Ideophones in Awetí

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Audio, video and ELAN files which were used for the corpus analysis can be consulted at:

www.mpi.nl/DOBES/archive\_access/  $\rightarrow$  Awetí

# Ideophone im Awetí Deutsche Zusammenfassung

## 1. Einleitung

Neuere Studien haben ergeben, dass Ideophone in den Sprachen der Welt ein wesentlich weiter verbreitetes Phänomen sind, als vorher angenommen, da es in früheren Zeiten häufig ignoriert oder marginalisiert wurde. Ein Grund hierfür war sicherlich die Schwierigkeit, diese Elemente aufgrund ihrer nur bedingten Arbitrarität als Wörter zu klassifizieren, ein weiterer, dass sie üblicherweise im oralen Diskurs auftreten und schwer in eine schriftliche Form zu übertragen sind. Deshalb kommen sie in Sprachen mit einer langen Schrifttradition, wie den europäischen, nur noch selten vor. In einigen Gegenden der Welt, vor allem in Asien und Afrika, hat die Erforschung von Ideophonen jedoch eine längere Tradition.

In vielen bisher erforschten Sprachen des Amazonastieflands bilden Ideophone ebenfalls einen festen Bestandteil. Dieses gilt auch für das Awetí, eine von einer kleinen Gemeinschaft gesprochene Tupisprache in einem mehrsprachigen Kulturgebiet am Quellgebiet des Xingu-Flusses in Zentralbrasilien. Die ca. 170 Awetí-Sprecher leben in zwei Dörfern innerhalb des Parque Indígena do Xingu, einem seit 1961 bestehenden Reservat. Ein Teil des Reservats, der "Alto Xingu", ist dadurch gekennzeichnet, dass dort aktuell zehn Ethnien, die unterschiedliche Arawak-, Carib- und Tupisprachen sowie eine isolierte Sprache (Trumai) sprechen, über mehrere Jahrhunderte ein gemeinsames kulturelles System herausgebildet haben. Dieses zeichnet sich dadurch aus, dass die Ethnien regelmäßig durch eine Reihe von Aktivitäten (rituelle Feste, Tausch von traditionellen Objekten, Ringkämpfe) miteinander in engem und friedlichem Kontakt stehen und auch untereinander heiraten, dass aber gleichzeitig fast jede Gruppe bis heute ihre eigene Sprache beibehalten hat. Ein Individuum im Alto Xingu ist lediglich dazu berechtigt, die Sprache des Dorfes, in dem es aufgewachsen ist, zu sprechen sowie - wenn davon abweichend – die Sprache(n) der Eltern. Auf diese Weise lassen sich bis heute, abgesehen von einigen Lehnwörtern zur Benennung von Elementen der gemeinsamen Kultur, kaum Sprachkontaktphänomene in den einzelnen Sprachen nachweisen. Die interkulturelle Kommunikation im Alto Xingu wird zum einen durch Bilinguale (d.h. Kinder aus gemischt-ethnischen Ehen) gestützt wie auch – besonders im Bereich der Rituale – durch den Einsatz von non-verbalen Mitteln (Gestik, ritualisierte Handlungsabläufe). Zum anderen hat sich das Portugiesische in der letzten Zeit immer mehr zur Kontaktsprache nach außen, aber auch innerhalb des Gebiets entwickelt.

Im Awetí treten Ideophone sowohl in der täglichen Kommunikation, als auch – vermehrt noch – im narrativen Diskurs der beiden professionellen Geschichtenerzähler auf. Mit der zunehmenden Verbreitung einer durch das zweisprachige Schulsystem vermittelten Schriftkultur und mit dem Vordringen nationalsprachlicher Medien (Fernsehen, Radio) in die Alltagskultur der Awetí sind jedoch gerade diese Elemente einer mündlichen Erzähltradition als erstes in ihrer Existenz bedroht – eine Entwicklung, wie sie ähnlich bereits in anderen indigenen Gemeinschaften Amerikas beobachtet werden konnte.

Eine Definition, die weit genug gefasst ist, um auch die beobachteten Unterschiede in den Ideophonen der Welt im Hinblick auf Lautsymbolik oder grammatischen Status zu berücksichtigen, wurde von Dingemanse (2009: 83) aufgestellt:

"Ideophones are marked words that vividly depict sensory events."

Wichtig an dieser Definition ist, dass es sich bei Ideophonen um Wörter ("words") handelt, denen eine Bedeutung zuzuordnen ist, dass sie in mehrfacher Hinsicht markiert sind und dass sie durch Darstellung ("vividly") ein Ereignis abbilden ("depict"), welches zu einem breiten Spektrum von Sinneswahrnehmungen gehört.

Im Awetí gibt es drei Gruppen von sprachlichen Elementen, auf die unter Einbeziehung verschiedener Analyseebenen diese Definition zutreffen könnte:

 nicht-flektierte Wörter, die ein auf eine Aktivität referierendes Verb entweder ersetzen oder wiederholen, oder die Informationen hinsichtlich von Art und Weise, Medium, in der die Aktivität stattfindet etc. hinzufügen;

- (II) stimmliche Nachahmungen von durch Menschen, Tiere oder Naturelemente hervorgerufenen Lauten, die in den gleichen syntaktischen Umgebungen auftreten wie Elemente der Gruppe I;
- (III) menschliche Ausrufe, die emotionale Zustände, physische Wahrnehmungen oder Sprechereinstellungen wiedergeben.

Da die Elemente der Gruppe I und II im Hinblick auf grammatische Merkmale und Distribution weitgehend übereinstimmen und beide – wenn auch in unterschiedlichem Maß – lautsymbolisch sind, sollen sie im weiteren Verlauf dieser Arbeit als "Ideophone" zusammengefasst werden. Aufgrund ihrer Unterschiede in einigen Bereichen soll jedoch an relevanten Stellen von Typ I- oder Typ II-Ideophonen gesprochen werden. Die Elemente der dritten Gruppe, nachfolgend als "Interjektionen" klassifiziert, haben keine darstellenden oder lautsymbolischen Eigenschaften und weichen auch in syntaktischer und semantischer Hinsicht klar von den anderen beiden Gruppen ab.

Bei der vorliegenden Arbeit handelt es sich um eine reine Korpusanalyse. Das zur Verfügung stehende Sprachmaterial wurde von 1998 bis 2007, größtenteils im Rahmen des DoBeS-Awetí-Sprachdokumentationsprojekts an der Freien Universität Berlin, von Dr. Sebastian Drude und mir zusammengestellt und bearbeitet. Während unserer Tätigkeit im DoBeS-Projekt verbrachten Drude und ich jeweils bis zu zwei Monate im Jahr im Awetí-Hauptdorf und arbeiteten zusätzlich mit einer kleinen Gruppe von Awetí-Sprechern an der Transkription und Übersetzung der Daten im Forschungszentrum des Museu Paraense Emílio Goeldi in Belém/ Brasilien.

Das verwendete Korpus besteht aus mehr als 40 Stunden Audio- und Videoaufnahmen verschiedener Diskursformen, vor allem Mythen und historischen Erzählungen, aber auch autobiographischen Erzählungen, Beschreibungen und Erklärungen zu traditionellen Aufgaben und Gebräuchen sowie einigen Dialogen. Bei der Analyse der Daten wird grob zwischen "narrativem" und "nicht-narrativem" Diskurs unterschieden, wobei ersterer Mythen und historische Erzählungen umfasst, die spezielle, von den beiden professionellen Awetí-Geschichtenerzählern in einem langen Studium erlernte Erzähltechniken erforderlich machen.

Ideophone wurden konsistent in ihrem jeweiligen Diskurskontext annotiert und analysiert. Zusätzlich wurde eine den Daten entnommene Liste von Ideophonen hinsichtlich ihrer Semantik überprüft, indem Sprecher ohne Angabe des jeweiligen Kontexts aufgefordert wurden, ihre Bedeutung anzugeben. Eine weitere wichtige Quelle in Bezug auf die Bedeutung von Ideophonen waren Kommentare der Sprecher während ihrer Übersetzungstätigkeit, die teilweise beobachtet und notiert wurden und teilweise als Audioaufnahmen vorliegen.

Ziel dieser Arbeit ist eine umfassende Beschreibung von Awetí Ideophonen auf verschiedenen Analyseebenen. Zusätzlich sollen Belege für ihre historische Entwicklung zu Verbwurzeln geliefert werden. Phonologische, morphologische, syntaktische, semantische und diskurs-pragmatische Merkmale dieser Elemente werden systematisch beschrieben. Da Ideophone aber durch ihre performativen und imitierenden Eigenschaften von anderen Wörtern abweichen, kommt zu der rein grammatischen Beschreibung eine Analyse von Merkmalen hinzu, die die Produktion der Ideophone in ihrem jeweiligen Äußerungsmoment betreffen. Die Audiodaten ermöglichen hierbei eine Untersuchung hinsichtlich prosodischer Eigenschaften, und anhand der Videos lassen sich redebegleitende Gestik und andere Formen der körperlichen Darstellung von Kommunikationsinhalten untersuchen. Die Lautsymbolik von Ideophonen soll ebenfalls durch das Aufstellen von Sets ähnlicher Formen mit ähnlichen Bedeutungen erforscht werden.

Die Ergebnisse sollen daraufhin in einem sprachübergreifenden und typologischen Zusammenhang diskutiert werden. Da für diese Tupisprache keine historischen Daten existieren, werden für die historische Analyse die synchrone Variation im Awetí-Korpus sowie aktuelle Daten aus anderen Tupisprachen berücksichtigt.

### 2. Forschungsansätze

Nach Kulemeka (1995) gibt es zwei Hauptansätze zur Erforschung von Ideophonen. Der eine, im Zusammenhang mit asiatischen Ideophonen häufig verwendete Ansatz befasst sich mit der lautsymbolischen Komponente dieser Elemente, zeigt also Korrellationen zwischen Phonemen oder Phonemgruppen und bestimmten Bedeutungen auf. Der andere Ansatz, der insbesondere für das Studium afrikanischer Ideophone kennzeichnend ist, beschäftigt sich mit der Möglichkeit, Ideophone einzelsprachlich oder sprachübergreifend als Wortart zu definieren. Dieses scheint zwar in Bezug auf einige afrikanische Sprachen durchaus möglich, bei anderen Sprachen sind jedoch die morphologischen und syntaktischen Eigenschaften dieser Wörter sehr heterogen, so dass es sinnvoller ist, sie gemäß dieser Eigenschaften verschiedenen Wortarten zuzuordnen. Eine sprachübergreifende Klassifikation wäre einzig auf der Basis diskurs-pragmatischer Kriterien, d.h. in Bezug auf die performativen und hervorhebenden Eigenschaften von Ideophonen möglich.

In neueren Ansätzen stehen häufig die Diskursfunktion oder semantische und kognitive Aspekte von Ideophonen im Vordergrund. Die Bedeutung von Ideophonen ist schwer zu erfassen, und wenn Sprecher aufgefordert sind, diese anzugeben, nehmen sie oftmals nichtsprachliche oder äußerungsspezifische Ausdrucksmöglichkeiten wie Gestik, Mimik oder eine auffällige Prosodie zur Hilfe. Kita (1997) hat ausgehend von diesen Beobachtungen ein Modell für die kognitive Strukturierung der Bedeutung von Ideophonen entwickelt. In diesem Modell gibt es zwei Dimensionen von Bedeutungsrepräsentation, eine ,analytische', in der das Lexikon, dekontextualisiert und in semantische Einheiten zerlegt, in einer hierarchischen Struktur abgespeichert ist, und eine ,affekto-imagistische' Dimension, in der Sprache in direktem Kontakt mit Sinneserfahrungen, Motorik und Gefühlen steht. Während die Bedeutung aller anderen Wörter einer Sprache ausschließlich in der ,analytischen' Dimension erfasst ist, ist die von Ideophonen vorwiegend in der "affekto-imagistischen" Dimension angesiedelt, wodurch das durch ein Ideophon ausgedrückte Ereignis bildhaft dargestellt und nach-erlebbar gemacht werden kann. Kita belegt seine These hinsichtlich der zweigeteilten Bedeutungsrepräsentation von Ideophonen durch verschiedene Kombinationen von Ideophonen, Verben und Adverbien im Japanischen, die im Fall eines Ideophons mit einem Wort aus der rein ,analytischen' Dimension aufgrund der unterschiedlichen Darstellungsmodi niemals zu redundanter Information führt. Donald (1998), dessen entwicklungsgeschichtliche Forschungen die Grundlage für Güldemanns (2008) Klassifikation von einigen afrikanischen Ideophonen als "mimetische Zeichen" bilden, spricht weniger von einer kognitiven Erfassung von Bedeutung als von einem intentional eingesetzten Kommunikationsmodus der "Mimesis". Mimesis ist eine Ausdrucksmöglichkeit durch Einsatz des Körpers, die der Entwicklung von Sprache zwar vorausgegangen ist, aber nach wie vor alternativ oder ergänzend zur Sprache verwendet wird, z.B. auch zur Aufrechterhaltung von Kommunikation oder – im Fall der Ideophone – zur Hervorhebung bestimmter Information durch direkte Versinnbildlichung. Auf dieser "mimetischen" Ebene der Kommunikation sind auch redebegleitende Gestik und markierter prosodischer Ausdruck anzusiedeln, die oftmals mit Ideophonen einhergehen.

Historische Untersuchungen im Zusammenhang mit Ideophonen weltweit legen nahe, dass sie sich in vielen Sprachen zu Verben weiterentwickelt haben, wobei sie zunächst durch finite leichte Verben syntaktisch integriert werden. Außerdem können Ideophone sowohl eine stabile Komponente im Lexikon einer Sprache darstellen, als auch in andere Sprachen entlehnt werden.

### 3. Typologische Einordnung des Awetí

Das Awetí bildet innerhalb der Tupi-Sprachfamilie einen eigenen Zweig. Es ist agglutinierend (prä- und suffigierend), vorwiegend kopfmarkierend und kopffinal. Im Awetí bilden Substantive, Verben, Adverben und Ideophone offene, Personalpronomen, Demonstrativa, Postpositionen, Interjektionen und Partikeln geschlossene Wortklassen. Es gibt keine gesonderte Klasse von Adjektiven. Eigenschaften werden stattdessen durch stativische Verben ausgedrückt.

Das Phoneminventar umfasst 15 Konsonanten und jeweils sechs orale und nasale Vokale in symmetrischer Anordnung. Es gibt keine Unterscheidung zwischen langen und kurzen Vokalen. Tonhöhe ist phonologisch nicht distinktiv. Die Betonung eines Wortes fällt immer auf die letzte Silbe des Wortstammes.

Bei den Substantiven lassen sich drei Klassen unterscheiden: inalienabel-possessive, alienabel-possessive und nicht-possessive Substantive. Es gibt keine Genus-Unterscheidung. Bei Substantiven und Demonstrativa mit menschlichen Referenten ist die Numerusunterscheidung optional und kann durch das Pluralsuffix *-za* angezeigt werden. Pronomina haben eine Singular-Plural-Unterscheidung.

Pronomina und Verben unterscheiden zwischen einer inklusiven und exklusiven ersten Person Plural.

Das Awetí verfügt über ein morphologisch ausgedrücktes Nominaltempus. Verben können nach ihren jeweiligen Präfixen in drei Klassen unterteilt werden: intransitiv-stativische (deskriptive), intransitiv-aktivische und transitiv-aktivische Verben. Bei transitiven Verben zeigen zwei Gruppen von Präfixen entweder Subjekt- oder Objekt-Kongruenz an. Die Valenz des Verbs lässt sich durch Derivationsaffixe (kausativ, reflexiv, reziprok) oder durch Objekt-Inkorporation ändern. Aspekt wird lexikalisch (Aktionsart), morphologisch durch Affixe und Reduplikation und syntaktisch durch Partikeln ausgedrückt. Es gibt weitere Partikeln zur Tempus- und Modusunterscheidung. Verben können durch verschiedene Affixe nominalisiert werden. Die Nominalderivationen weisen nominale und verbale Merkmale in unterschiedlichem Maß auf.

Kernargumente werden durch Nominalphrasen ausgedrückt, oblique Argumente und Adjunkte durch Postpositionalphrasen. Die Anordnung der Konstituenten im Satz ist variabel und durch ihre jeweilige Diskursfunktion determiniert. Die grammatischen Relationen von Subjekt und Objekt sind durch Personenreferenzpräfixe am Verb indexiert. Syntaktische Funktionen von Argumenten sind in einem Split-Ergativ-System am Verb markiert.

In einer Possessivkonstruktion ist der Possessor dem Possessum vorangestellt, d.h. die syntaktische Relation wird durch die Wortstellung signalisiert. Bei einer veräußerlichen Possessivrelation ist das Possessum zusätzlich durch das Relationalpräfix *e*- markiert. Eine Nominalphrase besteht mindestens aus einem Pronomen oder einem Substantiv. Ein nominaler Kopf kann durch ein Demonstrativum, ein Numeral, ein klitisches Possessivpronomen oder eine NP, ein unflektiertes stativisches Verb (Desc) oder seine Nominalisierung (NOMqual) sowie weitere Nominalisierungen in Relativsatz-Funktion (Rel) modifiziert werden. Diese treten in der in (1) dargelegten Reihenfolge auf:

(1) NP  $\rightarrow$  ({Dem, Num}) (NP<sub>[POSS]</sub>) {N, PRO, DEM} ({NOMqual, Desc, Rel}) NP<sub>[POSS]</sub>  $\rightarrow$  {N, Pro, DEM}

Ein Verbkomplex besteht mindestens aus einer Wurzel (V) und einem Personenpräfix, das Subjekt- oder Objektkongruenz anzeigt (PERS-). Er kann weiterhin die folgenden Partikeln und Affixe aufweisen: eine aus einer proklitischen Partikel und einem Suffix bestehende Negation (NEG<sub>1</sub>, -NEG<sub>2</sub>), Partikeln in zweiter Satzposition zum Ausdruck von Tempus und/oder Modus (TM), ein valenzveränderndes Präfix (VAL<sub>1</sub>-), ein dem Nukleus vorangestelltes Substantiv mit der grammatischen Relation eines Objekts (OBJ), ein dem Nukleus unmittelbar nachgestelltes Suffix zur Markierung von Modus (-M), ein Aspektsuffix, ein Kausativsuffix bei transitiven Verbstämmen (-VAL<sub>2</sub>). Die Abfolge der Elemente des Verbkomplexes lässt sich folgendermaßen schematisieren:

## (2) (NEG1) (TM) PERS- (VAL1-/OBJ-) V (-M) (-ASP) (-VAL2) (-NEG2)

## 4. Ideophone im Awetí

Weder hinsichtlich ihrer Phoneme noch in der Silbenstruktur weichen Ideophone vom übrigen Lexikon des Awetí ab, wobei dies für die onomatopoeischen Ideophone (Typ II) in einem etwas geringeren Maß gilt. Alle Ideophone weisen in ihrer Aussprache phonetische Variation auf (z.B. fortis/ lenis-Realisierung von Plosiven). Ebenso gibt es mehrere phonologisch variante Formen, die sich auf identische Aktivitäten beziehen. In Bezug auf prosodische Merkmale sind Ideophone im Awetí deutlich markiert. Sie setzen sich als separate prosodische Einheiten vom Rest der Äußerung ab, und Variation in Tonhöhe, Lautstärke und Aussprachegeschwindigkeit oder ein spezifischer Rhythmus wirken sich direkt auf ihre Bedeutung aus.

Spezielle Suffixe können an Ideophone, die punktuelle Ereignisse ausdrücken, angehängt werden, um diesen Plötzlichkeit oder Nachdruck als Bedeutungskomponente hinzuzufügen. Die meisten Ideophone können repetitiv verwendet werden, um bestimmte Interpretationen zu ermöglichen. Ideophone des stärker konventionalisierten Typ I können auf unterschiedliche Art redupliziert werden. Reduplikation und Wiederholung lassen sich dadurch unterscheiden, dass wiederholte Ideophone jeweils einen Wortakzent tragen, wohingegen es bei reduplizierten Formen nur einen Akzent gibt. Beide Prozesse treten bei Ideophonen häufig kombiniert auf. Formale Variationen bei bedeutungsverwandten Ideophonen lassen sich nicht immer adäquat durch Reduplikationsprozesse beschreiben. Im aktuellen Sprachgebrauch des Awetí gibt es eine Anzahl von Verben, die eine formale Ähnlichkeit zu Ideophonen aufweisen. Alle diese Verben enden in  $/\epsilon/$  nach einem lenisierten Plosivlaut. Dieses formale Merkmal charakterisiert eine Klasse von intransitiven Verben, die durch das Kausativpräfix *mo*- transitiviert werden können.

Syntaktisch treten Ideophone immer als unabhängige Sätze auf, auch wenn sie semantisch in Verbindung zu dem finiten Prädikat eines vorangehenden oder folgenden Satzes stehen, indem sie diesem eine Komponente der Art und Weise, funktional einem Adverb ähnlich, hinzufügen. Im den Fällen, wo Ideophone die Funktion eines Prädikats haben, treten sie entweder isoliert oder zusammen mit Argumenten und Adjunkten auf. Weniger häufig können Ideophone auch den invarianten Teil eines komplexen Prädikats, in Verbindung mit einem finiten "leichten" Verb (,light verb') '*e*, darstellen. Die Ideophone in dieser Art von Konstruktion beziehen sich überwiegend auf stimmliche Ereignisse. Sie können prosodisch markiert sein oder nicht, wobei es eine Korrellation zu geben scheint zwischen prosodischer Markiertheit und morphologischer Komplexität des leichten Verbs.

In ihrem Vorkommen als unabhängige sprachliche Einheiten stellen Ideophone immer affirmative Aussagesätze dar. Sie lassen sich mit verschiedenen TAM-Partikeln, z.B. zum Ausdruck von Futur, Irrealis oder Abgeschlossenheit eines Prozesses (der wiederum durch Wiederholung des Ideophons dargestellt wird), kombinieren. Wenn sie jedoch zusammen mit einem leichten Verb ein komplexes Prädikat bilden, ist dieses mit einem Großteil der Verbmorphologie, inklusive zum Ausdruck der Negation (Partikel + Suffix), kombinierbar. Die Interpretation bei lautnachahmenden Ideophonen kann dabei sowohl die einer metasprachlichen als auch einer logischen Negation sein. Die Konstruktionen mit einem leichten Verb werden hier nicht als Ideophone im eigentlichen Sinn, sondern als ,ideophonische Verben' betrachtet.

Awetí Ideophone weisen Laut-Bedeutungsentsprechungen auf verschiedenen Ebenen auf: in Bezug auf einzelne Phoneme, Phonem-Verbindungen und Silbenstrukturen. Die Bedeutung von Awetí Ideophonen lässt sich am besten als "bild-schematisch" (,imageschematic') im von Johnson (1987) und Lakoff (1987) beschriebenen Sinn charakterisieren. Während onomatopoeische Ideophone (Typ II) Laute imitieren, die von Lebewesen oder Naturelementen produziert werden, bilden Ideophone vom stärker konventionalisierten Typ I wahrnehmungsauffällige Komponenten von Aktivitäten ab, die auf grundlegenden Körpererfahrungen wie Enthaltensein oder Begrenztheit basieren.

Ideophone sind unterschiedlich stark konventionalisiert, und einige können ad-hoc gebildet werden, wobei sich die Bedeutung nur im Kontext erschließt. Ideophone drücken im allgemeinen durch bestimmte morphologische Formen und/ oder phonosemantische Merkmale die zeitliche Kontur eines Geschehens aus.

Es gibt kaum konventionalisierte Ideophone, die sich auf spezifische Ereignisse beziehen. Die meisten Ideophone drücken Bedeutungskomponenten aus, die auf eine Anzahl von Ereignissen zutreffen, und müssen daher im Kontext interpretiert werden.

Zur Darstellung komplexer Ereignisse kann eine Sequenz von Ideophonen, die mehrere Komponenten abbildet, wesentlich präziser sein als ein semantisch korrespondierendes Verb. In dieser Hinsicht ähneln Ideophone den in Pawley (1993) beschriebenen Verben in der Papuasprache Kalam. Da es im Zusammenhang mit Ideophonen nicht zwischen Agentivität oder Kausativität unterschieden werden kann, stehen Partizipanten in der Semantik von Ideophonen nicht im Vordergrund.

Videodaten des Awetí bestätigen, dass Ideophone in dieser Sprache durchgehend von Gesten begleitet werden und dass dieses nicht in gleichem Maß für andere Wörter (z.B. Verben oder Substantive) gilt, bei denen redebegleitende Gestik weniger systematisch und wesentlich seltener auftritt. Anhand von Beispielen konnte gezeigt werden, dass Ideophone und Gestik komplett synchron verlaufen, indem der Stroke einer Geste normalerweise mit dem Ideophon zusammenfällt. Diese Korrellation war bereits Kita (1997: 392, 2001: 425) im Zusammenhang mit Japanischen 'adverbialen' ideophonen aufgefallen. Kita, der die Interaktion zwischen Ideophonen, spontaner redebegleitender Gestik und expressiver Prosodie im Japanischen untersuchte, fand zusätzlich heraus, dass ein prosodischer Höhepunkt, sofern vorhanden, ebenfalls mit dem Äußerungszeitpunkt des Ideophons zusammenfällt, was ebenfalls auf Ideophone im Awetí zutrifft.

Im Zusammenhang mit Gestik muss eine Unterscheidung vorgenommen werden zwischen Ideophonen, die sich auf ein Bewegungsereignis beziehen, und solchen, die auf andere Aktivitäten referieren. Ideophone zu Bewegungsereignissen treten dabei typischerweise in Verbindung mit einem finiten Prädikat auf, zu dem sie sich funktional ähnlich wie ein Adverb der Art und Weise verhalten. Auf Ideophone, die andere Aktivitäten abbilden, trifft dies nicht zu. Dieser generelle Unterschied spiegelt sich auch in den redebegleitenden Gesten: Während Bewegungsideophone von deiktischen Gesten begleitet werden, die nur teilweise deskriptive Komponenten haben, sind Gesten zu den übrigen Ideophonen

vollkommen ikonisch und führen Bewegungen aus, die die beschriebene Aktivität charakterisieren. Fallen Gesten jedoch mit Verben zusammen, die ebenfalls auf eine bestimmte Aktivität verweisen, bilden sie häufig Objekte, also Partizipanten des Ereignisses, ab. Außerdem zeigen redebegleitende Gesten zu diesem Typ von Ideophonen Variation in Abhängigkeit davon, ob ein Ideophon eine zentrale Position im Diskurs einnimmt und wie sehr es syntaktisch integriert ist (d.h. ob es für sich allein steht oder in eine komplexe Verbalphrase eingebettet ist). Bei Bewegungsereignissen stellen die Ideophone die Art der Bewegung dar, während eine gleichzeitig ausgeführte Geste die ,Weg'-Komponente (,path', siehe Talmy 2007) wiedergibt. Diese Weg-Information ist abhängig von der Bewegungsrichtung, die als lexikalische Information in einem mit dem Ideophon assoziierten Bewegungsverb (eines angrenzenden Satzes) oder auch einem lokativen Adverb enthalten ist. Während die meisten Bewegungsverben im Awetí die Bewegungs- und die Wegkomponente eines Bewegungsereignisses lexikalisieren und Informationen über die ,Figur' durch grammatische Struktur liefern, kodiert ein Ideophon die Komponenten ,Bewegung', ,Art und Weise' und ,Figur'. Sowohl Ideophone, als auch lexikalische Verben können jeweils allein oder kombiniert in angrenzenden Sätzen auf ein Bewegungsereignis referieren. Da Gesten, die mit Ideophonen von Bewegungsereignissen zusammenfallen, immer die nicht im Ideophon enthaltene Wegkomponente wiedergeben, variieren sie in Abhängigkeit zu dem Verb oder anderen Element, auf das sie sich beziehen. Wenn die Art und Weise der Bewegung, die durch das Ideophon ausgedrückt wird, im Diskurs eine zentrale Information darstellt, kann sie zusätzlich gestisch abgebildet werden. Abschließend lässt sich feststellen, dass Ideophon-begleitende Gesten stark konventionalisiert sind und das offenbar nicht nur im narrativen Diskurs, wo sie Teil eines erlernten Repertoires von Erzähltechniken darstellen mögen. Dieses widerlegt eine Behauptung McNeills, nach der redebegleitende Gestik generell mit einem niedrigen Bewusstheitsgrad des Sprechers einhergeht.

5. Historische Entwicklungen unter Einbeziehung von Ideophonen im Awetí Es konnte gezeigt werden, dass sich Ideophone im Awetí morphologisch und syntaktisch sehr unterschiedlich verhalten, woraus sich ableiten lässt, dass sie unterschiedlichen historischen Entwicklungen zugeordnet werden müssen. Gleichzeitig ist erkennbar, dass Ideophone, vor allem die des konventionalisierteren Typ I, in einem engen Zusammenhang zu lexikalischen Verben stehen, was auf einen Grammatikalisierungsprozess zwischen diesen hindeutet. Da es keine historischen Daten zum Awetí gibt, müssen jedoch alle hier skizzierten Prozesse, die aus der synchronen Variation unter Einbeziehung von allgemeinen typologischen Tendenzen abgeleitet wurden, als hypothetisch betrachtet werden.

Historisch-vergleichende Studien zum Awetí weisen darauf hin, dass sich Ideophone in Bezug auf Lautwandel konservativer verhalten als andere Wörter, so dass man davon ausgehen kann, dass sie zu dem älteren Vokabular der Sprache gehören und sich formal kaum verändert haben. Dieses kann durch eine Anzahl von identischen und ähnlichen kognaten Ideophonen aus der eng verwandten TG-Sprache Emerillon bestätigt werden. Diese Sprache wird in Französisch Guyana gesprochen, und es gibt keinerlei Sprachkontakt zwischen den beiden Sprachgemeinschaften. Zusätzlich gibt es einige neuere lautliche Entwicklungen im Awetí im Vergleich zu TG-Sprachen und zum Sateré-Mawé, die sich ebenfalls nicht in Ideophonen wiederfinden. Einige Untersuchungen zu Ideophonen in anderen Sprachen der Welt bestätigen die Annahme, dass diese Elemente oftmals Merkmale aufweisen, die auf synchroner Ebene aus dem Rest des Vokabulars der Sprache verschwunden sind, sich aber für frühere Sprachstufen und/ oder in mehreren genetisch verwandten Sprachen nachweisen lassen.

Gleichzeitig lässt sich auch die Hypothese nicht ausschließen, dass Ideophone als Lehnwörter Eingang ins Awetí gefunden haben. Zum einen gibt es eine größere Anzahl von ähnlichen oder gleichen Ideophonen in anderen Xingusprachen, die größtenteils anderen Sprachfamilien angehören, zum anderen sind einige der Ideophone aus dem Awetí-Korpus von Sprechern als Kamaiurá-Wörter identifiziert worden. Diese TG-Sprache wird von den meisten Mitgliedern der Awetí-Sprachgemeinschaft aktiv oder passiv beherrscht. Obwohl es insgesamt im Oberen Xingu aufgrund der besonderen Sprachenpolitik wenig Lehnworteinfluss oder Sprachmischung gibt, ist der Sprachkontakt durch die große Anzahl Menschen, verschiedenen Bilingualer (d.h. deren Eltern jeweils zwei Sprachgemeinschaften angehören) gegeben. Zusätzlich gehören gerade die mündlich überlieferten Mythen, die eine für Ideophone typische Diskursform darstellen und von mehrsprachigen Geschichtenerzählern präsentiert werden, zu der von allen Sprachgruppen geteilten Kultur.

In vielen Sprachen verbinden sich Ideophone mit "leichten" Verben, die typischerweise die Bedeutung ,sagen' oder ,tun' haben, zu komplexen Verben. McGregor (2002) konnte nachweisen, dass sich diese verbalen Konstruktionen in nordaustralischen Sprachen zu finiten Verben weiterentwickeln, bei denen die Leichtverbkomponente zunächst zu einem Verb-Klassifikator und später zu einem Konjugationsmarker grammatikalisiert. Er stellte weiter fest, dass diese Entwicklung zyklisch ist, dass also Sprachen mit stark grammatikalisierten Verben immer eine große Anzahl von Ideophonen besitzen, die dann wiederum über Leichtverbkonstruktionen zu Verben grammatikalisieren. Zusätzlich scheint sich die Leichtverbkonstruktion in australischen Sprachen areal auszubreiten.

Güldemann (2008) diskutiert eine vergleichbare Verbkonstruktion in verschiedenen afrikanischen Sprachen als einen Ausdruck von "Mimesis", einer vorsprachlichen Darstellungsfähigkeit des Menschen, bei der er seinen gesamten Körper intentional einzusetzen weiß. Die Leichtverbkomponente wird von Güldemann im Rahmen dieses Konzepts als "Mimesismarker" oder auch als "Quotativ-Prädikativum" (,quotative predicative') bezeichnet, wohingegen das Ideophon eines von vier möglichen "mimetischen Zeichen" (,mimetic signs') darstellt, das durch den Mimesismarker in den Diskurs eingeführt wird. Andere mimetische Zeichen sind direkte Rede, stimmlich imitierte nichtsprachliche Geräusche (hier als Typ II-Ideophone klassifiziert) und darstellende Gestik.

Das Verb 'e, das im Awetí die finite Komponente der Ideophon-Verb-Konstruktion bildet, hat viele der Eigenschaften, die Güldemann für Mimesismarker in den von ihm untersuchten afrikanischen Sprachen anführt. Es hat wenig phonetische Substanz und weicht durch seine unregelmäßige Bildung von anderen Verben ab. Es dient zur Markierung wörtlicher Rede, hat eine namensgebende Funktion (e.g. *tawat 'e-tu* ,er wird *tawat* (,Jaguar') genannt'), und einige noch näher zu untersuchende Beispiele deuten darauf hin, dass es auch zur Hervorhebung von bestimmten Diskurselementen verwendet werden kann. Güldemanns Ansatz bietet außerdem den Vorteil, dass die markierte Prosodie von Ideophonen und ihre Begleitung durch Gestik als weitere Merkmale für die Darstellungsform der "Mimesis" angesehen werden können.

Aus dem unterschiedlichen Vorkommen von Awetí Ideophonen im aktuellen Sprachgebrauch und den typologischen Tendenzen, die den Arbeiten von McGregor und Güldemann zu entnehmen sind, lässt sich ein mögliches fünfstufiges Szenario für einen

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Entwicklungsprozess im Awetí von Ideophonen über Ideophon-Verb-Konstruktionen zu Verben entwerfen. Auf der ersten Stufe werden prosodisch markierte und durch Gesten begleitete Ideophone als unabhängige syntaktische Einheiten oder als unflektierte Prädikate in einem Satz verwendet. In der zweiten Entwicklungsphase wird ihnen ein Mimesismarker in Form eines finiten Verbs 'e beigefügt, wobei sie immer noch eine markierte Prosodie aufweisen und mehrfach wiederholt auftreten können. Die dritte Phase ist dadurch gekennzeichnet, dass die mimetisch darstellenden Elemente zurückgehen. Dieses ist vor allem daran erkennbar, dass mehrfach wiederholte Ideophone sich auf eine einfache Wiederholung verkürzen, womit die Konstruktion sich formal einer reduplizierten Verbform annähert. Gleichzeitig übernehmen grammatische Elemente (Aspektsuffixe) am finiten Leichtverb Funktionen, die vorher mimetisch dargestellt wurden. Auf der vierten Entwicklungsstufe fusioniert das Ideophon mit dem nachfolgenden Leichtverb, wobei der Glottalverschluss am Verbanfang wegfällt und eine konsonantische Koda in der letzten Silbe des Ideophons lenisiert wird oder aber bei vokalischer Koda ein lenisierter Konsonant r/c oder  $\chi/c$  eingesetzt wird. Aus diesen Formen, die vor allem als Nominalisationen von Handlungen (,action nominals') auftreten, kann sich dann auf der letzten Stufe ein finites Verb herausbilden. Diese Verben sind im Awetí dadurch gekennzeichnet, dass sie alle auf  $\epsilon$  enden, ihre Betonung auf der vorletzten und nicht – wie im Normalfall – auf der letzten Silbe haben und intransitiv sind.

Abgesehen von dem bisher skizzierten Entwicklungsprozess von Ideophonen zu Verben muss der umgekehrte Fall, das Entstehen von Ideophonen aus Verben, ebenfalls angenommen werden. Dieser Prozess lässt sich anhand von historischen Daten aus einigen afrikanischen Sprachen nachweisen und wird auch für andere amazonische Sprachen behauptet.

## 6. Ideophone und Verbalkomplexe in anderen Tupisprachen

Ein Vergleich zwischen einer repräsentativen Auswahl von Tupisprachen im Hinblick auf vergleichbare Phänomene liefert weitere Informationen zum Verständnis der zu beobachtenden historischen Prozesse im Zusammenhang mit Ideophonen im Awetí. Da das Awetí als (letzter) Repräsentant eines eigenen Zweiges innerhalb der Tupi-Sprachfamilie gilt, aber auch als sehr eng mit dem Tupi-Guaraní-Zweig verwandt gesehen wird, ist es

sinnvoll, die Sprache nicht nur mit TG-Sprachen, sondern auch mit Sprachen aus anderen Tupi-Zweigen zu vergleichen. Im einzelnen handelt es sich bei den in diesem Kapitel näher untersuchten Sprachen um Emerillon, Gavião, Kayabi, Kamaiurá, Karitiana, Karo, Mekens, Mundurukú, Sateré-Mawé, Sirionó und Yuki. Von diesen gehören Emerillon, Kayabi, Kamaiurá, Sirionó und Yuki zum TG-Zweig. Die anderen sechs Sprachen repräsentieren jeweils einen Zweig der Tupi-Familie. Mit Ausnahme von Emerillon (Französisch-Guayana) und Sirionó und Yuki (beide Nordbolivien) werden alle Sprachen in verschiedenen Regionen Brasiliens gesprochen.

Inventar der Phänomene	Α	Κ	Κ	Е	S	Y	Μ	G	Μ	Κ	М	K
	w	а	а	m	i	u	а	а	e	а	u	a
	e	m	у	e	r	k	W	v	k	ri	n	ro
Unabhängiges IDEO	+	+	?	+	+	?	?	+	(+)	+	+	-
IDEO + Argumente	+	+	?	+	?	?	?	?	(+)	(+)	+	-
IDEO + einf. "leichtes" Verb	+	+	-	+	+	?	(+)	-	-	(+)	-	(+)
IDEO + kompl. "leichtes" V.	+	?	-	?	+	?	(+)	-	-	(+)	-	+
Verb-Reduplikation	+	+	+	+	+	+	+	?	(+)	(+)	+	-
Unflektiertes Verb	-	-	-	-	+	?	-	+	(+)	-	-	-
Suffix-Konjugation	-	-	-	-	(+)	+	-	-	-	-	-	-
Verbklassen-Marker	(+)	-	-	-	(+)	(+)	+	-	-	-	-	-
Marker des Informationstyps	?	-	+	-	-	-	(+)	-	-	(+)	-	-

Tabelle 1: Ideophone und vergleichbare Phänomene in Tupisprachen<sup>1</sup>

Die Ergebnisse der Einzelanalysen zu Ideophonen oder anderen Phänomenen in den zwölf Tupisprachen, die alle als expressiv oder hervorhebend gekennzeichnet werden und mit Ideophonen weitere Eigenschaften teilen, sind in Tabelle 1 zusammengefasst.

Zwei Drittel der Tupisprachen haben unabhängige Ideophone, wobei Karo eine klare Ausnahme bildet, und für drei weitere Sprachen keine Informationen vorliegen. Bei den acht Sprachen mit unabhängigen Ideophonen gibt es keinerlei Hinweis darauf, dass diese nicht mit zusätzlichen Argumenten oder Adjunkten in einem Satz auftreten können. Im Fall

<sup>&</sup>lt;sup>1</sup> Ein Fragezeichen zeigt an, dass es zu dem jeweiligen Phänomen keine ausreichende Information gab. Ein eingeklammertes Pluszeichen wurde verwendet, wenn die verfügbare Literatur nicht klar die hier gewählte Analyse einer Konstruktion unterstützt.

von Awetí, Kamaiurá, Emerillon und Munduruku wird dies klar bestätigt, und in den Daten zum Mekens und zum Karitiana gibt es Beispiele, die diese Analyse zulassen.

Ideophone, die mit finiten "leichten" Verben (größtenteils auf dem Verb 'e ('sagen') basierend und ohne weitere Morphologie) ein komplexes Verb bilden, scheinen in den Tupisprachen ebenfalls häufig vorzukommen. Dieses Merkmal trifft eindeutig auf Awetí, Kamaiurá, Emerillon und Sirionó zu. Im Karo ist es die einzige Möglichkeit, wie Ideophone (oder ehemalige Ideophone ohne prosodische Markiertheit) im aktuellen Sprachgebrauch auftreten. Im Sateré-Mawé können nur Verben, die auf ein "telisches" Ereignis, das für oder im Interesse des einzigen Partizipanten ausgeführt wird ("middle'), referieren, in dieser Konstruktion stehen, die damit eine bestimmte semantisch definierte Verbklasse markiert. Im Karitiana dient diese Art von Konstruktion der Hervorhebung von handlungsrelevanter Information im Diskurs. Während es für das Vorkommen von "leichten" Verben mit zusätzlicher Verbmorphologie im Fall von Kamaiurá und Emerillon keine Datenbelege gab, existieren diese komplexeren Formen in den anderen fünf Sprachen. Im Karo scheinen die "leichten" Verben sogar immer eine komplexere Morphologie (z.B. TAM-Affixe, Negation) aufzuweisen.

Ein Phänomen, dass im Awetí und in den meisten anderen Sprachen nicht vorkommt, ist für die Sprachen Gavião und Mekens als das der "nicht-flektierenden" (Moore 2002) oder "nicht-flektierbaren Verben" (Galucio 2001) bezeichnet worden. Diese Verben scheinen sich von den ebenfalls nicht flektierten Ideophonen dadurch zu unterscheiden, dass in Sätzen mit diesem Phänomen Subjekt-NPs auftreten können, wohingegen Objekt-Referenten nur implizit oder in untergeordneten Verbstrukturen gegeben werden. Ideophone haben dagegen unausgedrückte Subjekt-Referenten. "Unflektierte Verben" können wie andere Verben negiert oder kausativiert werden, wobei letzteres im Mekens zur Ableitung von flektierten Verben führt. In beiden Sprachen haben nicht-flektierte Verben die Funktion, das Ereignis auf das sie referieren, im Diskurs zu betonen. Die "unflektierbaren Verben" im Mekens sind, bis auf solche, die ein Subjekt im selben Satz haben, hier als Ideophone analysiert worden. Für beide Sprachen konnte kein Hinweis gefunden werden, ob "unflektierte Verben" prosodisch markiert sind.

Im Sirionó gibt es ebenfalls die Möglichkeit, Verben ohne Flexion zu verwenden. Zusätzlich lässt sich für Sirionó und für die benachbarte Sprache Yuki die Herausbildung einer Suffix- neben der üblichen Präfixkonjugation belegen, ein Merkmal, das auch in einigen kuschitischen Sprachen Afrikas areale Verbreitung gefunden hat. Im Sirionó gibt es zusätzlich eine Tendenz zur Weiterentwicklung der Flexionssuffixe zu Verbklassenmarkern in den Fällen, wo der suffigierten Form ein Kausativpräfix *mu*-hinzugefügt ist. Alle diese Formen weisen ein Suffix der 3. Person Singular (-i) auf, und ein Personenpräfix oder eine NP sind dem Kausativpräfix vorangestellt. Im Yuki lässt sich Variation hinsichtlich der Position der Affixe in diesen Formen ebenfalls als Hinweis auf diese Art der Weiterentwicklung interpretieren. In beiden Sprachen bildet jedoch die Verbwurzel (oder das ehemalige Ideophon) eine separate prosodische Einheit vom flektierten Teil der Konstruktion. Abgesehen von der Tendenz zur Entwicklung einer auf -t endenden Verbklasse in Sirionó und Yuki sowie der Markierung einer Verbklasse durch die gesamte periphrastische Konstruktion im Sateré-Mawé besitzt auch das Awetí eine Gruppe von Verben, die auf eine unbetonte offene Silbe mit /ɛ/ als Nukleus enden. Einige dieser Verben haben eine klare Verbindung zu Ideophonen und sind (wenn nicht durch das Kausativpräfix mo- transitiviert) intransitiv. Sie könnten nach semantischen Kriterien ebenfalls wie ihre Entsprechungen im eng verwandten Sateré-Mawé als telische medio-passive Verben klassifiziert werden.

Eine Konstruktion schließlich, die eine Vordergrund-Information im Diskurs anzeigt, findet sich im Kayabi. In dieser Sprache kann jedes Verb nach seinem Informationsstatus in drei verschiedenen Diskursmodi dargestellt werden. In einem dieser Modi markiert das Suffix -i das Verb als Fokus im Diskurs. Im Gegensatz zu der "deklarativen" und zu der "narrativen" Form hat die "Fokus"-Form kein Subjekt- oder Objektpräfix, sondern ein vorangestelltes freies Personalpronomen oder eine lexikalische NP für das Subjekt bei intransitiven Stämmen und ein Personalpräfix oder eine NP, die bei transitiven Stämmen das Objekt markieren. Diese Formen ähneln stark den "action nominal constructions' (ANCs) im Awetí, die die Struktur einer possessiven Nominalphrase haben, wobei die Person entweder durch ein proklitisches Pronomen oder durch eine NP in der gleichen Position markiert ist. Die "Fokus"-Form unterscheidet sich von den anderen zwei Diskursformen im Kayabi weiterhin dadurch, dass bei transitiven Stämmen kein Subjekt markiert werden kann und dass weder die Markierung einer 2. Person noch einer Negation zulässig sind. Das Suffix -i in dieser Form kann ebenfalls ein Relikt eines auf 'e ("sagen') basierenden "leichten" Verbs

oder eines aus der gleichen Quelle hervorgegangenen Mimesismarkers sein und würde problemlos in Güldemanns (2008) Schema passen, der behauptet, dass Mimesismarker in einigen Sprachen eine Vordergrund-markierende Funktion im Diskurs ausbilden.

Eine solche diskurs-pragmatische Funktion konnte nicht klar für die anderen Sprachen nachgewiesen werden, aber zwei Formen mit der unpersönlichen ANC 'etu ("man sagt') im Awetí schienen eine vergleichbare Funktion zu haben. Die zunächst etwas widersprüchliche Beobachtung Francheschinis (1999), dass im Sateré-Mawé auch Verben anderer Verbklassen eine telische medio-passive Konstruktion eingehen können, könnte auch in diese Richtung gedeutet werden. Auch im Karitiana werden Ideophone auf der Äußerungsebene von verbalen Prädikaten unterschieden. In dieser Sprache unterscheiden sich jedoch, wie Landin (1988/ 2005) beschreibt, nicht nur "ideophonische" von "narrativen Äußerungen", sondern unabhängige Ideophone sind auch grundsätzlich von den in der "narrativen Form" verwendeten Verbwurzeln zu differenzieren. Auf der anderen Seite gibt es eine formale Übereinstimmung zwischen Karitiana und Awetí, die wiederum die "ideophonische Form" in die Nähe von ANCs im Awetí rückt: Landin gibt an, dass "ideophonische Äußerungen" sehr häufig direkt auf Sätze folgen, in denen "narrative Formen" auf dieselben Ereignisse verweisen. Ähnlich verhält es sich im Awetí mit dem alternierenden Gebrauch von ANCs und Sätzen mit flektierten Verben. Allerdings lässt sich hier keinerlei Unterschied in der Kodierung der Information erkennen, außer dass ANCs, rein strukturell bedingt, eher als Ereignis- denn als Paritizipant-orientiert zu betrachten sind. ANCs im Awetí korrellieren außerdem mit Nominalisierungen in anderen TG-Sprachen, die das sogenannte "Zirkumstantial-Modus" (,circumstantial mood', Rodrigues 1981) ausdrücken bzw. als "oblique-topikalisierte Verben" (Jensen 1998) analysiert werden. Diese sind z.B. im Kamaiurá durch das Suffix -i markiert und gleichen damit den "Fokus-Formen" im Kayabi. Im Kamaiurá existieren diese Formen nur in der 3. Person und unterscheiden sich in ihrer Funktion kaum von flektierten Verbformen, außer dass sie obligatorisch nach topikalisierten Adverbien auftreten. Drude (2008: 85) beobachtet für ANCs im Awetí ebenfalls die Tendenz, vor allem dann Verwendung zu finden, wenn in der ersten Satzposition Adverbien auftreten. ANCs sind jedoch weder auf diese syntaktische Umgebung, noch auf die 3. Person beschränkt, so dass sie im aktuellen Sprachgebrau als vollkommen äquivalent zu finiten Verben zu betrachten sind.

Weitere Beobachtungen in Bezug auf ANCs im Awetí lassen darauf schließen, dass sie ,performative' Merkmale haben können und eine Verbindung zu Ideophonen aufweisen: Eine quantitative Analyse eines repräsentativen Textausschnitts hat gezeigt, dass der expressive (und damit auch ikonische) morphologische Prozess der Reduplikation sehr viel häufiger in ANCs als in finiten Verbformen auftritt. Aus dieser und einigen weiteren Korrellationen zwischen ideophonischen Konstruktionen und ANCs wurde die These entwickelt, dass ANCs ein Übergangsstadium zwischen Ideophonen und finiten Verben darstellen könnten. Es wird dabei angenommen, dass dieser Prozess mit einem zunehmenden Verlust von "Expressivität" verbunden ist, der durch grammatische Struktur kompensiert wird. Die Annahme, dass Reduplikation ein Indikator für "Expressivität" ist, wird gestützt durch eine Beobachtung von Gabas (1999) zum Karo: in dieser Sprache gibt es keine Reduplikation bei Verbformen, sondern aussschließlich in ideophonischen Konstruktionen.

Alle in diesem Kapitel vorgestellten und diskutierten Konstruktionen in verschiedenen Tupisprachen, die aufgrund ihrer expressiven oder hervorhebenden Funktion als mit Ideophonen in einem historischen Zusammenhang stehend betrachtet werden können, lassen sich unter Güldemanns (2008) Mimesis-Ansatz fassen und, ausgehend von einer solchen Konstruktion, durch verschiedene, teilweise interagierende Lexikalisierungs- und Grammatikalisierungsprozesse beschreiben.

### 7. Schlussfolgerung und Ausblick

Wie im Verlauf der Arbeit immer wieder betont wurde, ist das wichtigste sprachübergreifende Merkmal von Ideophonen ihre "Expressivität" bzw. ihre performative Eigenschaft und die damit verbundene diskurs-pragmatische Funktion des Hervorhebens von Information.

Ideophone haben eine markierte Prosodie und treten im Awetí konsistent in Verbindung mit darstellender Gestik auf. Hierbei handelt es sich um zwei weitere Merkmale neben Ideophonen, die laut Kita (1997) kognitiv in einer "affekto-imagistischen Dimension" (affecto-imagistic dimension') der semantischen Repräsentation gespeichert werden. Ideophone werden außerdem häufig redupliziert oder wiederholt verwendet, wodurch auf ikonische und damit auch "expressive" Weise repetitive Prozesse oder mehrfach wiederholte Tätigkeiten ausgedrückt werden.

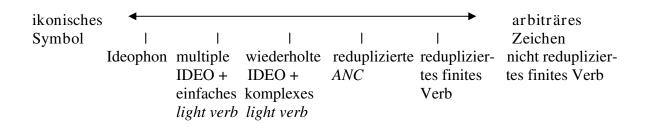
Im Awetí können Ideophone als Wortart klassifiziert werden, da sie sich auf verschiedenen Analyseebenen von anderen Wörtern der Sprache absetzen. Durch ihre prosodische Markiertheit unterscheiden sie sich von allen anderen Wörtern mit Ausnahme von Interjektionen, die jedoch nicht dieselben syntaktischen und semantischen Merkmale haben und im Gegensatz zu Ideophonen nicht synchron durch Gesten begleitet werden. Awetí Ideophone treten entweder als unabhängige Satzeinheiten, als Prädikate mit spezifischen Argumenten oder als nicht-flektierter Teil eines Prädikats mit einem flektierten "leichten" Verb auf. Treten sie als unabhängige Elemente auf, sind sie immer prosodisch markiert. Sobald sie jedoch syntaktisch eingebettet sind, können sie dieses Merkmal und damit verbunden auch ihren Status als Ideophone verlieren.

Anders als afrikanische Ideophone, aber ähnlich denen in anderen Tupi- und vielen weiteren Amazonassprachen sind Ideophone des konventionalisierteren 1. Typs semantisch darauf beschränkt, Aktivitäten abzubilden, d.h. Ereignisse, die Bewegung einschließen oder, noch spezifischer, perzeptuell auffällige Merkmale dieser Ereignisse. Die weniger konventionalisierten Ideophone des 2. Typs hingegen imitieren lautliche Ereignisse. Die am häufigsten verwendeten konventionalisierten Ideophone können sich auf verschiedene Ereignisse mit ähnlichen Bewegungskomponenten beziehen und müssen daher im Kontext interpretiert werden. Nach Angaben von Nuckolls (1996), deren semantische Beschreibung von Ideophonen im Pastaza Quechua auf einem von Lakoff (1987) und Johnson (1987) entwickelten Ansatz basiert, liegt das an ihrer bild-schematischen Struktur, die Körpererfahrung auf direkte Weise widerspiegelt. In ihrem jeweiligen Diskurskontext können diese Ideophone ferner durch den gleichzeitigen Einsatz von Gesten disambiguiert werden. Einige Ideophone verweisen allerdings auch auf sehr spezifische Ereignisse. Daraus lässt sich schließen, dass Awetí Ideophone sich aus unterschiedlichen historischen Quellen entwickelt haben. Eine Möglichkeit ist, dass Ideophone dieses spezifischen Typs als Lehnwörter in das Awetí gekommen sind, wobei sie in der Ausgangssprache Verben darstellen. Ein zweite Möglichkeit, nach der sich Ideophone aus Awetí Verben entwickelt haben, kann ebenfalls nicht ausgeschlossen werden.

Obwohl die meisten Ideophone grundlegende Körpererfahrungen ausdrücken, die in ihrer Einzelbedeutung vage sind und verschiedene Ereignisse charakterisieren, können Sequenzen von zwei oder mehreren dieser Ideophone komplexe Ereignisse in ihren aufeinanderfolgenden Phasen abbilden und damit wesentlich detailgetreuer sind als finite Verben, die den gleichen Sachverhalt als Einheit bezeichnen.

Weiterhin konnte anhand von Variation im aktuellen Awetí Sprachgebrauch eine mögliche historische Entwicklung von Ideophonen zu Verben über Zwischenstadien, die durch eine stetige Abnahme der Ikonizität/ Expressivität und deren Ersetzung durch grammatische Struktur gekennzeichnet sind, aufgezeigt werden. Figur 1 ist eine schematische Darstellung dieser Entwicklung.

Figur 1: Skala von Ikonizität zu Arbitrarität



Innerhalb der Tupi-Sprachfamilie scheinen Ideophone, vor allem als Teile komplexer Prädikate in Verbindung mit "leichten" Verben (,light verbs'), ein Ausgangspunkt für verschiedene Phänomene zu sein. Diese werden in der Literatur beschrieben und/ oder konnten in synchronen Sprachdaten beobachtet werden. Aufgrund der allgemein spärlichen Datenlage können die Ergebnisse hier jedoch zum aktuellen Zeitpunkt nur als vorläufig gewertet werden. Dennoch war es möglich, alle Phänomene, die für die einzelnen Sprachen beschrieben wurden, in dem von Güldemann entwickelten mimetischen Ansatz zusammenzubringen und das jeweilig vorliegende Ergebnis in einer Sprache auf Grammatikalisierungs- und Lexikalisierungsprozesse zurückzuführen, die in parallelen oder unterschiedlichen Kombinationen auch in den anderen Sprachen der Tupifamilie zu finden waren. In den letzten Jahren hat die Erforschung von Amazonassprachen aus verschiedenen Sprachfamilien erheblich zugenommen, und von vielen dieser Sprachen ist inzwischen bekannt, dass sie große Inventare von Ideophonen aufweisen. Es konnte außerdem für andere Weltregionen (Afrika, Australien) gezeigt werden, dass Ideophone einen Anteil an der Herausbildung bestimmter arealer Phänomene haben, so dass ein Vergleich der Awetí Ideophone mit denen der anderen Sprachen des Kulturgebiets des Alto Xingu ein interessanter Ansatzpunkt für weitere Forschungen wäre.

Wie in Kapitel fünf beschrieben, konnten in den aktuell verfügbaren Daten zum Kamaiurá (Tupi), Kalapalo (Carib) und Waurá (Aruak) mehrere ähnliche oder auch identische Ideophone gefunden werden. In ihrer Referenzgrammatik (1999) des Trumai (isoliert) fanden Ideophone zwar keine Erwähnung, aber in der Zwischenzeit hat sich Guirardello (pers. Komm.) mit diesem Aspekt der Sprache näher befasst, und die Publikation einer Studie ist in Vorbereitung. Guirardellos Studien zufolge haben die Trumai viele Ideophone aus der Sprache der Kamaiurá, mit denen sie engen Kontakt pflegen, entlehnt. Nach Angaben von Franchetto (pers. Komm.) treten Ideophone auch sehr häufig im DoBeS-Korpus zum Kuikuro (Carib) auf, ebenso wie in den nah verwandten Dialekten des Kalapalo und Nahukwa, die ebenfalls im Alto Xingu gesprochen werden. Dieses lässt sich anhand einiger Daten aus einem kürzlich der Öffentlichkeit zugänglich gemachten Teil des DoBeS-Sprachdatenarchiv zum Kuikuro bestätigen. Auch Bassos (1995) schriftliche Daten zum Kalapalo unterstützen diese Beobachtung und legen zusätzlich nahe, dass Ideophone in dieser Sprache ähnlich im Diskurs verankert werden wie im Awetí. Für das Waurá gibt Richards (1988) an, dass Ideophone eine typische Quelle für die Verbbildung darstellen.

Eine weitere offene Frage, die näher erforscht werden sollte, ist, ob Ideophone im Alto Xingu ein rudimentäres Verständigungsmittel in einer multilingualen Umgebung darstellen bzw. zu einem früheren Zeitpunkt darstellten. Wie im ersten Kapitel dargelegt, herrscht im Alto Xingu bis heute eine restriktive Sprachenpolitik vor, nach der ein Individuum nur die Sprache(n) seiner Eltern und des Dorfes in dem es aufgewachsen ist, sprechen darf, wobei sich aber in den letzten Jahrzehnten das Portugiesische als Kontaktsprache innerhalb des Gebiets immer mehr etablieren konnte. Viele Forscher haben zudem angegeben, dass Ideophone weltweit in einem engen Zusammenhang zu Gesten stehen, was ebenfalls für das Awetí nachgewiesen werden konnte. Aus der anthropologischen Literatur ist bekannt, dass Gestik im Alto Xingu zur interethnischen Kommunikation, vor allem im rituellen Diskurs, eingesetzt wird.

Da sehr viele Bilinguale in diesem Gebiet leben, wäre es außerdem interessant, die kognitive Strukturierung von Ideophonen bei diesen Sprechern eingehender zu untersuchen. Unter der Annahme, dass diese Elemente direkten Ausdruck von Körperwahrnehmungen darstellen und damit stark von anderen Wörtern einer Sprache abweichen, stellt sich die Frage, ob ein Bilingualer ein oder zwei sprachspezifische Sets von Ideophonen in seinem Wortschatz hat. Während Mithun (1982) herausstellte, dass irokesisch-englische Zweisprachige sich der irokesischen Ideophone in ihrem englischen Diskurs wenig bewusst zu sein schienen, konnte für zweisprachige Awetí-Kamaiurá-Sprachassistenten festgestellt werden, dass sie während ihrer Arbeit an den Transkriptionen wiederholt Kamaiurá Ideophone identifizierten. Hieraus lässt sich schließen, dass die jeweilige soziale Akzeptanz von Code-Mixing in diesem Zusammenhang ebenfalls ein wichtiger Faktor zu sein scheint.

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## Abbreviations

ACC	-	accusative
ACT	-	marker of active voice
ADVZ	-	adverbializer
AG	-	marker of the agent series
ANC	-	action nominal construction
ANTI	-	antipassive
ASS	_	assertive particle
AT	_	atelic
ATT	_	"attributive" case
AUG	_	augmentative
AUX	_	auxiliary
CAUS	_	causativizer
CHANG.TOP	-	change of topic
COL	-	collective marker
COM	-	comitative
COMP	-	complementizer
COMPL	-	1
CONFL	-	completive conjunction
coref	-	coreferential marker
CNT	-	
	-	'continuative' particle dative
DAT	-	
DEIC DEM	-	deictic marker
	-	demonstrative pronoun
Desc DESID	-	descriptive verb used as modifier of noun desiderative
DESID	-	diminutive
	-	
EMOT ENUM	-	particle expressing the speaker's feelings marker of enumeration
EPEN	-	epenthesis
EPEN EPIST	-	1
	-	epistemic particle
EVID EXCL	-	evidential particle exclamation
F	-	
FOC	-	female speaker marker of focus or emphatic form
FUT	-	future marker
FRUST	-	frustrative
GER	-	gerund
HORT	-	hortative
IDEO	-	ideophone
IMP	-	imperative (permissive)
IMPF	-	imperfective
IND	_	indicative
INDF	_	indefinite prefix
INTENS	_	intensifier
INTERJ	_	interjection
		merjecton

INTERR		interrogative particle
	-	interrogative particle
INTRV	-	intransitivizer
IRR	-	irrealis
LOC	-	locative case marker
MA	-	manner
Μ	-	male speaker
MID	-	marker of middle voice
MIM	-	mimesis
Ν	-	nuclear case
MN	-	nominal marker
NARR	-	marker of narrative form
NEG	-	negation
NFUT	-	nominal future
NOFUT	-	non-future marker
NOM	-	nominalizer
NOMag	-	nominalizer deriving agent of activity
C		denoted by verb
NOMcirc	_	nominalizer deriving circumstance of
		activity denoted by verb
NOMinstr	_	nominalizer deriving instrument of activity
		denoted by verb
NOMpat	-	nominalizer deriving patient of activity
Nompar		denoted by verb
NOMpl		nominalizer deriving place of activity
ПОМрі	-	denoted by verb
NOMqual		nominalizer deriving quality of state/
NOlviqual	-	• • •
NDCT		property denoted by stative verbs
NPST	-	nominal past
OBG	-	generic object
OBJ	-	object, object reference
OBL	-	oblique argument
OM	-	object marker
ON	-	onomatopoeia
OPT	-	optative
PART	-	particle, not further specified
PAST	-	past
PERF	-	perfective
PINC	-	particle of inceptive perception
PL	-	plural
1pl.excl	-	first person plural exclusive
1pl.incl	-	first person plural inclusive
POSP	-	postposition
POSS	-	possessor
PRES	-	present tense
PRO	-	free pronoun
PropN	-	proper name
PRS	_	present
		r

PTES	-	particle marking end of sentence
QUOT	-	quotative marker
QV	-	quotative verb
REC	-	reciprocal marker
RED	-	reduplication
REFL	-	reflexive marker
RL	-	relative
REL	-	relational prefix
Rel	-	relative clause
Remb	-	source of information remembered
st	-	stative intransitive verb stem
SUB	-	marker of subordination
SWRF	-	switch reference
TEL	-	telic
TOP	-	topicalizer
TRV	-	transitivizer
VBLZ	-	verbalizer
vi	-	intransitive verb stem
VOC	-	vocative term
vt	-	transitive verb stem
[]	-	inaudible segment or segment left out
1, 2,7	-	person category or noun class

# Gesture annotation

~~~~~	preparation phase
****	stroke
	recovery phase
~~~~~	hold within preparation phase
*****	hold after gesture stroke

### 1. Introduction

Recent studies in languages all over the world have shown that ideophones are a typologically widespread linguistic phenomenon, which, however, has often been ignored or marginalized in the past. This may have partially been due to the fact that their classification in terms of grammatical categories is not as straightforward as for other elements of speech and that – like onomatopoeia – they do not fully correspond to the Saussurean postulation of the arbitrariness of the linguistic sign. Saussure (1916: 102) claimed that onomatopoeic words apart from "never [being] organic elements of a linguistic system" are rare and therefore a marginal phenomenon. In addition, iconicity which is essentially imitative has often been considered a limited semiotic mode. Nuckolls (1995: 147), however, points out that all signs, including onomatopoeic words, communicate in mixed modes, because on the one hand they may create an impression of resemblance and on the other hand they have a conventionalized form.

Another reason for ideophones to have been ignored for a long time is because they typically occur in oral discourse, and it is generally difficult to adequately transfer them into a written form: "sound symbolic language is not designed for convenient reproduction into a literate two-dimensional form" (Nuckolls 1995: 162).<sup>1</sup> Thus, in languages with a long written tradition, they tend to have disappeared, so that scholars whose observations were based on written documents may simply not have been aware of them.<sup>2</sup> In addition, as was pointed out by Nuckolls (1995: 146), the usage of such elements in discourse in a Euro-American cultural setting where literacy is highly valued is associated with qualities such as childishness or simplicity of expression, which may have had a further negative impact on their recognition as objects of study in linguistic analysis.<sup>3</sup>

In some areas of the world, however, the study of ideophones has had a longer tradition, for example in Asian linguistics. According to Kita (2001: 420), ideophones in Japanese are highly conventionalized elements, which are very frequently used in everyday discourse as well as in verbal arts. Moreover, they are an integral part of the

<sup>&</sup>lt;sup>1</sup> See also Sherzer (1994: 907) who describes the decisions that have to be taken by researchers in order to adequately transcribe and translate significant performative features of Native American oral discourse.

<sup>&</sup>lt;sup>2</sup> Cf. Voeltz/ Kilian-Hatz (2001:2).

<sup>&</sup>lt;sup>3</sup> Cf. Munro (1998) who first became aware of ideophones in the North-American indigenous language Chickasaw when she overheard her consultant using these elements while talking to a small child.

Japanese language, so that ignoring their existence would mean to obtain only an incomplete analysis of the functioning of this language. The same applies to many other languages of the world.

As was mentioned by different researchers, ideophones seem to be especially frequent in narrative discourse. This even still applies to some European languages. An example is Modern Turkish, studied by Jendraschek (2002: 84), who points out that ideophones have survived in oral discourse due to the late development of a standard orthography in the 1930s. Jendraschek (2002: 92) summarizes the function of ideophones in narrative discourse as follows:

"Erzählungen müssen sprachlich ästhetisch sein, sonst wenden sich die Zuhörer ab. Sie sind emotional gefärbt, damit die Zuhörer mitfühlen und sich in die Erzählung hineinversetzen. Sie sind zudem subjektiv, denn der Erzähler muss sich von anderen Erzählern abgrenzen, um sozialen Status zu erlangen. Schließlich haben solche Erzählungen eine soziale Funktion, da sie ein gemeinsames Erlebnis darstellen und somit das Zusammengehörigkeitsgefühl stärken. [...] In vielen Sprachen steht den Erzählern ein Inventar sprachlicher Elemente zur Verfügung, die ihnen dabei helfen, all diese Funktionen in ihren Erzählungen umzusetzen: Die Ideophone."<sup>4</sup>

From the literature of the last few years the conclusion can be drawn that ideophones are an integral component of oral discourse all over the Amazonian lowlands.<sup>5</sup> They also manifest themselves in Awetí, a Tupian language which is spoken by a small indigenous community in the multilingual area of the Upper Xingu in Central Brazil. The existence of such elements in the oral narrative discourse of the indigenous peoples of this area was already observed by the German explorer Karl von den Steinen, who visited the Xingu twice in the late 19<sup>th</sup> century. Steinen wrote about what he termed the "Steinbeilpantomime" ('stone axe pantomime'), which he first witnessed during his second expedition in a village of the Bakairi, at that time a Carib group of the Upper

<sup>&</sup>lt;sup>4</sup> "Narratives must be linguistically aesthetic; otherwise the interlocutor will turn away. They have an emotional touch in order to create empathy and make the listener get involved in the action. They are further subjective because the narrator must dissociate himself from other narrators to gain social status. Finally, these narratives have a social function in that they represent a shared experience and strengthen the community spirit. In many languages narrators have an inventory of linguistic elements at their disposition which help them to realize all these functions in their narratives: the ideophones." [my translation]

<sup>&</sup>lt;sup>5</sup> Cf. section 1.3 (except 1.3.2 to 1.3.4).

Xingu, and which was repeated to him in all the villages he came to afterwards. The "stone axe pantomime" is an oral performance in which ideophones and gestures were used to communicate to the visitors that their metal axes were of a better quality than the indigenous stone axes, and that therefore they should be handed over to the Bakairi:

"Wie quält sich der Bakaïrí, um einen Baum zu fällen: frühmorgens, wenn die Sonne tschischi aufgeht, - dort im Osten steigt sie - beginnt er die Steinaxt zu schwingen. Und tschischi wandert aufwärts und der Bakaïrí schlägt wacker immerzu, tsök tsök. Immer mehr ermüden die Arme, sie werden gerieben und sinken schlaff nieder, es wird ein kleiner matter Luftstoss aus dem Mund geblasen und über das erschöpfte Gesicht gestrichen; weiter schlägt er, aber nicht mehr mit tsök tsök, sondern einem aus dem Grunde der Brust geholten Aechzen. Die Sonne steht oben im Zenith; der Leib – die flache Hand reibt darüber und legt sich tief in eine Falte hinein – ist leer; wie hungrig ist der Bakaïrí – das Gesicht wird zu kläglichstem Ausdruck verzogen: endlich, wenn tschischi schon tief unten steht, fällt ein Baum: tokále = 1 zeigt der Kleinfinger. Aber Du, der Karaibe, plötzlich ist Alles an dem Mimiker Leben und Kraft - der Karaibe nimmt seine Eisenaxt, reisst sie hoch empor, schlägt sie wuchtig nieder, tsök, tsök, pum  $-\bar{a}h$ ..., da liegt der Baum, ein fester Fusstritt, schon auf dem Boden. Und da und dort und wieder hier, überall sieht man sie fallen. Schlussfolgerung für den Karaiben: gieb uns Deine Eisenäxte" (Steinen 1894: 71, my emphasis).<sup>6</sup>

Steinen attributed a part of this vivid performance to the fact that he and the Bakairi did not have a common language, but at the same time he observed that they were using the same elements – albeit more sparingly - when communicating among themselves and abundantly in contact with other indigenous groups.<sup>7</sup> In Awetí, too, these elements occur with high frequency in different discourse genres but especially and in elaborate

<sup>&</sup>lt;sup>6</sup> "How the Bakaïrí struggles with felling a tree: early in the morning, when the sun tschischi rises, – there in the east it rises – he begins to swing his stone axe. And tschischi rises further, and the Bakaïrí – bravely – keeps beating tsök tsök tsök. His arms are getting tired, he rubs them; they drop down. A small and feeble puff of air escapes his mouth, he runs his hand over his exhausted face; he keeps beating, no longer with tsök tsök, but with a groan from deep within his chest. The sun has reached its zenith; the belly – the hand rubs over it and falls into a deep hollow – is empty; how hungry is the Bakaïrí – he shows the most miserable face: finally, when tschischi is already low, falls a tree: tokále = 1 shows the little finger. But you, the caraiba (non-indian), – suddenly everything on the mimic becomes lively and forceful – the caraiba takes his metal axe, swings it high up, strikes it down with force, tsök, tsök, tsök, pum – āh ..., a last forceful kick, and there lies the tree on the ground. And there and yonder and here again, everywhere one sees them fall. Conclusion for the caraiba: give us your metal axes." [my translation]

<sup>&</sup>lt;sup>7</sup> Cf. Steinen (1894: 71/72).

style in narrative discourse as performed by the two professional story-tellers of the group.

Although Awetí is still learned as a first language by children growing up in the two Awetí villages, it is at a stage of transition, being threatened in its existence by increasing contact with Portuguese. One expression of this is that the oral literary tradition is gradually disappearing with the facilitated access to Brazilian mass media, which cover the same functional domains. In addition, elements of oral discourse such as ideophones may get lost in the process of developing a written literary tradition of Awetí which is most likely to be based on Portuguese models due to a Portuguesebiased bilingual school education.

Such tendencies have been reported from small linguistic communities all over the world, e.g. the speaker community of the Mayan language Mam: "[...] the advent of more universal schooling and much more ubiquitous television have [...] contributed to the shrinking of the context for telling stories" (England 2009: 207/8). Another example are the ideophones in Pastaza Quechua, which - according to Nuckolls (1996: 131ff.) are considerably more frequent in the discourse of illiterate people in one village than in an equally isolated village with a higher level of formal education. She concludes that "literacy, which removes language from the body of the speaker, is at odds with the discursive design of sound-symbolic language" (Nuckolls 1996: 134). And Sherzer (1994: 908ff.), in critically evaluating his approach to Kuna oral discourse in the early 1970s, points to the somewhat reduced translations into Panamanian Spanish that at that time had been made by a young Kuna research assistant. The Kuna translator had decided to eliminate various formal aspects of the text, such as the dialogical structure of the performance or recurrent elements without a referential content. According to Sherzer these elisions and modifications reflected the conventions of written discourse his Kuna assistant had been exposed to in the Panamanian school system. When transcribing and translating Awetí discourse with young Awetí research assistants I had similar experiences with regard to ideophones or other expressive elements, which by some of the young people were not transcribed and commented on as being "not proper words".

Based on these observations indicating a general decline of an oral literary tradition, many researchers postulate that "special efforts should be made to recognize and record this elusive material while it is available" (Mithun 1982: 57), on the one hand because a careful study of ideophones on their different levels of analysis can help to establish language- or family-specific as well as universal patterns. On the other hand, ideophones are part of the verbal arts of a group which are highly valued by the language communities themselves and directly linked to their cultural identity, so that such phenomena should be exhaustively documented in order to be retrievable by following generations.<sup>8</sup>

## 1.1 Terminology and working definitions

In the linguistic and anthropological literature on languages in different parts of the world terms such as 'expressives' (Diffloth 1972), 'impressifs' (Tsuji 2001), 'palabras affectivas' ('affect words') (England 2006, 2009) or 'mimetics' (Kita 1993, 1997) have been used to refer to this kind of expression which, as Nuckolls (1995: 146) describes it for Pastaza Quechua, "is deliberately and consciously imitative or iconic of auditory, rhythmic, visual, or psychophysical sensations". However, these terms do not always cover the same phenomena, and in different languages there may also be variation with regard to their features on the different levels of linguistic analysis.

In an attempt to systematically describe such words for Bantu languages, Doke (1935: 118) named them "ideophones" and established the following definition, which is still the most widely used:

"A vivid representation of an idea in sound. A word, often onomatopoeic, which describes a predicate, qualificative or adverb in respect to manner, colour, sound, smell, action, state or intensity."

Voeltz & Kilian-Hatz (2001) point out two important aspects of this definition: on the one hand Doke observes that a sound-meaning correllation is not a necessary feature of ideophones – thus differentiating them from onomatopoeia, and on the other hand he does not classify them as belonging to any specific grammatical category. In fact, they observe, he neither offers "a syntactic [n]or a semantic definition [n]or any criteria for identifying ideophones as such" (Voeltz/ Kilian-Hatz 2001:2). The authors attribute this imprecision in Doke's definition to a general difficulty to adequately describe

<sup>&</sup>lt;sup>8</sup> See e.g. de Niemeyer Cesarino (2008), an ethnographic study of verbal arts among the Marubo, a Panoan group of Western Amazonia. The study shows how the group's poetic discourse relates to all aspects of their cultural identity. Nuckolls (1996: 134), when comparing the use of sound symbolic language in two villages, observes that in the village with more educated speaker "its use connotes "insider-status" and a cluster of other values [...] such as authenticity, intimacy, and affectivity".

ideophones within and across languages. The feature researchers from different parts of the world generally agree upon is captured in the first sentence of the above quotation and relates to their pragmatic function of creating a dramatic effect in discourse: ideophones are vocal simulations or imitations of events, perceptions and – more restrictedly – emotions.

A recent and more concise definition by Dingemanse (2009: 83), which explicitly aims at "being broad enough to serve as a general cross-linguistic characterization of ideophonic phenomena while leaving room for the details to be spelled out for specific languages", is the following:

"Ideophones are marked words that vividly depict sensory events."

This definition contains all the relevant components for a cross-linguistic characterization without making reference to the grammatical status of these words or to sound-symbolism, two criteria which may vary considerably from language to language. The most important aspects are that ideophones are 'words' with specifiable meanings, that they are 'marked' in several respects, that by performing ('vividly') rather than describing they create an image ('depict') of an event and that the depicted events belong to a broad spectrum of sensory impressions (Dingemanse 2009: 1/2).

### 1.2 Inventory of relevant phenomena

There are a number of different phenomena in the Awetí language which may all be gathered under the label of "ideophone" according to the definition by Doke and crosslinguistic characterizations by other scholars. In a first step towards a systematisation, taking into account their most salient features on different levels of analysis, three groups of elements can be identified:

- (I) Uninflected words substituting or 'repeating' a verb referring to an activity, or adding information to a verb with regard to the manner, medium, etc. in which the action takes place:
- a. (tal\_mamuti\_2\_8, 1641.368) **Pyw** o=u'wyp. IDEO.pick.up 3coref=arrow

'He<sub>i</sub> picked up his<sub>i</sub> arrow.'

b. (mop\_manioc, 0916.54)

I=por-ezut -(t)u  $\tilde{i}$  me, pururu.

3=ANTI-bring.vt-NOM 3PRO.F PART, IDEO.throw.down.several.things 'He brings it (the firewood), throws it down pururu.'

c. (tal\_kujakyt, 1111.932)

 $N\tilde{a}='y'u$  -tu ti me, kut kut kut kut mu'j $\tilde{e}$ .

3= drink.vi-NOM EVID PART IDEO.drink ready

'(They say that) he drank, kut kut kut kut kut and finished.'

d. (tal\_mamuti\_2\_8, 0098.271)

*O-ut* ti a'yn, tyk tyk.
3-come.iv EVID PART, IDEO.walk
'(They say that) she came, (walking) tyk tyk.'

(II) Vocal imitations of sounds uttered by humans, animals and elements of nature which occur in the same syntactic environments as the items of group (I):

a. (tal\_mamuti\_1\_8, 0699.372)

*O-tak ti Warakuni a'yn, ãj ãj ãj.* 3-cry.vi EVID PropN PART, IDEO.cry '(They say that) Warakuni cried, **ãj ãj ãj**.'

b. (tal\_mamuti\_4\_8, 0948.341)

Atīw atīw atīw atīw.

IDEO.sneeze

'He was sneezing.'

c. (tal\_mamuti\_4\_8, 0053.806)

*O-ti'ing ti a'yn, ta'wat ti'ing-ku wo me, 'hm 'hm 'hm 'hm.* 3-speak.vi EVID PART jaguar speak-NOMPOSP PART IDEO.roar

'(They say that) he spoke in the jaguar's language, 'hm 'hm 'hm 'hm.'

d. (tal\_mamuti\_3\_8, 0867.613)

Tung tung tung,  $n\tilde{a}=pytj\tilde{o}-pytj\tilde{o}-ju$ -tua'yn.IDEO.fart3=RED-fart.vi-IMPF-NOM PART

'Tung tung tung, she was continuously farting.'

(III) Human exclamations expressing emotional states, physical sensations or attitudes of the speaker:

```
a. (tal_mamuti_3_8, 0681.59)
Atsy atsy atsy!
```

INTERJ

'That's disgusting!'

b. (kal\_sham1, 0975.394)

*Ete jatã 'e!* INTERJ DEM PART

'This hurts (of a burn).'

```
c. (kal tawozy2, 0843.517)
```

*Eke, pej- tup me 'a!* INTERJ IMPpl-see.vt PART PART 'What a pity, (just) look!'

d. (tal kakaja, 0412.006)

*Kwy*, *e- tym=wã kitã!* INTERJ 2sg-plant=COMPL DEM

'Wow, (I'm impressed that) you planted all that!'

Of these three groups the first two will henceforth be treated as 'ideophones' for showing little variation with regard to their characteristics and distribution, while the third group will be subsumed under the category of 'interjection'.<sup>9</sup>

Items of group I and II are either directly motivated by sound symbolism and iconicity<sup>10</sup> or by what has been called "motivated"<sup>11</sup> or "conventional sound symbolism"<sup>12</sup>, i.e. they consist of a combination of sounds that are felt by the speaker community to be similar to the original extra-linguistic sensation (Kilian-Hatz 2001:158).

Awetí interjections – by contrast – are clearly not motivated by sound or iconic in any other way, which excludes them from the definition of 'ideophones' provided by

<sup>&</sup>lt;sup>9</sup> Cf. section 3.3.7.3.

 $<sup>^{10}</sup>$  In the terminology developed by Hinton et al. (1994: 3/4) this is referred to as "imitative sound symbolism".

<sup>&</sup>lt;sup>11</sup> Kilian-Hatz (2001).

<sup>&</sup>lt;sup>12</sup> Hinton et al. (1994: 5).

Dingemanse. They always represent instances of human speech, reflecting either the attitude or the emotions of the speaker or the protagonist in a narrative. They most often form a whole utterance by themselves, and there are strict rules as to whether an item of this group may be repeated or not. Although there is a certain overlap between group II ideophones and interjections in cases where both are concerned with human exclamations, the latter form a closed set of expressions while the other two groups constitute open classes. Another distinction between the ideophones of group I and II and interjections in Awetí is that the former two are equivalent in meaning to predicates formed by active verbs, while the latter can mostly be paraphrased by stative verb predicates. Items of this group are also less expressive (or 'vivid' in Dingemanse's definition) than ideophones of group I and II, i.e. they may be uttered with high pitch as an expression of marked prosody, but other marked prosodic features such as rhythmic variation, increase or decrease in volume or expressive lengthening do not occur.

Some authors consider items of all three groups as 'ideophones' or treat them as one large group of "expressive vocabulary"<sup>13</sup>, others further distinguish between 'sound mimicking words' – here referred to as ideophones of group II – and proper 'ideophones'.<sup>14</sup>

Since – as will be shown – the items of group I and II in many respects behave in an identical way, the two groups have been joined under the same heading of 'ideophones' but whenever they show a differing behaviour they will be referred to by 'group I' and 'group II' respectively.

## 1.3 Ideophones and related phenomena in Amerindian languages: An overview

While most of the studies on ideophones traditionally dealt with African and Asian languages in different frameworks<sup>15</sup>, these elements have not received the same attention in the analysis of American indigenous languages. In a 2001 article Nuckolls (2001: 271) still observes that little attention has been given to ideophones in South American native languages, for which there is scarce data in general. Only more recently there have been detailed studies of individual phenomena (including ideophones) for South-American indigenous languages. Therefore, several earlier analyses made with regard to North-American languages from different families will be

<sup>&</sup>lt;sup>13</sup> Cf. Mithun (1982).

<sup>&</sup>lt;sup>14</sup> Cf. McGregor (2002: 341).

<sup>&</sup>lt;sup>15</sup> Cf. Kulemeka 1995.

included here, especially since many of the observations also apply to ideophones in the Southern part of the continent. In addition, a number of recently published grammars of South American languages spoken in the Amazonian lowlands will be consulted, in which the subject of ideophones or expressions involving ideophones is treated to differing degrees.

Only in recent times some consensus has developed among researchers on Amerindian languages to use the term "ideophone" for the described phenomenon. Earlier terms were among others "expressive vocabulary" (Mithun 1982), "noise word" (Langdon 1994) or "sound symbolic word" (Nuckolls 1995). However, even in more recent analyses a clear definition of ideophones is often lacking, as is consistency with regard to the usage of this term.

The relevant literature is presented in chronological order whereby languages of the same family are grouped together. This applies especially to the Carib family, where this phenomenon has been given attention relatively early. For the Tupian family, in this section only one earlier study on 'noise words' in Guaraní is outlined. A more detailed presentation of selected studies from this family will be given in chapter six, where ideophones in Awetí will be compared to related phenomena in other Tupian languages.

## 1.3.1 Carib languages

Derbyshire (1961, 1977) is one of the first linguists who explicitly use the term "ideophone" to describe certain elements in the discourse of Hixkaryana, a Southern Carib language spoken in Northern Brazil along the rivers Mapuera and Nhamundá. His analysis is based on data from various field trips between 1959 and 1975. The data base includes oral literature (folktales and personal narratives) as well as written materials (hortatory, procedural and personal letter writing). In his earlier work Derbyshire (1961a: 141) characterizes ideophones as a class of particles, grouped together with exclamation, response, vocative and modal particles<sup>16</sup> into a "particle hyperclass" due to the fact that all these words are non-derived and non-possessed and often only consist of one syllable.

In a later publication Derbyshire (1977: 179) describes ideophones as a separate class of onomatopoeic words without any inflection which carry the meaning of an action that could also be expressed by an inflected verb. Syntactically, ideophones may

be used in three ways: (i) they can constitute an independent clause, expressing the action all by themselves, (ii) they can accompany a verb which carries the same meaning and thus, according to Derbyshire, be a redundant element of discourse, and (iii) they may be accompanied by an inflected form of the verb ka- ('say'/ 'do'), whereby in the example given in the article no further element is inserted between ideophone and ka-form. When forming a complete utterance, ideophones may further be accompanied by other sentence constituents, such as adverbs (cf. Derbyshire 1961b: 236).

Similar observations on ideophones in the Northern Carib language Apalai – spoken in the Brazilian state of Pará, mainly along the Paru Leste river – are made by Koehn & Koehn (1986), who point out that ideophones are a frequent phenomenon in everyday conversation and in narrative discourse. The authors, using the same definition of "ideophone" as Derbyshire (1977), confirm that the three syntactic environments listed for ideophones in Hixkaryana can also be found in Apalai. They add that ideophones in this language are the only word class, which cannot be followed by a postpositional particle. Unlike Derbyshire, Koehn & Koehn (1986:124) state that in the case where an ideophone accompanies a verb referring to the same event, the two usages are not redundant, but that the ideophone only encodes the "basic part of the meaning, not including person, tense, etc." of the verb. They observe that ideophones may consist of a single morpheme or constitute a sequence of forms repeated from twice up to more than ten times. There are also sequences formed by different ideophones. These elements further deviate from the phonological system of the language by having additional consonants and vowels in different positions. They also show the elsewhere in the language not permitted phonotactic peculiarity of a glottal stop in morpheme-final position. Ideophones normally consist of mono- or disyllabic morphemes. At the end of their description the authors present a list of 38 ideophones which are drawn from three narrative texts. One can observe that the listed ideophones are of diverse phonological shapes. They contain oral and nasal vowels, and vowel harmony exists in some forms but not in others. Some of the forms show full or partial reduplication, as in (1)(a) and (b), while others do not, as in (1)(c):

## (1) (Koehn & Koehn 1986:125/126)

<sup>&</sup>lt;sup>16</sup> Some of these other particle classes have been classified as interjections in other

a. wywywywy 'hammock swinging' or soposopo 'stepping into water'

b. sororo 'moving of canoe in shallow water'

c. pyhseky 'jump'

Some of the forms also suggest a correlation between form and meaning, but this subject is not explored by the authors. According to Camargo (2002), ideophones in Apalai can be nominalized, referring to the agent who is characterized by the activity depicted by the ideophone. This is illustrated in (2):

(2) (Camargo 2002)

a. *soo kane* – 'the one that said "soo"' – 'waterfall'

b. *tyryry kane* – 'the one that said "tyryry" – 'wind'

For other Carib languages the following information could be gathered which is based on various grammars and dictionaries as well as personal communication with linguists working on individual languages.

For Trio, a Carib language of Suriname, which – together with Apalai and Wayana – belongs to the Wayana-Trio subgroup,<sup>17</sup> ideophones have been described in Carlin's (2004: 410) grammar as conventionalized sound symbolic expressions which provide the listener with "a more vivid account of action, event or state". In addition, ideophones can be imitative of human sounds, animal calls or elements of nature, such as *kororo* (+ka) for 'snoring' or *tiririn* (+ka) for 'thundering'. They are, however, not restricted to sound-emitting events, as can be shown by the ideophones in (3) with (a) depicting a visual, (b) a tactile sensation and (c) referring to a soundless state or posture:

(3) (Carlin 2004: 411, 412)

- a. mananaman (+ ka) 'lightning'
- b. *sapan* 'touching something'
- c. *tiīiç* 'standing around waiting'

languages.

<sup>&</sup>lt;sup>17</sup> Cf. www.ethnologue.com

By and large ideophones in Trio have the same grammatical features as those encountered in Apalai. They may have a deviant phonological form, are mono- or disyllabic, and can be reduplicated or repeated to express repeated action or plurality of the participant involved (Carlin 2004: 411, 413).<sup>18</sup> Syntactically they fall into two groups: those that can be independent and those which only occur in combination with a following inflected form of the verb *ka* ('say'). Those of the first, larger group can occur closely in front of and/or behind a verb they are associated with, as shown in (4)(a) and (b), often providing additional semantic information, e.g. in (4)(a) on the manner component of the event referred to:

- (4) (Carlin 2004: 511, 535)
- a. *Ëema-tae j- arë -ø -n si si si si si …*path-PERL 3→1-take -PRES-NCERT IDEO.walk<sup>19</sup>
  'He takes me along a path.'
- b. *Irë-mao wa- t- ee-se tï- n-etë -hpë -tae-rë,*DP.INAN.ANA-TMP NEG-COREF.1TR-be-NF 3COREF-3O-plan.NOM-PST -PERL\_ASSERT *turu*.
  IDEO.fall.down.dead
  'Then he died just as he had predicted, he died.'

Ideophones functioning as the objects of a predicate formed by the transitive verb *ka* ('say') are given in (5):

(5) (Carlin 2004: 411, 538)

a. **Tonton** wi- **ka**-ø -e

<sup>&</sup>lt;sup>18</sup> Whether Carlin draws a distinction between the two processes and whether she attributes different functions to them, e.g. repeated action to reduplication and plurality of participant to repetition, cannot clearly be deduced from the partially contradicting information she gives: "The number of reduplications or repetitions of an ideophone is expressive of the number of actions being carried out. [...] Repetition of an ideophone indicates either plurality of the subject or of the object [...]. This is not to be confused with reduplication of part of the verb stem, which expresses plurality (or duration) of action and not of participants." (Carlin 2004: 411).

<sup>&</sup>lt;sup>19</sup> Abbreviations used in the Trio examples:  $\rightarrow$  acting on; 1TR one-argument transitive verb; ANA anaphoric ANIM animate; ASSERT assertive; CERT certainty; DP demonstrative pronoun; DUR durative; FACS facsimile; INAN inanimate; NCERT

IDEO.cough  $1 \rightarrow 3.1$ TR-say-PRES-CERT 'I am coughing.' ('I say tonton.')

b. *Taaaapiime make t-ee-se.*many.ANIM.FACS mosquito COREF.1TR-be-NF *Kuuuuh tiï- ka-e\_ken kuuuh.*IDEO.gush.out COREF.1TR-say-NF\_DUR IDEO.gush.out
'There were an awful lot of mosquitoes. They gushed out, kuuuh they went.'

However, as shown in (5)(b) where identical ideophones occur in combination with ka and by themselves, there also seem to exist ideophones which can form part of either group.

Carlin further suggests to group ideophones and interjections in that language into the same category for having "expressive content", which in interjections is related to emotions, and for being combinable with additional morphology. Instead, prosodic means such as vowel lengthening or pitch variation can have, for example, an intensifying function in ideophones (Carlin 2004: 411). Another prosodic means is the gradual reduction of loudness of a series of repeated ideophones, which, according to Carlin (2004: 414), either indicates a climax in the narrative or "that the present episode is coming to an end".

Two derivational processes involving ideophones are mentioned. On the one hand ideophones may combine with a "facsimile marker"  $-me^{20}$  to form adverbial expressions indicating manner of movement as in (6)(a), and some verbs can be formed from ideophones in receiving a verbalizing suffix -ta, as in (6)(b):

(6) (Carlin 2004: 400, 410)

a. *kïrïkïrï-me* 'trembling'

b. *wejuh-ta* 'fart'

Ideophones, followed by an inflected form of the cognate verb ka/(k)a, are also frequent in Wayana (Camargo, personal communication), which is spoken in Brazil, French Guyana and Suriname. They are often onomatopoeic, refer to sounds emitted by

non-certainty; NF non-finite; O object; PERL perlative; PRES present; PST past; TMP time, manner, place.

 $<sup>^{20}</sup>$  The literal meaning of adverbials formed from an ideophone and this marker is given as 'as X' or 'having the appearance of X' (Carlin 2004: 400).

natural phenomena or to activities which are accompanied by a characteristic sound. Wayana ideophones are nominalized according to the same scheme as shown for Apalai in (2).

According to Franchetto (personal communication), ideophones are very frequent in her DoBeS-corpus of Kuikuro, a Southern Carib language spoken in the Upper Xingu Basin. The same holds for Kalapalo and Nahukwa<sup>21</sup>, the two other dialects of that same Carib language which belong to the same cultural area as Awetí. Empirical evidence for this is given by Basso (1985, 1995) in her anthropological analysis of Kalapalo discourse which is based on texts belonging to different sub-genres of narrative discourse. Basso (1985: 66, table 8), who focussed in her investigation on the construction of meaning through performance, summarizes different kinds of usages of ideophones. These are sub-grouped into "onomatopoeia", "expletives", referring to human sounds and cries, and "calls of living things". Examples for the latter two groups are listed as individual items, most of them repeated several times. Two "expletives" are given in (7)(a) and (b), a sound made by an animal in (7)(c):

(7)(Basso 1985: 66)

- b. *kïtah* 'expression of frustration'
- c. *siiiissss* 'call of a snake'<sup>22</sup>

The examples show that Basso's classification scheme differs considerably from the one underlying this study. On the one hand, her term 'expletive' covers both onomatopoeic ideophones of group II, exemplified by (7)(a), as well as interjections, an instance of which is given in (7)(b). This is explained by a close association between human calls and the feelings from which these arise. On the other hand, animal calls are separated from human sounds.

<sup>&</sup>lt;sup>21</sup> In the SIL-Ethnologue (<u>www.ethnologue.com</u>) Nahukuá (Nahukwá) is classified as a dialect of Matipu whereas in Franchetto (2000: 128) it is grouped together with Kuikuro and Kalapalo as belonging to one language.

 $<sup>^{22}</sup>$  Basso explains that what she calls "expletives" are classed in Kalapalo as *itsu* and – unlike in English cultural tradition – can refer to humans and animals alike. In addition, there is always an association between human calls and the feelings from which these arise which shows that in Basso's classification a distinction between "ideophones" on the one hand, and "interjections" on the other is somewhat blurred and difficult to draw.

A further differentiation is made between sounds emitted by entities, and sounds referring to actions in which entities – inanimate objects as well as animate bodies or  $organs^{23}$  – are involved. For these – equivalent to group I ideophones in Awetí – she lists four complete utterances in Kalapalo, reproduced in (8), which show that the syntactic behaviour of ideophones in this language largely corresponds to what has been described for other Carib languages:

(8) (Basso 1985: 66)<sup>24</sup>

a. puk, ah tafaku, isiña

'Puk, well tafaku wood to her mother.'

(puk 'sound of wood being placed before recipient')

b. ti ti ti ifaki ekugu

'Ti ti ti a long way."

(ti ti ti 'sound of human feet walking on path')

c. tsidik ataŋembefa

'Tsidik, he climbed onto what he had been concerned with"

(tsidik 'sound of man's body hitting tree as he climbed onto it')

d. aimbegele tsïgïtsïgïtsïgï uletofona, dididididididiiiii didik buuk!

'Once again he did as before tsïgïtsïgïtsïgï to do that, didididididididididididididik buuk!' (*tsïgïtsïgïtsïgï* 'man climbing tree, pushing feet against trunk'; *dididididididididiiiii* 'man sliding down tree trunk'; *didik* 'man's body bumping off tree trunk at bottom'; *buuk* 'man's body (feet) hitting the ground')

Although the glossing line presented by Basso and reproduced here is not very transparent, (8)(a) and (b) clearly show that the ideophones *puk* and *ti ti ti* are used instead of verbs to form the predicates of the clauses, while in (8)(c) the ideophone is adjacent to a predicate formed by a finite verb which apparently has the same overall meaning but less semantic content in not bearing any information on the 'gestalt' of the patient participant. In (8)(d), four different ideophones – following one after another –

 $<sup>^{23}</sup>$  Basso states that some organs of the human body, such as the eyes, the pulse or the inner abdomen, are treated as active by themselves since the Kalapalo consider them places of emotion (1985: 65).

 $<sup>^{24}</sup>$  The glossing line and the translations are those presented by Basso (1985).

describe a complex activity, the climbing of a tree and subsequent sliding down from it and hitting the ground, which – unlike the corresponding lexical verbs in English – can represent the different phases of this activity. There are no Kalapalo verbs in this sentence so that it is not possible to make a statement about their semantic specificity in comparison to that of the ideophones.<sup>25</sup>

Basso (1985: 64) further observes that some of her "onomatopoeic" ideophones are highly standardized and occur in almost all narrative sub-genres. At the same time ideophones are an open class of words to which new forms, especially for describing formerly unknown events, are constantly added. According to Basso, the use of a "variety of onomatopoeia in a story attests to the narrator's skill in making sense and then creating in the listener's mind a vivid image of the action that takes place" (1985: 64).

## 1.3.2 Iroquoian languages

An early study dealing exclusively with "expressive vocabulary" in several Iroquoian languages of North America, spoken in the American States of New York, Wisconsin and Oklahoma and in the Canadian Provinces of Quebec and Ontario, is given by Mithun (1982), who analyses the synchronic and diachronic behavior of "words for noises, animal cries, mental states, and physical states and actions" (1982: 49) on different levels of description. Methodically, Mithun asked native speakers for the meaning of such words when these occurred in context. She further states that when first trying to elicit the items in isolation, most speakers were not even aware of their existence. After they were pointed out to them in use, however, they could easily produce many further examples. The data of spontaneous language use in each of the four languages was partially collected by the author herself, and partially supplied by native language teachers over a period of several years. The expressions were further verified by larger groups of native speakers.<sup>26</sup>

<sup>&</sup>lt;sup>25</sup> For various languages it has been pointed out that ideophones can be semantically more specific than verbs which refer to the same events (see e.g. Dickinson (2002) on Tsafiki and section 4.5).

 $<sup>^{26}</sup>$  According to Mithun (1982: 50, footnote 5), it was much easier to countercheck the meaning of the expressions and elicit new ones when working collectively than by asking different speakers individually. This observation can be confirmed by my own elicitation work with Awetí and Cashinahua speakers who – by discussing the data among themselves – came up with further idiomatic examples, while informants on their own tended to accept non-idiomatic constructions in order to please the linguist.

Mithun arrives at the conclusion that their phonological, morphological and syntactic divergences are systematic and directly linked to their function of imitating sounds. In her study she subsumes under "expressive vocabulary" both ideophones and interjections, whereby she does not draw a clear distinction between these two when analysing their features in detail. Salient morphological features - according to Mithun - are that "expressive" words, unlike other lexical items, are not inflected, consist of only one or two syllables, and are often reduplicated. This process does not occur with other words in these languages which undergo processes of affixation. "Expressive" words also often have a divergent stress pattern by showing ultimate instead of penultimate stress. Mithun notices that in three of the four Iroquoian languages under investigation (Mohawk, Oneida, Cayuga and Seneca) there are additional vowels in the expressive vocabulary as well as consonants in all four languages which seem to cover "gaps" in comparison to the more symmetrical phoneme inventories of other Iroquoian languages and reflect a general tendency towards phonological symmetry in language. This may be seen as an argument in favor of the hypothesis that ideophones (or rather "expressive vocabulary" items) are more stable than other lexical items, and therefore also less prone to phonological change, as was also observed by other authors (e.g. Langdon 1994, discussed below). Expressive vocabulary items mostly obey regular phonological processes and combinatorial restrictions of phonemes which are also observed elsewhere in the respective languages. But they additionally show submorphemic alternations which do not occur in other parts of the lexicon. Thus, length, pitch and pharyngealization, not further illustrated by the author, may enhance the "expressive mode" of these elements. In addition, Mithun gives several examples of a possible tendency towards sound symbolism in these words. According to her observations, ideophones referring to high-pitched sounds contain high vowels and are pronounced with high pitch, as in (9)(a), whereas there are lower vowels in ideophones referring to low-pitched sounds, exemplified by (9)(b), which are pronounced accordingly:

(9)(Mithun1982: 54, footnote 11, 52/3)

- a. Mohawk *i:k* Oneida, Cayuga *ki:ks* Mohawk/ Seneca *i:ks* 'sound of creaking door'
- b. Mohawk wawarú Cayuga mbláõ Seneca krõkrõk
   'frog's croak'

A sudden sound of something hitting a hard surface characteristically ends in /?ks/ (as in (10)(a), while sounds against softer surfaces often have /m/ as their final consonant (as in (10)(b):

(10) (Mithun1982: 54, footnote 11)

- a. Mohawk, Oneida, Cayuga, Seneca *kwa?ks*'sound made by an egg falling and breaking on a hard surface'
- b. Mohawk samsamsam'sound of light steps on a forest path'

Water sounds, as in (11), generally contain sibilants:

(11) (Mithun1982: 54, footnote 11)

- a. Mohawk šyáo 'splash'
- b. Oneida tšyahtšyahtšyah 'splash splash'

The fact that there are sets of expressions with similar meanings which differ by one vowel also shows an absence of lexical discreteness<sup>27</sup> in Iroquoian expressive words, whereas in non-expressive vocabulary such a difference can produce a word with a completely unrelated meaning. This can be seen in example (12) from Mohawk where different vowels represent a knocking or tapping sound on different kinds of surfaces:

(12) (Mithun 1982:54)

- a. to? to? to? 'knocking (as on a door)'
- b. ta? ta? ta? 'tapping'

Mithun attributes this feature of expressive words to their function of imitating sounds. She further observes that syntactically these elements are mostly independent of the sentence structure, and can only occur as "the object of a verb like *say*" (Mithun 1982: 55).

<sup>&</sup>lt;sup>27</sup> This term was used by Diffloth (1972, 1976) for similar observations in Semai.

Since for Iroquoian languages, different from most South American indigenous languages, there are extensive written records dating back to the early 20<sup>th</sup> century, a diachronic dimension could be integrated into the analysis. Mithun observed in this context that some items of expressive vocabulary were identical in all four languages, although there was little contact between the communities, and each of the languages underwent specific sound changes. Mithun concludes that due to their imitating function these items are apparently more resistant to sound changes, in particular to consonant shift, than other parts of the lexicon. She therefore suggests treating them as "a special class within the lexicon, with its own synchronic and diachronic behavior" (1982: 57). Another important observation which shows that "expressive vocabulary" seems to be more stable than the rest of the lexicon and on a different cognitive level was that Iroquoian interjections were often used by bilingual speakers while speaking English and that they seemed to be unaware of the code-switch. As will be seen, many of the characteristics listed by Mithun for "expressive vocabulary" in Iroquoian languages also apply to ideophones and interjections in Awetí and other South American indigenous languages.

#### 1.3.3 Paraguayan Guaraní (Tupian)

Departing from her own prior observations with regard to what she then termed as "expressive 'say' constructions" in various Yuman languages of North America, Langdon (1994) presents a first description of so-called "noise words" in Paraguayan Guaraní which – like Awetí – belongs to the Tupian language family.

In Langdon (1977) the author had explored the semantics of a specific construction consisting of uninflected words in combination with an inflected verb with the meaning 'to say'. The same words can elsewhere be used like ordinary verb stems. Langdon had arranged her examples from a variety of Yuman languages according to semantic categories like noises, motions, patterns, or emotions, and characterized the constructions as "descriptive of a characteristic configuration of an individual, object, or situation by focusing on the overt, immediately verifiable evidence, while declaiming any active, deliberate, or volitional intent" (Langdon 1977). In addition, she had noticed that there were very similar constructions in more distantly related languages of adjacent geographical areas. At a time when there were not many studies on South American indigenous languages available Langdon also perceived striking parallels

between the "expressive 'say' constructions" in Yuman languages of California and "noise words" in the variety of Guaraní which is spoken in Paraguay.

Under the term "noise words" Langdon (1994) subsumes a class of verbs which generally refer to noises, either produced by nature, inanimate objects or the human body, and – in a metaphorical use – to human emotions. These verbs have a clear tendency towards sound symbolism and form a systematic part of the lexicon. By asking a native speaker to describe the exact meaning of the items in question, contrasting them with other words which differ by one vowel or by the initial consonant, Langdon tried to establish minimal sets and – as in Asian tradition with regard to research on ideophones<sup>28</sup> – characterize the semantic content of individual segments of the words.<sup>29</sup> While considering some features as clearly iconic, she admits that for others the form-meaning correlation is not as straightforward and that work with more native consultants may alter the results of her preliminary analysis. Examples for iconic features which correlate with Mithun's observations in (9) on high-pitch and low-pitch sound symbolism are given in (13), where the high vowel /i/ in (a) is generally characterized as 'high-pitched, intense', as opposed to the lower vowel /a/ in (b):

(13) (Langdon 1994: 96/7, table 7.2)

- a. *tiriri* 'splintering glass, just one crack'
   *wiriri* 'high-pitched giggle'; 'branches scraping'<sup>30</sup>
- b. warara 'echoing thunder' mbarara 'loud, deep'; 'big drum'; 'heavy books falling'

Another opposition which reflects the sound symbolic nature of these verbs is that between /p/ in (14)(a) and (b) and /mb/ in (13)(b), where sharp explosive connotations contrast with more reverberating ones:

(14) (Langdon 1994: table 7.2)

a. *piriri* 'fire burning dry grass'; 'crackle of new money'

<sup>&</sup>lt;sup>28</sup> Cf. section 4.5 and e.g. Lee (1992) for Korean or Tsuji (2001) for Japanese.

<sup>&</sup>lt;sup>29</sup> Cf. Langdon (1994: table 7.2).

<sup>&</sup>lt;sup>30</sup> The same word *wiriri* in Awetí means 'bamboo' and thus shows a partial semantic overlap with the second meaning of the Guaraní noise verb. Both, the Awetí noun and the Guaraní verb root may have had their common historical origin in an ideophone which has disappeared in both languages.

#### b. pororo 'popcorn'; 'sparks'

As can be seen in the examples, verb roots in Guaraní referring to noises have a canonical shape  $CV_1rV_1rV_1$ , thus presenting the preferred syllable structure CV of the language. In this they resemble the shape of one type of ideophones encountered in Awetí.<sup>31</sup> Very few verbs also have /l/ or /n/ instead of /r/, for which Langdon (1994: 98) suggests the possibility of being "archaic residues of an earlier more complex system", contrasting between the phonemes in this position. These verb roots in Guaraní are characterized by vowel harmony, whereby all oral and nasal vowels of the language's phoneme inventory, presenting the same six pairs of vowels in symmetric distribution as in Awetí,<sup>32</sup> can be in the position of  $V_1$ , except for /ē/ which Langdon considers an accidental gap. The initial consonant of these words can either be an obstruent, more specifically a stop or a voiceless fricative, or the approximant /w/. Although a considerable part of the lexicon of the strongly acculturated variety of Guaraní spoken in Paraguay consists of Spanish loanwords and includes phonemes of that language, 'noise' verbs obey all phonological constraints of the Tupian part of the language's lexicon. For Langdon this is evidence that they belong to the native lexical inventory, which corresponds to the observation made by other researchers that sound symbolic words tend to be less prone to change than other parts of the lexicon. Another argument in favor of the hypothesis that they form part of the original lexicon is their specific meaning, e.g. *tiriri* in (13)(a) or *piriri* in (14)(a), for which no equivalent words can be found in the Romance language. Instead, as in the English translation equivalents given in (13) and (14), the meaning can only be given by a complex expression to which a noun referring to the participant needs to be added.<sup>33</sup>

Langdon further observed that between some items of the canonical form and several two-syllable forms of a  $CV_1rV_1$ -shape, identical except for not having the third syllable, there is a semantic relationship which – when both refer to noise – can be described as expressing a prolonged sound of the same quality in the case of the three-syllable item. In these cases the longer word has presumably derived from the two-

<sup>&</sup>lt;sup>31</sup> Cf. section 4.2.

<sup>&</sup>lt;sup>32</sup> Cf. section 3.2.

<sup>&</sup>lt;sup>33</sup> Note that Langdon in most cases gives alternative meanings which either suggests that the meaning of the respective item is not conventionalized or that the exact meaning should rather be described on a more abstract level, e.g. as a specific kind of sound or movement which is characteristic for several distinct events (cf. section 4.5.2).

syllable word by partial reduplication of the last syllable, as illustrated in (15), even though there are also examples where the semantic relation is not (immediately) given.

(15) (Langdon 1994: 99)*sunu* 'first thunder clap' vs. *sununu* 'echoing thunder'

Noise verbs are inflected according to the paradigm of the intransitive verb type of Guaraní which corresponds to intransitive active verbs in Awetí,<sup>34</sup> and can be transitivized by a causative prefix *mbo*-, which is a cognate of the Awetí causative *-mo* with the same function. Examples for an inflected regular intransitive verb and a noise verb are given in (16)(a) and (b) respectively:

(16) (Langdon 1994: 100, table 7.3)

a. *a-puka* 'I laugh'

b. a-perere 'I make a flapping noise'

In spontaneous speech Langdon could observe a usage of the noise words as noun modifiers without any morphology, as in (17):

(17) (Langdon 1994: 101) *Nd-a-ipota so'o* xyryry.
NEG-1sg-want meat sizzle
'I don't want fried meat.'

In careful speech the form would have a subject prefix and a nominalizing suffix *-va* to form a relative clause modifier. The same two possibilities also exist for regular verbs. When asked to characterize the difference between morphologically complex verbs in this position and bare verb roots, the native speaker consultant explained that in the former case the emphasis was on the modified noun while in the latter on the action performed. Owing to a sparse data base, Langdon does not attempt to give any explanation for her observations. In view of what has been said about ideophones in other languages, one may hypothesize that regular verb roots and noise words have

<sup>&</sup>lt;sup>34</sup> Cf. section 3.3.4.

developed the same syntactic environments by analogy, the verb roots acquiring the possibility to be used without morphology as modifiers, indicating a shift of focus towards the event, while what originally could have been a non-inflecting ideophone may have developed into a verb root. More evidence, at least for the assumption that ideophones may develop into verbs, will be presented in chapter five, when analysing the synchronic variation observed with regard to ideophones in Awetí, and in chapter six, where data from other Tupian languages will be investigated with regard to this hypothesis.

## 1.3.4 Chickasaw (Muskogean)

A study, which impressively shows that in a language shifting from orality to a written literary tradition ideophones tend to disappear, is Munro's (1998) description of "expressive 'say' constructions" in Chickasaw. Chickasaw is a Muskogean language, mostly spoken in South Central Oklahoma, for which in 1987 around 1000 native speakers were registered, most of them over fifty years old. A general strong tendency towards English monolingualism within the ethnic population has been attested for this language.<sup>35</sup>

Munro states that "expressive 'say' constructions" do not occur in ordinary discourse and that she first encountered one by chance after nine years of learning the language. This happened when her native teacher addressed a baby, taking its hand, slapping it on the table and accompanying this gesture by saying "*pas pas pas aachi*" ('say pas pas pas'). <sup>36</sup> The Chickasaw teacher explained that such words were exclusively used when talking to children, who thus would learn the language more easily. Munro managed to elicit altogether 32 such constructions, all of which referred to noises, by first making her consultant recall more of them and then by making up similar constructions filling the typical triple CVC structure with phonemes of the language and making the consultant evaluate their correctness. The items then were rechecked on various occasions with the same person and with a second native speaker in order to verify whether there was a consistent form-meaning association. Munro found out that the two consultants associated the same or similar meanings, and could easily accept each other's different meaning associations. By asking four native

<sup>&</sup>lt;sup>35</sup> See http://www.ethnologue.com/show\_language.asp?code=cic

<sup>&</sup>lt;sup>36</sup> This observation suggests a strong relationship between ideophones and gestures, a subject which will be further explored for Awetí in section 4.6.

speakers of English without any competence in Chickasaw to guess the meaning of 21 expressive syllables by their sounds, she tested whether the meaning associations were general or conventionalized within the native speaker group. The results – only four of 60 guesses weakly corresponded to the meanings given by the native speakers – confirmed her hypothesis that the associations were idiosyncratic, i.e. restricted to Chickasaw speakers.

Some of the expressive syllables resemble English noise words and may be considered borrowings. Two examples are given in (18):

- (18) (Munro 1998: 183/4)
- a. *paaw* or *pa'w* 'sound of a gun'
- b. *tik* or *ti'k* 'sound of a clock ticking'

Since there are many expressive syllables referring to "modern" sounds, such as shooting with a gun or starting a car, there is a high probability for this process by which lexical gaps in the language can be filled. At the same time this is not a counterargument to the assumption based on phonological, semantic and sociolinguistic observations that expressive vocabulary in general is more archaic than other parts of the lexicon.

Munro (1998: 181) further found out that, while the expressive syllable, usually repeated three times and occasionally twice, remains invariant, the form of *aachi* ('to say') can be modified to signal aspectual differences, can be negated and receive a dative object prefix. The invariant syllables can also be uttered in isolation but not combined with a finite verb other than *aachi* similar in meaning. Munro noticed that the expressive syllables cannot be used by themselves as verbs due to their CVC-shape which contrasts with the minimal VCV-shape of verb roots. However, there are in nearly all cases verbs which contain identical CVC segments and have a similar meaning, as in (19):

(19) (Munro 1998: 183)

*kab* or *ka'b* 'sound of knocking or hammering' as opposed to*itti-káb-bak-li'-chi* 'to knock things together'

Most of these belong to a group of often partially reduplicated verbs which start with *itti-*, normally a reciprocal prefix.<sup>37</sup>

There are two variant forms of each of the expressive syllables, one CVC, the other CV'C with a glottal stop inserted between vowel and consonantal coda. The vowel in the first form may be short, as in (18)(b) and (19), long, as in (18)(a), or nasalized – with nasal assimilation before a stop in the coda, as in (20):

(20) (Munro 1998: 183)*lhonk* or *lho*'k 'sound of pig grunting'

The second form, as illustrated by the second variants in (18) to (20), always has a short vowel because long vowels regularly shorten when followed by a glottal stop in a closed syllable.

Munro further discovers a second, two-syllable type of expressive word with the shape  $CV_1CV_1k$ , which usually has the same meaning as its simple CVC-counterpart. In one case, for the pair *kalh/kalhak* ('sound of knocking, pounding, hammering'), the additional meaning 'sound of wagon wheels' is given for the extended form.

Not for all CVC-words is there such an extended form, and one extended form was encountered without a corresponding simple form.

Semantically, a clear relation exists between several of the simple forms built with the same consonants and vowels in reverse order, i.e. which are phonologically related by metathesis, as can be seen in (21):

(21) (Munro 1998: 183/4)

bak or kab 'sound of knocking or hammering'

This points in the same direction as Mithun's above observation on the "lack of lexical discreteness" in Iroquoian expressive vocabulary. Such a process of metathesis also seems to have taken part in the reduplication process of some of the verbs corresponding in meaning to the expressive syllables (cf. example (19) above).

<sup>&</sup>lt;sup>37</sup> Cf. section 3.3.8.3.1 and 4.3 for the relation between ideophones and reduplication in Awetí.

Other expressive syllables which phonologically only differ by their consonantal coda, e.g. *kab* in (21) versus *kalh*, or by the intermediate vowel, as in (22), also have similar meanings:

(22) (Munro 1998: 183/4)

a. <i>tif</i> or <i>ti'f</i>	'sound of cat hissing'
b. <i>tof</i> or <i>to'f</i>	'sound of cat spitting'

This, again, confirms the idea of sound-meaning correspondences in this type of words. In addition, the expressive syllables violate a number of constraints regarding the usual syllable structure of the language by permitting more consonants in their coda and by admitting a glottal stop before a word-final consonant as in the second variant form. Munro concludes her analysis by pointing to a number of cross-linguistic parallels between indigenous languages from different families throughout America and also observes that there are correspondences with ideophones in several African languages.

## 1.3.5 Pastaza Quechua (Quechua)

A detailed analysis of "sound symbolic words" or "ideophones"<sup>38</sup> in Pastaza Quechua, spoken in the Ecuadorian lowlands, is given by Nuckolls (1995, 1996, 1999, 2001). The author states that the language – although originating from the Western Andean highlands and clearly related to the Inca lingua franca – is culturally in close contact with non-cognate Amazonian languages with which it also shares certain features of ideophone usage (Nuckolls 2001: 271). She states that ideophones in Pastaza Quechua – as opposed to Highland Quechua dialects where they have a more marginal status in the language system<sup>39</sup> – should be considered a distinctive word class due to specific morphological, syntactic and semantic criteria.

Nuckolls analyses are based on field data collected during 1.5 years in the isolated village Puka yaku in the Pastaza region. Nuckolls characterizes the adult members of the community as mostly illiterate and not very competent in Spanish. The children, too,

<sup>&</sup>lt;sup>38</sup> Nuckolls (1995: 145) uses both terms synonymously. At the same time she distinguishes different classes of sound symbolic words by their grammatical function (cf. 1995: footnote 4) which shows that in her definition these elements do not form a grammatical category in itself. In Nuckolls (2001) only the term "ideophone" is used. <sup>39</sup> This observation has not been confirmed by Paul Hoggarty (r. c) when the term the term the

<sup>&</sup>lt;sup>39</sup> This observation has not been confirmed by Paul Heggarty (p.c.), who states that ideophones are a vital element in the Highland dialects of Quechua studied by him.

went only sporadically to school at the time when she conducted her fieldwork. During the first year Nuckolls collected most of her data, which consists of naturally occurring conversation and oral narratives, while in the remaining six months she worked in close cooperation with a field assistant, with whom she also conducted a series of interviews.

In her various publications Nuckolls emphasizes different aspects of ideophones which she characterizes as "a form of expression that is deliberately and consciously imitative or *iconic* of auditory, rhythmic, visual, or psychophysical sensations" (1995: 146). Nuckolls (1995) focuses on the discourse function of these phenomena which are abundantly used in narrative texts. She establishes analogies between "the imitative, performative, and involvement properties that characterize sound symbolic discourse" (1995:151) and visual modes of expression like cinema and video. The term "involvement" in this context refers to the involvement of the interlocutor, who by means of a sound symbolic performance receives a more complex awareness of the communicated event than if it were just referred to by the speaker. It gives the opportunity "to share information, to verify understandings, and to evoke or express emotional points of view" (Nuckolls 1995: 163). Based on these considerations, she compares the various techniques of presenting ideophones in Pastaza Quechua discourse with different cinematic and videographic techniques (close-up shot, wide angle shot, juxtaposition, montage, fast motion shot, slow motion shot) and uses this terminology to describe their function. For example, an ideophone which is repeated, while the pace of its utterance is slowing down, for Nuckolls (1995: 159) has the same function as a slow motion shot which is to heighten the drama of a moment. She concludes that the functional significance of ideophones is similar to that of these imitative technologies in Western culture. For Nuckolls ideophones are semiotically distinct from the rest of the language, because they do not refer to but iconically simulate the most salient features of an action, event or process as it unfolds in real time. Thus, speech event and narrated event collapse into one. In addition to the performative foregrounding of ideophones by marked prosody and repetition or reduplication, Nuckolls (1995: 152) points to the possibility of syntactic foregrounding which often goes along with it. This is achieved when an ideophone as "a self-evidently meaningful" element represents a whole proposition. Ideophones used in this function are referred to as 'sound symbolic adverbs' (Nuckolls 1995). Nuckolls further explores the collocational restrictions of ideophones with verbs and from this develops a classification in which she compares the different usages of ideophones in the utterance with the functions of traditional parts of speech. The ideophones are classified according to their semantic contribution to an utterance. The 'manner adverb' type is given in (23):

(23) (Nuckolls 2001: 274, (3))

Sika-sha ri -shka-una chi bugyu-guna hanak -ta  $b^{h}uxx b^{h}uxx t^{\nu}ukshi$ -sha. climb-coref go-PERF-3:PL that dolphin-PL upriver -ADV IDEO emerge -coref 'Climbing upriver, those dolphins went, emerging  $b^{h}uxx b^{h}uxx$ .'

In (23) the verb  $l^{p}ukshi$  ('emerge') is only specific with regard to the direction of the activity. It is preceded by the ideophone  $b^{h}ux$  which adds information on the manner ('energetic'), medium ('water') and agent ('river dolphin') of the event. The analysis as a modifying adverb seems to be justified for this language, because the ideophone is part of the sentence as a modifier of the subordinate predicate which is marked as co-referent with the main clause predicate. From this first type Nuckolls distinguishes a second, in which ideophones function as the uninflecting parts of complex predicates. An example is given in (24):

(24) (Nuckolls 2001: 276, (8))
Yanga dziiiiiir-shi urma-ra.
just IDEO -EVID fall -PAST
'(The saliva) just fell (dribbling) dziiiiiiir.'

Nuckolls corroborates her analysis of *dziiiiiir* ('move with friction') as part of a compound verb in (24) with two other examples containing the same ideophone but different finite verbs it combines with ('cut' + IDEO = 'saw'; 'pull' + IDEO = 'drag'). Since, however, in all three cases the finite verb is a full verb and can form a complete predicate without the ideophone, the analysis does not seem to be appropriate. Instead, (24) should be seen as belonging to the same category as (23).

An ideophone can further restate a verb meaning as a kind of verbal gesture. In order to account for this usage, Nuckolls (2001: 277) refers to Kita's two-dimensional semantic framework, described in section 2.3. According to this theory, ideophones are different from other words in that their meanings are primarily represented in an affecto-imagistic dimension where they can be directly experienced, similar to the

meanings of representational gestures. In an utterance of the type given in (25) the ideophone thus depicts or rather performs the same activity which is referred to by the finite verb, in this case the ideophone *ling* in relation to the verb *satina* ('insert'):

(25) (Nuckolls 2001: 278, (11))

Syntactically the ideophone in (25) seems to function as an adverb modifying an immediately following topicalized subordinate predicate.

A last function of ideophones is that of adding a temporal contour (i.e. aspect) to an event, which will be described in more detail below. Nuckolls considers the different functions of ideophones as developmental stages, of which the last one, with its more abstract function, is at an advanced stage. According to Nuckolls (1999: 242; 2001), the semantics of ideophones thus can be described as ranging from concrete, sensorily grounded meanings to abstract, grammatical concepts. She illustrates this with the ideophone *tak*, which, at one extreme, can be sound imitating, at the other an aspectual marker similar to particles in the language. In its most concrete meaning *tak* depicts the moment of contact between two surfaces in an acoustically evident way (Nuckolls 1996: 178; 2001: 280). This is presented in (26)(a) as opposed to the more abstract (26)(b) without an associated audible sound and (26)(c), where the notion of direct contact has disappeared:

(26) a. (Nuckolls 2001: 281, (12)) *Tak taka-kpi hawa-manda l<sup>2</sup>utari-n*.
IDEO touch-SWRF high- from stick -3
'When it is touched *tak* from above, it clings.'

b. (Nuckolls 2001: 281, (13))
Sawli -ta tak hapi-sha ri -ra -ni.
machete-ACC IDEO grab-coref go-PAST-1
'Grabbing my machete tak I went off.'

c. (Nuckolls 2001: 281, (14))

*Na kay-bi -ga dziriri dziriri dziriri dziriri dziriri tak chupa-ta hawa-y.* new here-LOC-TOP IDEO.coil IDEO tail -ACC above-LOC 'Then here (it coiled itself) *dziriri dziriri dziriri dziriri dziriri and* (placed) its tail *tak* above.'

In (26)(c) Nuckolls sees a metaphorical extension of the original notion in that the ideophone describes a situation where an entity is positioned "within a definite point in a spatial field" (Nuckolls 1999: 242), in this case the tail of a snake which is about to strike, placed at a point in midair. In these three usages the ideophone *tak* adds a component of punctuality to an event, which in (26)(a) and (b) is expressed by an aspectually neutral finite verb as the predicate of the subordinate clause.<sup>40</sup> In (26)(c) the event is not additionally referred to by a verb and the predicate function is taken over by the ideophone.

A further degree of abstraction is achieved when the notion of one-dimensional contact is transferred into a three-dimensional space. In these contexts of use *tak* can convey the idea of contact that surrounds (and even impedes), as illustrated in (27)(a), filling something up or swelling, as in (27)(b):

(27) a. (Nuckolls 2001: 282, (16)) *Tak* kipiri-kpi -ga?
IDEO hug -SWRF-TOP
'And what if he hugged/ immobilized you tak?'

(27) b. (Nuckolls 2001: 283, (18))

*Ishkandi changa-ma papa muyu tak tiyari-wa -shka-ra, pungi-wa -shka -ra.* both leg -DAT large seed IDEOsit -1ACC-PERF-PAST swell-1ACC-PERF-PAST 'In both of my legs the lymph nodes sat up in me *tak*, they swelled up in me.'

In these usages the ideophone is considered to express completive aspect. Nuckolls explains this by pointing out that a situation where the whole circumference of an entity is described as being in contact with another entity conveys an impression of constraint

<sup>&</sup>lt;sup>40</sup> Cf. Nuckolls (1999: 242).

and thus suggests the idea of completiveness.<sup>41</sup> She states that the ideophone *tak* "is undergoing semantic reanalyses which are having grammatical consequences for its meanings and usages" (Nuckolls 2001: 278), pointing out that no grammaticalization of the form is involved in this process. It is, moreover, an increasing generalization of its content which leads to the reanalysis of its meaning and function. Nuckolls sees a general relation between the encoding of aspect and ideophones in that the former is linked to spatial, perceptual experience while the latter contribute to this by encoding ideas of perceptually salient experiences.

## 1.3.6 Tsafiki (Barbacoan)

The first Amazonian language for which an ongoing grammaticalization process from ideophones to one of five different verb class markers was proposed is Tsafiki (Dickinson 2002, 2006). Tsafiki belongs to the Barbacoan family and is spoken by around 2,000 individuals in the Western Ecuadorian lowlands. Dickinson's study, which focuses on complex predicates, is based on around 70 hours of text recordings mostly from three genres (traditional stories, personal narratives, conversation) produced by over 70 speakers of different ages. The material was collected by native speakers in the presence of native speaker interlocutors and only occasionally of the researcher in order to create a near-natural communicative setting. The data were transcribed by a trained group of native speakers and then translated by the researcher in close cooperation with several of these consultants.

Ideophones, of which 340 types were counted in the corpus, are a frequent phenomenon in Tsafiki. As in many other languages, they occur in narratives at pivotal moments, have an intonational contour which separates them from an adjacent main clause, a tendency for elongated vowels and 'exaggerated' pitch variation (Dickinson 2002: 182/3). Their syllable structure is regular. They are frequently partially or fully reduplicated, and the only morphological process they can undergo is a combination with the causative suffix *-le*, as in (28), to form two-participant events:<sup>42</sup>

(28) (Dickinson 2006: 10, (13))

<sup>&</sup>lt;sup>41</sup> Cf. Nuckolls (2001: 282).

<sup>&</sup>lt;sup>42</sup> This function is not explicitly given in the study, but in combination with coverbs these suffixes cause a change in the reference of the verb from a one- to a two-

*Junni tsan=ke poton poton-le ki-nun=si* then SMBL=QT IDEO.pound IDEO-CAUS DO:GEN-NOM=GRAD<sup>43</sup> *ora-i-da*. good:COV-BECOME:GEN-DCL.EMPH 'Then like that doing *poton poton*, (when (you) beat the ground), (it) happens.'

Syntactically, ideophones in Tsafiki can occur as complete clauses, either by themselves or with adjuncts, as in (29):

```
(29) (Dickinson 2002: 185, (67))
Jun=te=le wari sori sori, [...]
3D1=LOC= LOC well IDEO.swirl
'There (was) sori sori (swirling) (of a raft in a whirlpool) [...].'<sup>44</sup>
```

In addition, they can be in a clause chain adjacent to complex predicates which refer either to the same or to other events. Ideophones can further function similar to adverbial modifiers with verbs of locomotion, whereby they represent separate clauses, and they can modify nouns.<sup>45</sup>

All ideophones can be part of a "specialized construction" with the generic verbs *ti* ('say'), illustrated in (30), *ki* ('do'), as in (28), or *jo* ('be'), where they maintain their prosodic markedness:

(30) (Dickinson 2002: 195, (79), 2006: 10, (16)) *"Karsiyela man-ja-de", ti-to ali ali ti -na -ti -e ti-tu-n.*Graciela again-come-IMP say-SR IDEO.wave IDEO say-PRG-RP -DCL say-NEG-INT
'They say that saying "Graciela, come back!" (he) went ali ali (waving), right?"

participant event (Dickinson 2002: 266). From this one may conclude that ideophones in Tsafiki originally refer to one-participant events.

<sup>&</sup>lt;sup>43</sup> Abbreviations used in the Tsafiki examples: 1F 1<sup>st</sup> person feminine; 3P2 3<sup>rd</sup> person proximate one; ACC accusative; CAUS causative; COM comitative; COV coverb; DCL declarative; DCL.EMPH declarative emphatic; FOC focus; GEN generic; GRAD grade; INCL inclusive; INSTR instrument; INT interrogative; LOC locative; NCL noun classifier; NEG negative; NOM nominative; PRG progressive; QT quotative; RP reportative; SIT situational; SMBL semblative; SR same referent; SUF suffix; VCL verb class marker.

<sup>&</sup>lt;sup>44</sup> The example, originally consisting of two clauses, was shortened and the translation modified to make the semantics of the ideophones more transparent.

Semantically, ideophones in Tsafiki evoke a broad variety of sensations from various domains including sound, sight, touch, taste, smell and emotion. Two examples each for the conceptual domains of 'manner of movement', 'configuration in space' and 'tactile sensation' are given in (31)

(31) Dickinson (2002: 179-182)

a. lilin 'go/be on tiptoe'

wayo 'slip on slippery surface'

b. paran 'arms opened wide'

suntu 'hunch over'

c. oto 'soft'

silan 'sticky, slimy'

As was shown by examples (28) and (30), ideophones can constitute part of a predicate in the Tsafiki language. In addition, many of them can function as 'coverbs' in a complex predicate. Most predicates in that language are complex and generally consist of a 'coverb' in combination with an inflecting 'generic' verb. These two elements are spoken in one intonation contour and often form one phonological word (Dickinson 2002: 146). The coverb carries the major part of the semantic information in a complex predicate. An example for a complex predicate with the coverb *tere* ('step') and the generic verb *ki* is given in (32)(a). It is opposed to the formally identical reduplicated ideophone *tere tere* in (32)(b):

(32) a. (Dickinson 2006: 13, (27)) *Tere* ki -na -ti -e -ti -e ya=ri.
step:COV DO:GEN-PRG-RP-DCL-RP-DCL 3P2=FOC
'(They say she said) she was dancing.'
b. (Dickinson 2006: 13, (28)) *Tse, tere* tere ja-na-to, tere tere [...]
1F IDEO.step IDEO come-PRG-SR IDEO IDEO
'*Tere tere,* I was coming tere tere (stepping over mudpuddles).'

<sup>45</sup> Cf. Dickinson (2002: 194, (78)(b) and 185, (68)).

'Coverbs', which – like ideophones – have a highly affective meaning and therefore impose strong semantic restrictions to the participant (e.g. in size or type), form an open grammatical class. Dickinson counted 551 coverbs in her corpus, of which 249 can also function as independent ideophones, i.e. with a marked prosody, a separate intonation unit and possibly reduplicated. Since the language lacks a diachronic dimension to determine whether the ideophone has derived from the coverb or vice versa, the same observation can also be expressed in reverse order: Of the 340 ideophones, 249 can also be used as coverbs, i.e. without their marked prosody and in combination with a subset of generic verbs which is not necessarily restricted to or identical with the three verbs mentioned above. Coverbs further allow for more morphology (e.g. locative enclitics, imperative suffixes) than ideophones, but for less than generic verbs. Generic verbs, which in addition to their occurrence as the inflected element in a complex predicate can also be used as simple predicates to a high degree<sup>46</sup>, form a closed class of 33 items. Seven of them can also function as coverbs.<sup>47</sup> The generic verb in a complex predicate determines the type of event or state referred to and the case-marking pattern of the clause. A further element, which only occurs as part of Tsafiki predicates in specific morphosyntactic environments (e.g. after plural marking, marking of evidentiality), is one of five different verb class markers. Each of the simple and complex predicates can be unequivocally grouped into one of the five verb classes represented by these markers, depending on the generic verb contained in the predicate. Unlike ideophones and coverbs verb class markers are not restricted in their combinability with verbal morphology. All verb class markers can also function as generic verbs. An example, in which a predicate is marked by both classifying elements – a generic verb and a verb class marker – with the same form *ti* ('say'), is given in (33):

(33) (Dickinson 2002: 285, (3))

*Aman ya apa=ri ayan=be nama=ka o -ti -la -ti -man=ti -e.* now 3P2 father=FOC mother=COM daughter=ACC call-say:GEN-PL-SAY:VCL-SIT =RP-DCL 'Now they say the father and the mother called (their) daughter.'

<sup>&</sup>lt;sup>46</sup> Nearly half of the predicates in Tsafiki clauses were formed by a simple generic verb (Cf. Dickinson 2002: 201).

<sup>&</sup>lt;sup>47</sup> Cf. Dickinson (2006: 17, table 4).

Another example with the verb class marker *ra* ('be in position') combined with a simple predicate formed by the generic verb *chu* ('sit') is given in (34):

(34) (Dickinson 2006: 21, (50)) Amanato duke tsachi=la chu -la -ra -e. nowadays many tsachi=PL sit -PL -BE.POSITION :VCL-DCL 'These days there are lots of Tsachila.'

In addition to the outlined overlap between the different predicating elements ideophone, coverb, generic verb and verb class marker, Dickinson also observed certain restrictions. One of them is that those generic verbs which can function as coverbs cannot be used as ideophones, the other that of the verb class markers which can function as generic verbs none can be used as a coverb. From these observations of restricted overlap Dickinson (2002: 144) derives a model for a grammaticalization process, which applies to a small subset of the ideophones encountered in her corpus. It is schematized as follows:

(35) Ideophone > coverb > generic verb > verb class marker

She further states that these different predicating elements can be ordered on a scale according to their semantic encoding of the event structure, ranging from totally 'expressive' to highly 'analytic' (Dickinson 2002: 211).<sup>48</sup> By 'expressive' she refers to a representation of meaning by modalities evoking different kinds of physical and mental sensations, whereas in the 'analytic' dimension meaning is represented by a set of hierarchically arranged decontextualized semantic primitives. While ideophones are on the expressive end of the scale and coverbs also tend to be expressive rather than analytic, the generic verbs and the verb class markers are means of event classification with an increasing degree of abstractness. The semantic primitives formulated by Dickinson which represent the verb classes formed by the markers *ti* ('say') in (33) and *ra* ('be in position') in (34) are given in (36):

(36) (Dickinson 2006:22, (55))

<sup>&</sup>lt;sup>48</sup> Dickinson's scheme is based on the model developed by Kita (1993, 1997) which is outlined in more detail in section 2.3.

a. ti 'actor says or expresses X'

b. ra 'entity has X configuration and location in space'

Although Tsafiki has a predicate structure which differs considerably from the one in Awetí, the idea of a historical development from 'expressive' ideophones to 'analytic' lexical verbs or grammatical structure will be resumed in section 5.3, when grammaticalization tendencies involving Awetí ideophones will be discussed.

#### 1.3.7 Yurakaré (unclassified)

For ideophones in Yurakaré, an endangered language spoken in Central Bolivia by a group of approximately 2,500 individuals, a different grammaticalization scenario has been outlined by van Gijn (2010). In his study van Gijn focuses on the development of a marker of middle voice  $-tA^{49}$  in this unclassified language. Under the label 'middle voice' he subsumes reflexives, reciprocals and agentless passives as well as non-causatives, functions which all can be marked by this morpheme when either being attached to a transitive verb root or – in the case of non-causatives – to roots not occurring by themselves. The first three 'middle situations' can further be semantically described in terms of a low degree of elaboration of events: indistinguishable participants in reflexives, the collapsing of equivalent events in reciprocals and the suppression of a participant in passives (Kemmer 1993: 207/8). The non-causative can be subsumed under Kemmer's semantic characterization of peripheral middle events, such as spontaneous events, events with a non-identifiable causer, or events involving (loco-)motion.

In Yurakaré there is evidence that the marker *-tA* has its origin in a specific type of ideophone-verb constructions, a source which deviates from what Kemmer (1993) has suggested as the most common and almost universal source of these markers, namely markers of reflexivity. Since in Awetí there is synchronic evidence for a similar process from ideophones to verb roots, van Gijn's line of argumentation for this alternative path of development will be presented here to some detail.

Van Gijn's analysis is based on fieldwork data collected since 2001 on different occasions and in different areas. These consist primarily of audio recordings of mythological tales. In addition, two dialogues of half an hour each were recorded

without the researcher being present. Van Gijn further elicited data during text annotation and while checking the material previously produced by other researchers with altogether 35 consultants of different ages and living at several places.<sup>50</sup>

Van Gijn defines ideophones in Yurakaré according to the definition given by Doke (1935).<sup>51</sup> They are described as having characteristic phonological, morphological and syntactic features by which they can be differentiated from other words. Phonologically they have a tendency for violating phonotactic and prosodic constraints. Unlike other words which are minimally disyllabic, they can consist of one syllable only and can have a /k/ in the coda of a final syllable. Also different from other words they have their accent on the final syllable. Ideophones can be repeated, whereby the repetition indicates the number of events, either subsequently undergone by one participant or at once by several participants. An example for the latter case, with the repetition of  $r\ddot{u}$  depicting several individuals jumping into the water, is given in (37):

(37) (van Gijn 2006: 227, (114)(b))

*La ma-mmuy*  $r\ddot{u}$   $r\ddot{u}$   $r\ddot{u}$   $r\ddot{u}$  *yupata*  $-\phi = w = ya$ . then 3PL-all IDEO.abrupt.movement IDEO IDEO IDEO go.in.PL-3 = PL=NVR 'Then, rü rü rü, they all went in.'

Many ideophones in Yurakaré can further be suffixed by the morpheme -tA in its non-causative function or by a causative morpheme -che to develop into verb roots. This opposite marking by the two morphemes is restricted to ideophones. Depending on the respective ideophone, causative verbs can also be derived by partial reduplication. The described processes are exemplified in (125)(a) and (b):

(38) (van Gijn 2006: 228, (117)(a))
a. wë 'bend' (IDEO) wë-ta 'bended' wë-che 'bend'(vt)
b. përruk 'turn over' (IDEO) përruj-ta 'turn over' (vi) përruj-pë 'turn over'(vt)

Syntactically, ideophones usually accompany a finite verb which they directly precede. This is illustrated in (37) above and in (39):

<sup>&</sup>lt;sup>49</sup> If the nucleus of the preceding syllable is a low or a middle vowel, the vowel in the non-causative suffix adapts to it (van Gijn 2010: 274).

<sup>&</sup>lt;sup>50</sup> Cf. Van Gijn (2006).

(39) (van Gijn 2006, (113)(a))

Ashaa=jsha chüüshka-l-ishupë-ø=yalatijinaaysa=ja.above=ABLIDEO.running.liquid3SG-AFO-urinate-3=NVR subsequently DEMAysa=EMPH'From above, ''chüüsh'', Aysa peed on him.'

The primary function covered by ideophones in their typical syntactic environments, as given in (37) and (39), is that of state and manner adverbs for which no other words exist in the language. Semantically, they can be either purely descriptive as in (123), (partially) giving the same information which is given by the inflected verb, or they can add aspects of meaning, as in (37).

One of the central features of ideophones pointed out by van Gijn is their capacity to represent sensory experiences. In Yurakaré these are either auditory or visual in nature. According to van Gijn, all ideophones depicting auditory experiences are sound imitating. These 'auditory' ideophones often combine with an inflected form of the verb ta ('say') to form a construction like the one in (40):

(40) (van Gijn 2010: 283, (19)(a)) *Porrok porrok ta-ø=w=ya*.
IDEO.SI IDEO.SI say-3=PL=REP
"Porok porok", they went (hoofs of tapirs)."

As was mentioned in the preceding part of this section, this type of construction has been observed across languages and is not restricted to Amerindian languages.

'Visual' ideophones, on the other hand, mostly give a description of an object by referring to its physical state. Van Gijn (2010: 284) divides them into four categories, according to four different conceptual domains, which cannot always be neatly separated: 1) shape and size, 2) physical condition, 3) body arrangement or orientation and 4) manner of position or motion.<sup>52</sup> An example for an ideophone which can fit into the first category as well as into the fourth is *wayle* ('curved'). In both examples in (26) this ideophone is combined with an inflected form of the verb *mala* ('go'). However,

<sup>&</sup>lt;sup>51</sup> Cf. van Gijn (2006: 84) and section 1.2 above.

<sup>&</sup>lt;sup>52</sup> Another two ideophones refer to psychological states which are related to immobility and soundlessness (cf. van Gijn 2010: 285).

while in (41)(a) *wayle* depicts the shape of a tree, its repeated occurrence in (41)(b) refers to a manner of motion:

(41) a. (van Gijn 2010: 285, (26)(b)) *Wayle* mala-ø an kummë.
IDEO.curved go.SG-3 DEM tree
'That tree is (has grown) crooked.'
b. (van Gijn 2010: 285, (26) (a)) *Wayle* wayle mala-ø na shunñe.
IDEO.curved IDEO go.SG-3 DEM man
'The man is zigzagging (like a drunk).'

Van Gijn further shows that whether a state indicated by an ideophone is simply existent or resultant or caused, is determined by the respective finite predicate the ideophone occurs with. Although ideophones can combine with any verb, they most often do so with the verbs *ta* ('say'), as in (40), or *mala* ('go'), as in (41). In combination with ideophones these verbs turn into semantically almost empty auxiliaries, *ta* indicating a state of being and *mala* (or the plural form *bali*) a resultant state or a stage in a process.

Van Gijn's argumentation for the development of a middle marker from ideophoneverb constructions departs from the observations that all ideophones combine with inflected verbs and that a combination with the verb ta ('say') – formally identical to the middle marker -tA – is not only possible for sound imitating but also for the more abstract visual ideophones. The former was illustrated for *porrok* ('sound of tapir hoofs') in (40). An example for the latter is *ñim* ('blink') in (42):

(42) (van Gijn 2010: 286, (28)(c)) *Ñim ñim më- ta-ø na shunñe*.
IDEO.blink IDEO 2SG.VCO-say-3 DEM man
'That man is blinking at you.'

Van Gijn proposes four stages for a diachronic development. In a first phase, as in (244), sound-imitating ideophones are combined with the verb ta ('say') which is associated with sound production. The verb ta is still used this way in ordinary

quotative constructions, either with a 'voluntary comitative' (VCO), i.e. an object marker encoding the addressee as in (42), or without object marking as in (40). This parallel usage is one argument in favor of a derivation from a special kind of quotative construction involving ideophones depicting vocally produced meaningful sounds. At this stage, according to van Gijn (2010: 287) a first bleaching of the meaning of the verb ta takes place, since it can also be combined with ideophones representing nonmeaningful sounds which are not only produced by the vocal tract (e.g. animal sounds). The second phase is characterized by the extension of this construction to more abstract 'visual' ideophones and involves a gradual loss of iconic motivation. The sound symbolism is not imitative any more but rather conventionalized, i.e. certain phonemes are associated with specific meaning.<sup>53</sup> At the same time the repetition of ideophones is still iconic. The fact that in Yurakaré there are some ideophones which have one meaning associated with sound and another one which is more abstract additionally suggests the synchronic existence of different developmental stages. Van Gijn assumes that at this second stage a broader variety of verbs can be used in the verb-ideophone construction, e.g. mala ('go') in (26), which results in the introduction of an opposition between caused and non-caused states. The verb ta ('say') experiences a further bleaching when extended to non-audible states and processes. In a third stage the ideophone merges morphologically with ta to form a new predicate. Another argument corroborating this hypothesis is given by accent idiosyncrasies of these verbs which do not fit the accent placement system of the language but find a correspondence in the deviant accent pattern of ideophones (van Gijn 2010: 295, footnote 16). Van Gijn believes this merging to have come about by a considerably higher frequency of usage in the ideophone-verb construction of ta with its vague semantics compared to any other verb. The merging is accompanied by an assimilation of the vowel in tA, as outlined above. During this phase a morphological causative -che is introduced into the language, presumably as a grammatical loan from a neighboring variety of Quechua. In the fourth phase the morpheme marking non-causative action extends in function to other, more central areas covered by middle voice, i.e. to the marking of reflexive, reciprocal and agentless passive uses on transitive verbs. As a consequence, the direction of development proposed by Kemmer from a marker of reflexivity to a marker of middle voice (including 'non-causativity') would be reversed. More central for a

<sup>&</sup>lt;sup>53</sup> Cf. Hinton et al. (1994).

grammaticalization path from ideophones to verbs in Awetí, however, is van Gijn's idea that such a development involves semantic bleaching of the finite verb in the construction with the original meaning 'say'. Like most Amerindian languages Yurakaré lacks diachronic data so that this hypothesis cannot be tested, and due to the absence of a convincing genetic affiliation of this language not even comparative analyses within the same language family could yield additional results. Therefore the outlined historical scenario remains speculation. Van Gijn's further assumption that the syntactic flexibility of -tA words, which can also function as nouns or adverbial modifiers,<sup>54</sup> is a result of their ideophonic source, is also not very convincing. According to van Gijn (2010: 292) the fact that "ideophones relate to sensory sensations [...] can evoke different aspects of a situation: a participant, a property of a participant, or an event". He points out that this makes them functionally compatible with the prototypical functions of nouns, adjectives and verbs, i.e. with reference, modification and predication respectively. This way, he tries to relate the middle marker -tA to a socalled 'associative' marker -tA which derives nouns from verbs and nouns. According to van Gijn (2010: 290), the meaning of the derivation can be associated with the meaning of the base form. Examples are given in (43), showing that the 'associations' cover a broad spectrum, ranging from 'instrument' (to perform an activity referred to by the verb) in (a) over 'similarity' in (b) and possibly (c) to a 'metonymic relation' between the two referents in (d):

(43) (van Gijn 2010: 290, 292)

a. ewwe 'sweep' en	we-te 'broom'
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- b. *pillë* 'mouth' *pilë-të* 'door'
- c. *sibë* 'house' *sibë-të* 'former house', 'cassette holder', 'package of cigarettes'
- d. *dalla* 'head' *dala-ta* 'pillow'

A different approach, proposed by Güldemann (2008) seems to be more appropriate to explain the derived forms in (43) as well as the relation between the two *-tA* markers. Güldemann questions the idea of semantic bleaching for the 'say' component which has also been proposed in African linguistics for constructions comparable to (40) and (42). Instead, he convincingly shows for a number of languages in different areas of Africa

<sup>&</sup>lt;sup>54</sup> Cf. van Gijn (2010: 291, (36)).

that the original function of the 'say' component has been that of a general marker of mimesis. Güldemann's approach will be further described in chapter two and five and tested with Awetí data in section 5.3. In chapter six it will also be applied to other representative languages of the Tupian family.

### 1.4 The Awetí speaker community and their language

In the following subsections historical, statistical as well as sociolinguistic information will be presented for the speaker community, in order to give a clear picture of the overall vitality of the language. This is followed by a genetic classification of the Awetí language.

# 1.4.1 Ethnographic information

Awetí is a Tupian language spoken in a small indigenous community in a multilingual environment which has established itself at the Xingu headwaters in the Brazilian state of Mato Grosso. This 'Upper Xingu' area is part of the Parque Indígena do Xingu, a national reserve extending over 2.9 million hectares, which was founded in 1961 by the Brazilian government. The area is characterized by cultural homogeneity in combination with a remarkable linguistic diversity, the latter being the result of expulsion by European colonialism and relocation from other areas. Currently ten indigenous communities with representatives of three of the four major language families of Brazil and one linguistic isolate form part of the cultural system. These are the Arawakan languages Mehinaku, Waurá and Yawalapiti,<sup>55</sup> the Carib dialects Kuikuro, Kalapalo, Nahukwa and Matipu which all belong to one language, further the Tupian languages Kamaiurá and Awetí as well as the isolate Trumai.

The interethnic system is characterized by ceremonial cooperation, intermarriages and economic interdependencies in combination with a specific language policy which keeps the native languages, the primary badge of ethnic identity, apart on an individual level.

The Upper Xingu is currently inhabited by 3,228 individuals, living in altogether 18 villages – one to three villages per ethnic group.<sup>56</sup>

<sup>&</sup>lt;sup>55</sup> According to Franchetto (2011: 4) Mehinaku and Waurá are two dialects of one language. Yawalapiti with less than ten active speakers is about to disappear (Franchetto 2011: 20).

<sup>&</sup>lt;sup>56</sup> See www.socioambiental.org (last confirmed on the 29<sup>th</sup> of March 2011).

There is some evidence from the oral history of the Upper Xinguan peoples<sup>57</sup> as well as from archeological research<sup>58</sup> that the Awetí arrived in the area not before the 18<sup>th</sup> century.<sup>59</sup> Together with other Tupian peoples, the majority of which now are extinct, they became part of the specific cultural system which – according to archeological findings – around 900 had been founded by Arawak-speaking groups and had from about 1400 onwards been joined by Carib-speaking groups.<sup>60</sup>

When the group was first contacted by Karl von den Steinen during his second expedition to the area in 1887 he estimated the overall population to about 400 members.<sup>61</sup> In the following decades this number was severely reduced due to several epidemics.<sup>62</sup> In an official census from 1954, just after a severe epidemic of measles, only 23 Awetí were registered,<sup>63</sup> who at that time were living together with members from other ethnic groups of the Upper Xingu at a local health post set up by the Brazilian government. When Monserrat and Emmerich first visited the group in 1969, less than 40 Awetí – half of them spouses from other groups and their offspring – were living somewhere on the right bank of the Tuatuarí river. Today there are 195 Awetí, the majority living in one of two villages and in a larger settlement. In addition, some Awetí live in other ethnic communities, where they have moved as a result of exogamy.<sup>64</sup>

The Awetí main village, which was founded in the mid 1950s by three major political factions and in November 2007 had 92 inhabitants living in eight houses, is situated on the right bank of the river Tuatuarí and about 6 km from the river Curisevo, according to Drude (2006: 12) almost at the same place where Steinen had contacted the first Awetí.

<sup>&</sup>lt;sup>57</sup> See Stoeckler Coelho de Souza (2001), Fausto et al. (2006).

<sup>&</sup>lt;sup>58</sup> See Heckenberger (2000).

<sup>&</sup>lt;sup>59</sup> Fausto et al. (2006: 3), who compared the narrative accounts of different Xinguan peoples regarding the construction of the intertribal system, calculate that the Awetí and several other Tupian groups arrived in the region in the mid 18<sup>th</sup> century.

<sup>&</sup>lt;sup>60</sup> Cf. Heckenberger (2005).

<sup>&</sup>lt;sup>61</sup> Cf. Steinen (1894).

<sup>&</sup>lt;sup>62</sup> See Stoeckler Coelho de Souza (2001: 360) for a detailed account of the population size registered by different authors in the years between 1924 and 1996.

<sup>&</sup>lt;sup>63</sup> Cf. Silva (1972: 357/8, 376)

<sup>&</sup>lt;sup>64</sup> This is the result of a census carried out by IPEAX (Instituto de Pesquisa Etno Ambiental do Xingu) in 2011. See http://pib.socioambiental.org/pt/povo/aweti (last consulted on the 8<sup>th</sup> of June 2011).

The second village with 67 inhabitants in 2007 is about 20 km further north and around five km from the Posto Leonardo. This second village, which consists of five houses, is inhabited by the members of one large family. They split off from the main village in 2002/3 and were joined by other parts of the family, who until then had been living among the Kamaiurá. This family is of mixed ethnic origin, the father of the founder of the village, together with several spouses of his sons, daughters and grandchildren being of Kamaiurá origin, his wife being an Awetí.

Another big family around the former chief, also joined by a considerable number of Kamaiurá relatives and in 2008 consisting of more than 22 individuals, is living in the settlement. It was founded in 2008 after the former chief, together with his two Kamaiurá wives and his children, had left the main village, where he was replaced by a young man from a different political faction.

The Awetí live on slash-and-burn subsistence agriculture (mostly bitter manioc) and on fishing. They have a relatively autonomous, traditional way of life and do not depend on industrial products, even though their outside-contacts have increased considerably in the last few years. In their villages, as all over the Xingu, the houses are arranged in a circle around a centre which represents the public sphere, where people from different households or different villages interact. The oval-shaped houses represent the private sphere of the household, which often consists of ten or more individuals. These are a male head of the household, his one or two wives,<sup>65</sup> not rarely seven or more children per woman, sometimes the husband's or wife's old parents, spouses of adult children as well as grandchildren. A young husband needs to have acquired a certain social and economic status to be able to build a house for his own family.

In the Upper Xingu the ethnic identity of an individual depends on a combination of factors: if people learn the language of the village they grow up in and at least one of their parents belongs to this ethnic group, they are usually considered group members.<sup>66</sup> The Awetí show a preference for marrying members of their own group. The preferred marriage choice is that of cross-cousins, i.e. the children of siblings of the opposite sex. If a suitable marriage partner cannot be found within their own group, Awetí tend to marry Kamaiurá, the only other Tupian people in the Upper Xingu system. Exogamous marriages tend to be patrilocal: a young husband usually lives for a while in the house of his in-laws, before moving with his other-ethnic wife to his own village.

<sup>&</sup>lt;sup>65</sup> There are currently three cases of men having two wives.

In the Upper Xingu a specific language policy, still valid for most of the groups, determines which language(s) can be spoken by whom to whom. Only people who are of lineal descent in the first or second generation of a member of a certain ethnic group are entitled to speak the language. If women or men marry someone from a different ethnic group and move to his or her village, they are not allowed to speak the village's language. Although they acquire a passive knowledge of the surrounding language, they continue to speak their own languages and communicate with the other villagers via translators, often their own children, who speak the languages of both parents. Spouses of different ethnic origins usually develop passive competences in the other one's language. Many Xinguans have passive competences in one or more of the other languages, so that in verbal interaction with inhabitants of other villages people used to continue speaking their own languages, while often understanding the language of the other. Non-verbal communication also used to play a major role in these contact situations<sup>67</sup> and still does in ritual discourse. Nowadays in intertribal communication Portuguese has replaced this traditional pattern and is increasingly doing so in interethnic marriages, too.<sup>68</sup>

### 1.4.2 Language endangerment

There are factors threatening as well as promoting the vitality of the Awetí language.

The fact that the main village – and until 2002 the only Awetí village – is situated in a geographically isolated place which to the present day (and unlike other Xinguan villages) neither has a dirt road nor a runway for airplanes, for a long time has had a favorable influence on the maintenance of the Awetí language and culture, even though the population had been reduced to just a few surviving individuals only half a century ago. Compared to that devastating demographic situation their overall number has increased considerably. But it is still low, and this aspect in combination with the two recent splits caused by 'factionalism',<sup>69</sup> i.e. one political faction intriguing against another, may have a negative impact on the further development of the language. The split in 2002 was taken as an occasion for a sociolinguistic survey which was carried out

<sup>&</sup>lt;sup>66</sup> Cf. Reiter (2010: 123).

<sup>&</sup>lt;sup>67</sup> Cf. Steinen's "stone-axe-pantomime", described in chapter one.

<sup>&</sup>lt;sup>68</sup> Cf. Reiter (2010: 124/5).

over the following five years. In addition to a survey of census data for the two villages a questionnaire on individual linguistic competences and language use was answered by a representative group of 30 community members.<sup>70</sup> By the answers of these subjects individual tendencies could be observed and the linguistic situation of each household could be established. The results are summarized in the following.

According to census data nearly all members of the Awetí community are of mixed ethnic origin, i.e. they have a non-Awetí parent or grandparent, who in most cases is a Kamaiurá.<sup>71</sup> The questionnaire data confirmed that among the subjects 66 percent had an active competence of Kamaiurá, while only 17 percent did not understand this language at all.<sup>72</sup> The influence of other indigenous languages, of which there is mostly a passive competence, is neglectible.

In the two villages the linguistic situation differs due to the varying distribution of the Awetí and the Kamaiurá language over the households. In the main village, where – after the departure of the former chief and his family in 2008 – Awetí is the only or dominant language in each of the remaining seven households, all children learn Awetí as a first language.<sup>73</sup> Only in one of the households Kamaiurá is spoken as a second language with the Kamaiurá mother of the male head of the household.

In the second village two of the households are Kamaiurá-dominant, while in the other five households Awetí is the only or dominant language.<sup>74</sup> With 14 adults, defined as people born before 1993, and 17 children in 2007 the two Kamaiurá-dominant households constitute almost half of the village's population (46 percent).<sup>75</sup> Except for one monolingual Awetí speaker in one of these two houses all inhabitants are active or passive bilinguals with regard to Awetí. In the Awetí-dominant houses, however, a considerable number of nine adults and 17 children are Awetí monolinguals.

Since 2008 one of the two trained bilingual Awetí school-teachers permanently lives in each of the villages. According to recent information, in the main village an assistant teacher has taken over part of the lessons, while in the second village the formerly Kamaiurá-dominant second teacher has started to use Awetí as a primary language due

<sup>&</sup>lt;sup>69</sup> According to Stoeckler Coelho de Souza (2001: 384), this factionalism is currently characterizing intra- and intertribal politics in all Xinguan communities.

<sup>&</sup>lt;sup>70</sup> Cf. Reiter (2010).

<sup>&</sup>lt;sup>71</sup> See Reiter (2010: 132/3, tables 1 and 2).

<sup>&</sup>lt;sup>72</sup> See Reiter (2010: 134, table 3).

<sup>&</sup>lt;sup>73</sup> Cf. Reiter (2010: 137, table 4 without household 1).

<sup>&</sup>lt;sup>74</sup> In 2008 both villages have an almost identical number of inhabitants of around 70.

to the high percentage of Awetí monolingual children.<sup>76</sup> This shows that the unequal distribution of bilingualism in the village has had positive consequences for the language of the monolingual group in that the dominant indigenous language in education now is Awetí, since it is understood by all children.

The settlement inhabited by the former chief and his family is clearly Kamaiurádominant. In addition, the former chief and his older Kamaiurá wife are fluent speakers of Portuguese, as are part of their children. Nothing is known about the language of education used in that place, but according to information given by the Awetí school teachers in 2007 the Kamaiurá-speaking adults of that household already refused to send their children to the school of the main village when the lessons were held in Awetí.<sup>77</sup> Several of the younger children of the former chief were Awetí-dominant, when they left the main village, where they grew up. Not being able to use Awetí in everyday communication any more, they will probably become dominant in their mothers' language.

While in the main village Awetí is the only language used in all domains except for school-education, in the second village Awetí and Kamaiurá are currently both used in the same domains with the exception that Awetí has taken the place of Kamaiurá in bilingual education.<sup>78</sup>

In both villages the continuation of the indigenous language is mostly threatened by the growing impact of Portuguese on various levels. Portuguese is not only one of the languages used in the bilingual village schools which were introduced in the Xinguan communities in the mid 1990s, but also the language of mass media and of the nonindigenous inhabitants of the Brazilian health post in the vicinity. In addition, it is the language spoken in the towns, which nowadays are frequently visited primarily by male members of the Xinguan population. This massive contact with the Brazilian society has led to a very positive attitude of the younger Awetí population towards Portuguese and to its usage as a contact language not only with non-indigenous people but also with other ethnic groups within the confines of the indigenous reservation. However, Awetí and Portuguese are still used in separate domains, and in bilingual education the

<sup>&</sup>lt;sup>75</sup> See Reiter (2010: 138, table 5).

 <sup>&</sup>lt;sup>76</sup> Waranaku Awetí (p.c., 09/2010). Waranaku is the Awetí teacher in the second village.
 <sup>77</sup> Usually the teachers alternatingly taught either monolingually in Portuguese or in

Awetí over periods of two weeks.

<sup>&</sup>lt;sup>78</sup> This change took place after the Awetí teacher in 2008 settled in the new village as one of the last newcomers.

position of Awetí could be strengthened by using documents (e.g. historical narratives) from the documentation archive as material for instruction. Another positive aspect is that the Xinguans, unlike other peoples in different areas of the Amazonian lowlands, have an interest in learning Portuguese to communicate to "the outside world" but at the same time highly appreciate their own languages, by which they define themselves as group members. There are further in the Awetí population many older people and also younger women without access to school education, who have little knowledge of and little interest in the Portuguese language.

On the other hand one may hypothesize that the steadily increasing consumption of mass media, especially television and radio, in the villages can have serious consequences for the Aweti culture in that it directly competes with traditional story-telling. To learn the art of story-telling has always been a privilege of members of a family with a high social status. There are currently two traditional story-tellers in the main village. One of them is the father of the former chief, who is over seventy years old and has been ailing for the last few years. The other is a man in his fifties, who is an acknowledged shaman, 'owner' (i.e. founder) of the village and father of the new chief. A positive trend could be observed, when towards the end of the DoBeS project one of the sons of this latter person took up his studies of professional story-telling. This recent development, after many years during which none of the younger generation had been interested in continuing the oral narrative tradition, may be in part a result of the documentation project, because during the recording and annotation of data young people enjoyed coming to the researchers' house to listen to the stories, and later highly popular tape recordings of these stories circulated in the two villages.

The Awetí language at its current stage does not show any significant contact phenomena. There is some influence from other Xinguan languages on the lexical level in that loanwords are used to refer to elements of the common culture, as is observable in most of the Xinguan languages.<sup>79</sup> Individual one-word-switches in the recorded data occasionally occurred but were identified by the consultants, who – at least in this highly formal context – considered them to be unacceptable. On the other hand, some of the fluent Awetí-Kamaiurá bilinguals admitted during interviews that they had a

<sup>&</sup>lt;sup>79</sup> Cf. Franchetto (2000: 147). Two recently published word lists for cultural terms and artifacts in Upper Xinguan languages of different families reveal that the overall number of cross-linguistic correspondences is relatively low and mostly restricted to terms for new cultural objects borrowed from Portuguese (cf. Franchetto 2011: Appendix).

tendency to code-switch with their siblings. With regard to Portuguese it could be observed that it was used in everyday speech, when people referred to industrial products, days of the week, hours of the days or money, i.e. to objects and concepts which are foreign to the indigenous culture. In addition, young people increasingly address each other by Portuguese nick-names instead of the kinship terms typical for their culture where the usage of indigenous names is subject to taboo.

Although the overall situation of the Awetí language seems to be relatively stable, much depends on the linguistic situation of individual households in the near future and on a positive attitude. As long as the individual indigenous languages in the Upper Xingu continue to be highly appreciated by their speakers for being their primary badge of identity and as long as most young Awetí people will find their spouses within their own group, the language has good chances to continue.

### 1.4.3 Genetic affiliation of the Awetí language

Awetí belongs, as was already identified by Karl von den Steinen in 1887 during his second Xingu-expedition,<sup>80</sup> to the Tupian family, where it is currently considered the only surviving language of one of the ten branches.<sup>81</sup> Tupian languages have spread from the Amazon basin southwards and to the east, and due to a still-existing concentration of five of its branches in the Brazilian state of Rondônia, it is widely assumed that they may all have originated in that geographic area.<sup>82</sup>

The most numerous and geographically wide-spread branch of the family is Tupí-Guaraní. This branch has eight sub-groups with several members each.<sup>83</sup> The other Tupian branches have no more than one to six surviving languages, of which altogether 14 - all of them highly endangered – are still used in everyday communication.

Based on early word lists of the two German explorers Steinen (1894) and Schmidt (1905), Rodrigues (1964) had first categorized Awetí as a Tupí-Guaranian language, but this theory had to be revised with new data collected by Monserrat and Emmerich between 1967 and 1975. This data revealed a considerable amount of deviant structures from typical Tupí-Guaraní languages. Drude (unpubl. a) states that most Awetí words manifest regular sound correspondences with Tupí-Guaranian cognates, which suggests

<sup>80</sup> Cf. Steinen (1894: 107).

<sup>&</sup>lt;sup>81</sup> Cf. Rodrigues (1984/5), Rodrigues (1999: 109, table 4.1).

<sup>&</sup>lt;sup>82</sup> Cf. Rodrigues (1964), (1999).

<sup>&</sup>lt;sup>83</sup> Cf. Jensen (1999: 130-132).

that it is an independent Tupian language. In order to account for the fact that Awetí – together with Sateré Mawé, a language spoken in the states of Amazonas and Para which had formerly also been considered Tupí-Guaranian – still shares many more features with Tupí-Guaranian than any of the other languages, further sub-divisions of what may be called "Mawetí-Guaraní" (Drude 2006) have been proposed.

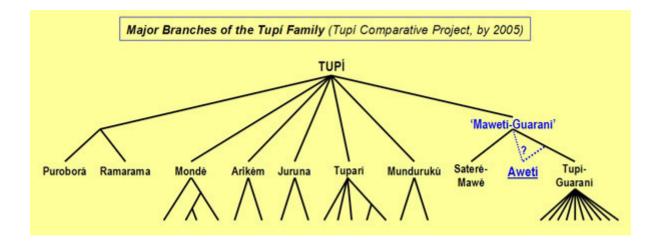


Figure 1: The Tupian branches and the genealogical position of the Awetí language <sup>84</sup>

Drude (2006: 15, cf. table 2) describes and discusses the four logical scenarios for a genetic relation between Sateré-Mawé, Awetí and Tupí-Guaraní, which also manifest themselves in figure 1. He states that the most common impression, confirmed by his own lexicostatistic analyses with a 100-word Swadesh-list, is that Awetí is closer to Tupí-Guaraní than Sateré-Mawé. Since, however, there is no significant difference between the respective numbers of cognates shared by the languages and since the sample of comparative data is very small, he does not consider it to be sufficient evidence for this hypothesis. A second possibility is that early Awetí separated from the ancestors of the other two before these separated from one another. As a third configuration one may assume that there is a closer relation between Awetí and Sateré-Mawé than between any of the two with Tupí-Guaraní, and finally there may not be any sub-grouping of the three branches at all, assuming that each of them is equally distant from any of the other two with which it has a common ancestor. In this case, the assumed Mawetí-Guaraní language must have split into three branches within a very

<sup>&</sup>lt;sup>84</sup> Cf. http://www.mpi.nl/DOBES/projects/aweti.

short period of time, short enough for no significant linguistic change to take place between the first and the second separation.

In the following the results of Drude's analyses, which include a revision of earlier hypotheses established by Dietrich (1990), a comparison of two different synchronic Awetí varieties and a preliminary comparison of Awetí, Sateré-Mawé and reconstructed protoTupí-Guaraní word lists under a historical comparative method, will be summarized.

Dietrich (1990) may be regarded a first study in which an internal grouping of the three branches was attempted, even though his focus of analysis was on an internal classification within the Tupí-Guaraní family and, owing to a specific methodology, his results do not have any direct implication for a genealogical classification. So, instead of aiming at a reconstruction of a proto-language by means of the historical comparative method, Dietrich set up six diagnostic parameters, three each on the phoneticphonological and on the morphosyntactic level, and attributed values ("+", "-", "±" and "?") to each language according to these parameters. Based on these values he established the statistical proximity between the languages of his sample which contains a representative selection of Tupí-Guaraní languages as well as Awetí and Sateré-Mawé. Dietrich (1990: 115) also did not consider Awetí and Sateré-Mawé to be members of the Tupí-Guaranian branch. His data base with regard to the established parameters in Awetí and Sateré-Mawé, however, was rather incomplete, so that imprecise conclusions were drawn. Drude (2006), by adding the results of his own research, filled the gaps for Awetí in Dietrich's analysis and calculated new proximity values in relation to the other languages, applying the methodology developed by Dietrich. According to Dietrich's earlier calculations, Awetí belongs on the phonological level to the 'most innovatory' languages of the branch, together with three Tupí-Guaranian languages which are suspected to have suffered strong substrate influence through language shift of their formerly non-Tupian speakers, Drude, by contrast, shows that Awetí has more properties of typical Tupí-Guaraní languages, which permit its more central positioning next to Sateré-Mawé as a 'less conservative' language.<sup>85</sup>

With regard to Dietrich's morphosyntactic parameters the situation for Awetí also changes when taking into consideration the results of Drude's research. While Dietrich

<sup>&</sup>lt;sup>85</sup> Cf. Drude (2006: 17, table 2) based on Dietrich (1990: 59).

had put Awetí and Sateré-Mawé apart from the Tupí-Guaranian languages into an altogether separate 'third division',<sup>86</sup> Drude's more complete data base changes this picture considerably. According to his new calculations, Awetí moves into Dietrich's 'first division', i.e. the group of typical Tupí-Guaranian languages.

Finally, Dietrich combined the results obtained for the two levels of analysis and arrived at the conclusion that Awetí, together with Sateré-Mawé and two other languages, forms a 'third division', showing features which are most divergent from what is considered typical for Tupí-Guaraní. Under Drude's new calculations Awetí belongs into Dietrich's 'second division', even with a tendency towards the most conservative 'first division' of Tupí-Guaranian languages.

Since Dietrich's methodology does not permit us to draw any incontestable conclusion with regard to a genetic classification of the language, Drude (2006) presents other criteria which need to be taken into account, one of them being the existence of genderlects in Awetí, the other the first results of a phonological comparison of cognates between Awetí, Sateré-Mawé and a reconstructed proto-Tupí-Guaraní.

According to their own historical narrative the Awetí of today have emerged from one of two Xinguan villages, the other of which was completely destroyed and all inhabitants killed by a group called Tonoly.<sup>87</sup> The surviving village was that of the not yet pacified Enumaniá,<sup>88</sup> the other that of the so-called *Awytyza 'ytoto* ("real Awetí"), who had already integrated into the Upper Xinguan society and whose place in the intertribal system was thereafter occupied by the Enumaniá. The Enumaniá of that time were characterized as *waraju* ("savages"), i.e. bellicose people who immediately took their revenge on the Tonoly by pursuing and killing them, whereas the "real Awetí" belonged to the category of *mo'at* ("person/ human being") a term that is attributed to

<sup>&</sup>lt;sup>86</sup> Drude (2006: 19) draws attention to the fact that this does not indicate any proximity between the two languages on the morphosyntactic level, considering that Dietrich's criterion for comparison is the conservativeness with regard to Tupí-Guaraní.

<sup>&</sup>lt;sup>87</sup> Cf. the narrative "awytyza" in: www.mpi.nl/DOBES/projects/aweti. Nothing could be found about the genetic origins of the Tonoly but they seem to have been Tupian. One piece of evidence is that in the historical narrative, in which the "real" Awetí people were killed by the Tonoly, the narrator imitates a singing arrow left behind by these people which clearly sings in a Tupian language. Drude (unpubl. a: 2) assumes that the Tonoly were a Kayabi sub-group.

<sup>&</sup>lt;sup>88</sup> Consequently, the Awetí consider themselves descendents of the Enumaniá: "Hoje não existem mais os aweti, não sei por que não falaram logo, devemos ser chamados enumania." [Today the Awetí do not exist any more, I don't know why they didn't say

the peaceful groups forming the Upper Xinguan multiethnic society.<sup>89</sup> Both villages of genetically related peoples with probably mutually intelligible languages were closely linked by matrimonial ties, i.e. they were exchanging wives who – as is the norm in the Upper Xingu – probably kept their native language after moving to their husband's village and used it among each other and in the domestic space with their children. This historical information – the development of the group from a single village with possibly mostly Enumaniá men and "real" Awetí women - together with the specific Upper Xinguan language policy may explain why there is a male and a female variety of the language, an atypical feature in Tupian languages.<sup>90</sup> These genderlects differ slightly on the morphosyntactic level, with regard to the usage of personal pronouns, possessor clitics on nouns, demonstratives, discourse particles, and only very marginally on the lexical level.<sup>91</sup> In a more detailed discussion of the differences between the two varieties, Drude (2006: table 6) shows that elements of the male variety, more specifically the deictic pronouns, could be derived from those of the female variety or are at least be related to these. This would render the hypothesis of two different substrates for the varieties rather unlikely, and Drude concludes that the genderlects may simply have been dialects of the same language. Since there are no historical records, Drude does also not take into account the possible linguistic influence of any of the now extinct Tupian peoples (Apyap, Karayaya, Arupaci, Ka'atyp, Wyrawat) mentioned in the literature (e.g. Bastos 1989) which came to the Upper Xingu around the same time as the Awetí and Enumaniá.

For Drude, a comparison of cognates under the historical comparative method offers the most accurate method of analysis to establish a genetic relation between the three branches. This method, which has been applied in a comparative Tupian project at the Museu Paraense Emílio Goeldi in Belém/ Brazil, is considered to be a legitimate way to establish an internal classification for Tupian languages, given that historical data is mostly missing and at the same time the number of studies on individual languages at

it right away, we should be called Enumaniá.] (commentary of the Awetí translator in Stoeckler Coelho de Souza (2001: 368), my translation).

<sup>&</sup>lt;sup>89</sup> Cf. Fausto et al. (2006: 2).

<sup>&</sup>lt;sup>90</sup> Different male and female varieties have been described for other Amazonian languages. One example is Karaja, a Brazilian language belonging to the Macro-Jê family, where, according to Ribeiro (2001) there are phonological differences in the speech used by men and women.

<sup>&</sup>lt;sup>91</sup> Cf. Drude (2002).

their current stage of development is continuously growing.<sup>92</sup> In the ongoing analysis, carried out by Drude and Meira, more than 150 triplets of cognates have been found so far, in addition to many more pairs of cognates between two of the three languages under discussion. Drude states that in the data considered there are many 'stable' correspondences, i.e. the same sound occurs in analogous position in all three languages.

More interesting for establishing a genetic relation are discrepancies,<sup>93</sup> which would permit to group two of the languages together against the third, i.e. a sound change occurred in one or two of the languages. The more improbable the change shared by two languages, the more likely it is that it took place only once. This indicates that the two languages it concerns separated after the change and thus may form a sub-branch of Mawetí-Guaraní.

An argument in favor of a grouping of Tupí-Guaraní and Awetí against Sateré-Mawé is the existence of long and short vowels in the latter, since this contrast also occurs in several other Tupian languages and – supposing it existed in proto-Tupí – seems to have disappeared in the former two branches. The argument is weakened, however, by the fact that this is a common change which at the same time is not restricted to these two Tupian branches.

For consonants the situation is more complex, and deviant sounds in any one language as opposed to the other two, make a case for different scenarios. Without going into the details of his analysis, it suffices here to state that Drude found stronger and weaker evidence for any of the groupings, from which he concluded an internal sub-grouping of Awetí and the Tupí-Guaraní branch to be the most likely scenario. This was further supported by a higher number of cognates found between the two in total numbers and in a 100-item Swadesh-list. Although Drude's in-depth analysis of a considerable number of cognates is not yet concluded, it has shown that Awetí is closely related to each of the other two branches, which was additionally confirmed by the

<sup>&</sup>lt;sup>92</sup> See e.g. Moore & Storto (2002).

<sup>&</sup>lt;sup>93</sup> In some cases such divergences of sounds between the three branches can be explained as a consequence of different analyses in the individual languages. These will be disregarded here (for details see Drude 2006: 30-33).

revised results of Dietrich's (1990) comparison of specific phonological and morphosyntactic parameters.<sup>94</sup>

#### 1.5 Methodology and outline of the analysis

This subsection will give an overview of the fieldwork situation, the collected material on which this study is based, the methodology used for the analysis and introduce the conventions for the annotation and presentation of the data.

#### 1.5.1 Fieldwork and data

In 2000, during the one-year pilot phase, I joined the Awetí Language Documentation Project, which was financed by the Volkswagen Foundation within the newly created DoBeS programme. The project was hosted at the Freie Universität Berlin and coordinated by Prof. H.-H. Lieb. Sebastian Drude as the principal researcher had begun to study the Awetí language and made his first audio recordings of narrative discourse in 1998. From 2000 to 2006 Drude and I assembled a vast and systematic corpus of linguistic and cultural material. Both of us spent up to two months per year in the Awetí village and each year received members of the Awetí community in Belém/ Brazil, where we worked together at the transcription and translation of the data in the linguistic department of the Museu Paraense Emílio Goeldi.

The corpus on which this study is based consists of more than 40 hours of audio and video recordings of a variety of discourse genres. These include predominantly myths and historical narratives told by the two professional story-tellers of the group, but also autobiographical texts, descriptions of customs and tasks, explanations and – to a lesser extent – informal conversation.<sup>95</sup> The speakers of the latter discourse genres are adult male and female speakers over the age of 30 who were appointed by the community to talk about specific subjects of cultural importance.

The data in the remainder of this study will be referred to by the terms 'narrative' and 'non-narrative' discourse, and in several quantitative analyses of specific grammatical phenomena this division has also been taken into account. The term 'narrative' in this context only comprises myths and historical narratives, since these

<sup>&</sup>lt;sup>94</sup> In a recent study which includes the results of his ongoing research, Drude (2011: 158) confirms that Awetí and TG-languages seem to be more closely related to each other than each of these branches/ languages to Sateré-Mawé.

<sup>&</sup>lt;sup>95</sup> See Appendix I.

genres require specific skills of the narrator who has acquired his narrative techniques in a long process of individual tuition. Therefore it is appropriate to separate these traditional genres, which more specifically constitute the oral literature of the Awetí people, from other narratives such as autobiographical accounts or descriptions and explanations. Especially the latter two only arguably form part of a native repertoire and probably only emerged in the documentation context, since cultural practices are usually not transmitted verbally but by observation and imitation. As a matter of fact representational gestures are abundantly used in the two genres, which may be a result of the method of demonstration and imitation usually applied in such situations.

Each text was transcribed and translated in close collaboration with a small group of young native speakers: Waranaku and Awajatu Awetí, the two bilingual teachers of the village school, Parawajru and Autukumalu Awetí, two young unmarried sisters, and Matirapa Awetí, one of the chief's sons. The chief Yakumin Awetí also participated in the translations, partially in collaboration with a researcher, partially independently, making his son Matirapa record his oral translations on a minidisk-player. Other young members of the village community irregularly participated in the transcription of audio data.

In the Awetí corpus ideophones have been consistently annotated and analysed in context. In addition, there has been counter-checking of a list of ideophones drawn from the data by asking different speakers – without specifying the context – to give their respective meanings.<sup>96</sup> Another important source for the semantic analysis of ideophones were the meta-commentaries given by Awetí consultants. Some of these were obtained in informal interviews, during transcription or checking of the data in collaboration with the researcher. Others were provided on various audio files, consisting of the oral translations by Jakumin Awetí, a competent speaker of Portuguese, who also translated and commented on the meaning of ideophones. The recording task was structured as follows: short passages of transcripts printed out by the researchers were read aloud by Matirapa and subsequently translated by Jakumin. The researchers afterwards received the minidisk files and added the translations to the transcriptions in the appropriate Toolbox and ELAN file-format. An important aspect of these orally-given translations is that Jakumin Awetí was taught Portuguese on an

<sup>&</sup>lt;sup>96</sup> See Appendix II.

individual basis and did not receive any training as a translator, i.e. his performance is mostly unaffected by any non-indigenous cultural norm.

The grammatical sketch – with the exception of the analyses of verb reduplication and reciprocity – is entirely corpus-based. The analysis of verb reduplication, a phenomenon closely related to ideophones, is additionally based on two informal interviews with Jakumin Awetí carried out by Sebastian Drude in July 2007 on the basis of a questionnaire developed by myself. Corpus examples of reduplication could further be counter-checked with Awajatu and Waranaku Awetí in Belém in October 2007. During this work-meeting with the two school-teachers I also elicited data on the expression of reciprocity.

#### 1.5.2 Methodology of data analysis

The aim of this dissertation is to present a comprehensive description of ideophones in the Awetí language and to provide evidence for their diachronic development into verb roots, which seems to be a cross-linguistically observable tendency. Phonological, morphological, syntactic, semantic and discourse-pragmatic features of these elements will be systematically described. Since ideophones according to Dingemanse's (2009) above definition differ from other words in imitating rather than describing events, the analysis of these multi-modal elements requires a more varied method of investigation than provided by a mere grammatical description. The large documentation corpus of auditory and visual data offers a unique opportunity to investigate features related to the production of ideophones at their moment of utterance. Therefore, the semantic contribution of their marked prosody - variation in pitch, volume or rhythm of speech can also be taken into account. In addition, the correlations between ideophones and cooccurring paralinguistic elements such as gesture and other types of bodily enactment will be investigated, which in other analyses have also not been explored to any significant extent.<sup>97</sup> Sound-symbolism, a common feature of ideophones all over the world, will be approached by establishing sets of formally similar ideophones with similar meanings and by comparing the meanings of sets of ideophones which contain a specific phoneme or phoneme cluster in the same position. The meaning of other iconic features, such as repetition and patterns of reduplication, will also be explored. The findings will be discussed under a cross-linguistic and typological perspective. In order

to compensate for the absence of a diachronic dimension in the Awetí data, synchronic variation in the corpus will be discussed, and ideophones in Awetí will be compared with data regarding ideophones and related phenomena in other Tupian languages, for which the available literature has expanded considerably since the late 1990s. For investigating in the specific use of ideophones as an areal feature there was not enough data available for other languages of the Xinguan area. But, as shown by studies from other areas of the world, it is certainly worth pursuing this line of research in future studies.<sup>98</sup>

## 1.5.3 Conventions for data sources and data representation

The numbering of the examples starts anew at each subsection of a chapter. Repeated examples within these subsections receive the same number. Tables are counted for each chapter, figures are counted through from the first to the last chapter. Pictures in section 4.6 will be given the same numbers as the examples they relate to. Several pictures relating to one example receive an individual counting on the second number (e.g. 4.1, 4.2, etc.).

An example is presented by minimally four lines. In the first line the source is indicated by a file name and a number referring to the time position in the original sound file. For elicited examples the name of the Awetí consultant and the date of elicitation are given. In the second line the Awetí example is written in italics. It is presented in the Awetí orthography<sup>99</sup> and with a morphological segmentation. Where the orthographical representation, due to processes of assimilation or elision of phonemes, does not reflect the morphological segments, the underlying structure is made transparent by an extra line underneath the example line. Clause boundaries within sentences are indicated by commas. The symbol [...] indicates elements in the examples which are missing in the original recording in order for the clause to be wellformed. These are mostly clause-final particles. [Words] in square brackets indicate parts of the utterance which are not audible or not spoken but added by the Awetí consultants during transcription and marked as necessary for a well-formed sentence. Ideophones and other elements relevant in different sections of the sketch grammar are

<sup>&</sup>lt;sup>97</sup> A recent study, taking into account these elements in his description of ideophones in the African language Siwu, is Dingemanse (2011).

<sup>&</sup>lt;sup>98</sup> See Güldemann (2002) for African languages and McGregor (2002) for Australian languages.

<sup>&</sup>lt;sup>99</sup> Cf. section 3.2.4 and Drude et al. (forthcoming).

highlighted by bold print. In the section on reduplication the base forms are underlined, and for each example a line with a phonetic transcription of the reduplicated verb is added.

In a third line a morphological glossing is given according to the conventions established by the Leipzig Glossing Rules. In the annotations the verb type (transitive, intransitive, stative) is not marked on the agreement prefix but directly on the translation of the verb root (e.g. *tup* see.vt for the transitive verb *tup* with the meaning 'see'), because the respective agreement prefix is determined by the root and the valency-changing morphemes it is affixed by. Postpositions are in most cases glossed as POSP, since there is not a uniform translation equivalent for many of them. An exception is *tsu* ('like') which is formally a postposition, but differs from other postpositions in several respects. NOM, if not further specified, refers to action nominal constructions. M or F, indicating whether a speaker is male or female, has not been consistently added to a demonstrative, person pronoun or discourse particle, where such a distinction is marked by different forms. The first person plural exclusive prefixes and possessive clitics *ozo=* and *ozoj-* are often used in Awetí discourse to indicate that one person is considered to be a representative of the whole group. The first person plural inclusive possessive clitics *kaj=* is the default possessive marker on body parts.

English translations in the fourth line are kept as close to the structure of the original Awetí sentences as this is possible without rendering the translation ungrammatical. Literal translations at the expense of grammaticality are given wherever this appears to be useful in order to make the original structure more transparent (e.g. in the context of nominalizations). The interpretation of the meaning of ideophones depends on the discourse context and on performative features, so that the orthographical representation of one form in different examples does not necessarily have the same translation. In order to provide information on the context, the examples containing ideophones often consist of more than one sentence. Information on the discursive context is further added where examples have a culture-specific content which otherwise cannot be understood.

In section 4.6 the examples are additionally annotated for gesture in a line directly following the sentence(s) given in Awetí. The gesture annotation follows the conventions as presented in Kendon (2004: 114, 362-364), which will be specified in the introduction to the respective section.

Examples of other languages in chapter one and five are presented, if existent, with the annotations given by the respective authors or added by myself. The same applies to the Tupian languages in chapter six, where the annotations may additionally be adapted to the conventions used for the Awetí examples or modified according to more recent analyses of the respective language. English translations were added in those cases, where the studies were written in French, Portuguese or Spanish.

#### 1.6 Outline of this study

In this first introductory chapter the phenomenon of ideophones in general and relevant data in Awetí were presented, followed by an overview of the history of study of ideophones in Amerindian languages. The Awetí speakers and their language were briefly introduced and the data base for this study was described. In chapter two the different approaches to the study of ideophones, as presented in the literature, will be described and evaluated with regard to their respective relevance for this study. The sketch grammar of the Awetí language follows in chapter three. Those parts of the grammar which are especially relevant for the analysis of ideophones will be dealt with in greater detail. These are, more specifically, the expression of aspect, the functions of action nominal constructions and form and function of verb reduplication. In chapter four Awetí ideophones are described in detail on various levels of analysis. Apart from a purely grammatical analysis this includes the analysis of features related to their moment of utterance, i.e. gesture and prosody. The description of these performative features, made possible by a corpus of audiovisual recordings, is one of the two areas focused on in this study. The second focus is the synchronic variation which could be observed in the corpus and permits hypotheses about historical processes involving ideophones, for which there is also typological evidence. These are discussed in chapter five, and similar processes in other Tupian languages are outlined and systematized in chapter six. Concluding remarks and prospects for future studies are given in chapter seven.

2 Approaches towards the study of ideophones

Kulemeka (1995) identified two major approaches towards ideophones, one consisting in the study of sound-meaning correlations in specific languages, the other in the description of ideophones as a grammatical class. The former "iconic and sound symbolic approach"<sup>100</sup> has primarily been employed to investigate the respective phenomenon in Asian languages, where sound symbolic words can be derived from words of different lexical classes through systematic phonological processes.<sup>101</sup> The latter "grammatical class framework" – in which also the above definition by Doke (1935) was developed – was established to characterize ideophones in specific African languages. In these languages they exist in the lexicon as a class of elements with idiosyncratic shapes and meanings, without onomatopoeia and sound symbolism being the predominant feature. Other approaches have emphasized the discourse function (Nuckolls 1995) or semantic and cognitive aspects of ideophones (Kita 1993/1997). More recently, attempts have been made to approach the phenomenon from a typological perspective, taking into consideration thematically diverse analyses from all over the world.<sup>102</sup>

## 2.1 Ideophones and sound symbolism

Especially for Asian languages the systematic relation between phonological and semantic components of ideophones and related words has been described in detail.<sup>103</sup> In the approaches towards other languages such a non-arbitrary relationship between a word and its referent has been rejected for a long time due to the Saussurean postulate of the arbitrariness of the linguistic sign. In the last few years, however, a number of studies, partially experimental or statistical, have investigated the assumption that the relation between speech sounds and meaning may not always be arbitrary. Some of these studies concluded that such a "sound symbolism" is more likely to occur in certain semantic classes of words, e.g. in animal names.<sup>104</sup> Evidence has also been found in various languages for a correlation between specific sound types such as high front

<sup>&</sup>lt;sup>99</sup> According to Kulemeka 'iconic words' imitate sounds made by objects in the external world, i.e. they are onomatopoeic, whereas the relation between a 'sound symbolic

word' and what it refers to is less concrete (cf. Kulemeka 1995: 74).

<sup>&</sup>lt;sup>101</sup> See section 2.3 for examples from Japanese.

<sup>&</sup>lt;sup>102</sup> Cf. Voeltz & Kilian-Hatz (eds.) (2001).

<sup>&</sup>lt;sup>103</sup> See e.g. Tsuji (2001), Lee (1992), Walter (1988).

<sup>&</sup>lt;sup>104</sup> Cf. Berlin (2006).

vowels or high tone and the expression of "smallness" as well as low back vowels or low tone and "largeness".<sup>105</sup> This association between sound and size could further be supported by data from ethological studies across species, where in antagonistic face-toface encounters specific acoustic signals are used to convey impressions of the size of the "emittent", of the entity producing the sound in Ohala's terminology.<sup>106</sup> From these observations and others related to human vocal anatomy Ohala (1997) formed the hypothesis of the existence of a biological evolutionary basis for sound symbolism in human language. This led him to the formulation of a "frequency code", i.e. the use of acoustic frequency for the invocation of size and related concepts (1994/1997). A recent representative and systematic approach towards finding cross-linguistic evidence for universal sound symbolism was given by Wichmann, Holman & Brown (2010). Their investigation is based on a sample of 40 items of basic vocabulary from the Swadesh list, collected for almost half of the world's languages in representative distribution. They could show that the similarities between sound shapes of words referring to the same concepts in different languages were significantly higher than between those referring to different concepts. Of the three possible explanations for these similarities, i.e. sound symbolism, loanword spread or common inheritance from a proto-world language, the authors could exclude the latter two by additional tests. One of these showed that the elimination of widespread loanwords did not significantly alter the overall results, another test, analysing languages from the 'Old World' and from the 'New World' separately, did not give results as predicted for the indication of closer genetic relatedness.<sup>107</sup> A further test showed that the measure indicating sound symbolism did not correlate with the measure for genetic relatedness, i.e. the words likely to be inherited were not the same as those with a tendency for sound symbolism.<sup>108</sup>

A typology of sound symbolism, according to many authors a typical feature of ideophones, was developed by Hinton, Nichols and Ohala (1994). They established four categories according to the degree of direct linkage between sound and meaning: corporeal, imitative, synesthetic and conventional sound symbolism.

<sup>&</sup>lt;sup>105</sup> Cf. e.g. Sapir (1929) or Ultan (1978), but counter-evidence is given in Diffloth (1994).

<sup>&</sup>lt;sup>106</sup> Cf. Ohala (1997: 99/100).

<sup>&</sup>lt;sup>107</sup> Cf. Wichmann et al. (2010: 852, Figure 5).

<sup>&</sup>lt;sup>108</sup> Cf. Wichmann et al. (2010: 854, Table 4).

'Corporeal sound symbolism' subsumes the usage of "certain sounds and intonation patterns to express the internal states of the speaker, emotional or physical" (Hinton et al. 1994: 2). Apart from typical phenomena such as expressive intonation or interjections, this category also includes involuntary coughing, hiccups etc., which are symptoms rather than symbols. For either belonging to the suprasegmental features of utterances or for not being conventionalized, many phenomena of this category do not appear in written language. Utterances of corporeal sound symbolism typically have a simple structure and cannot be segmented into smaller units. A second category with a higher degree of conventionalization is 'imitative sound symbolism', relating to onomatopoeic elements which represent sounds of the environment (e.g. animal sounds). Unlike corporeal sound symbolism it does not have a direct relation to emotional or physical states but has a referential function and often possesses a linguistic structure. According to the authors, movements are often referred to by items of this category due to the close neuronal linkage of rhythmic sound and rhythmic movement: Just as sound can be translated into movement (e.g. in dancing), the reverse also occurs.<sup>109</sup> A typical morphological process to express repeated movements is reduplication. This category can expand into the third, the category of 'synesthetic sound symbolism', which Hinton et al. (1994: 4) define "as the acoustic symbolization of non-acoustic phenomena". This third category relates to Ohala's above mentioned "frequency code", by which he tried to explain, why certain acoustic features are consistently used to represent properties of objects perceived by other than the auditory sense, e.g. size, shape or texture. Although there are many cross-linguistic correspondences suggesting universal tendencies, this category shows more arbitrariness than the previous two. Arbitrariness also and to a much larger extent characterizes the fourth category of 'conventional sound symbolism'. In this category the association of certain phonemes or phoneme clusters with specific meanings is mostly language-specific, and speakers, perceiving this conventionalized linkage as "natural", create new lexical items by analogy.

Ideophones across languages display imitative, synesthetic and conventional sound symbolism to differing degrees. Dingemanse (2009: 84), describing ideophones in Siwu, a language of Ghana, establishes a typology of form-meaning linkages especially for these words. He distinguishes three types. The first, termed 'direct iconicity', applies

<sup>&</sup>lt;sup>109</sup> Cf. Hinton et al. (1994: 4).

to ideophones imitating a sound in an onomatopoeic fashion. An example is the Siwu ideophone tsoààà for the sound of a waterfall (Dingemanse 2009: 2, (2)). The second type, 'gestalt iconicity', is used for ideophones which capture the aspectual contour of an event by their form. This can be illustrated by the two monosyllabic ideophones in (1), of which the first, with a closed syllable, depicts a punctual unitary event, while the second, with an open syllable and vowel lengthening, expresses a durative aspect.

(1) (Dingemanse 2009: 2, (3))
a. *gbíim* 'sound of explosion'
b. *vùùù* 'wind blowing'

The third term, 'relative iconicity', refers to sets of ideophones in a language which are related in form and in meaning. An example of a contrastive pair is given in (2).

(2) (Dingemanse 2009: 3, (4))
a. *pɔlɔpɔlɔ* 'smooth'
b. *kpɔlɔkpɔlɔ* 'slippery'

Dingemanse's first type corresponds to the category of 'imitative sound symbolism', as described by Hinton et al. (1994). Ideophones of the two other types could be members of any of the three categories of sound symbolism relevant for ideophones, because Dingemanse's typology focuses on the specific meaning components iconically depicted by ideophones and not on the degree of arbitrariness of the sound symbolism involved. The ideophones in (1) in this specific case belong to the category of imitative sound symbolism, while (2) could be an illustration of either synesthetic or conventional sound symbolism. Evidence for the existence of sound symbolism in Awetí ideophones will be given in sections 4.2 and 4.5.

## 2.2 Ideophones as parts of speech

The definition by Dingemanse (2009) in section 1.1 postulates a word-status for ideophones, which is widely uncontested, but the suggestion of a separate word class for these elements, whether cross-linguistically or language-specifically, has been a subject

of continuing debate. As can be seen by the following short presentation of different approaches, none of them adequately covers the phenomenon.

Sasse (1993) gives an overview of different attempts to define ideophones as a word class in a number of languages. He emphasizes that for an appropriate definition of ideophones phonological criteria need to be taken into consideration in addition to morphosyntactic criteria, which make ideophones - together with interjections different from all other word classes. Another contrastive feature is that they must be defined in terms of "a typical bundle of syntactic functions" (Sasse 1993: 667). Although some scholars have treated ideophones as a special subclass of interjections due to a variety of shared features, Sasse points out two syntactic differences: One is that ideophones participate in ordinary word class derivational processes, the other that they typically occur as sentence constituents, while interjections are normally invariant sentence-equivalents. Sasse further distinguishes "ideophonic expressions" in languages like English or German, which may be subsumed under different word classes, from "proper" ideophones. For the latter he gives the example of the Carib language Apalai, where these elements have distinctive formal features and show a syntactic multifunctionality as adverbs, verbs and nouns, a feature which clearly distinguishes them from other word classes. In general, Sasse objects to the idea of defining ideophones for each language system separately and opts for a definition which is based on prototypical properties. There are various problems with Sasse's classification. On the one hand, his description of Apalai ideophones is based on the written data provided by Koehn & Koehn (1986), which was discussed in section 1.3.1. These data do not contain any information on performative aspects, which are an important component of Dingemanse's (2009) cross-linguistic definition and – as this study aims to show – the most distinctive feature of ideophones with consequences for their supposed participation in derivational processes. In addition, ideophones are more often than not extra-clausal and can therefore not be cross-linguistically defined in terms of typical syntactic functions.

Another theoretical approach was proposed by Wierzbicka (2000) within her framework of a "Natural Semantic Metalanguage". She postulates a cross-linguistic definition for word classes on purely semantic grounds. Wierzbicka emphasizes that for ideophones – and for interjections, too – no language-specific instantiations of universally lexicalized meanings may be presented, i.e. in her terminology there are no "lexical exemplars" as there are for other word classes, e.g. DO and HAPPEN for verbs or THING and PEOPLE for nouns (Wierzbicka 2000: 203ff.). Instead, she proposes what she calls a "semantic exemplar", a shared semantic invariant, which in a first approximation she spells out as follows: "I say this word now [because] when someone hears this word I can say to this person: [it was moving etc.] like this" (2000: 309). By referring to the sound of the word in this definition the phonological criterion is emphasized which Sasse (1993: 667) considered to be the basic characteristic for ideophones. Two other important aspects of Wierzbicka's definition are the performativity of ideophones, i.e. they are experienced by the interlocutor at the moment of utterance ("now"), and their imitative quality, captured by "like this".

Wierzbicka illustrates her definition with examples of ideophones or "mimetics" from Japanese, however, she only considers occurrences in adverbial position. In this framework only Awetí ideophones referring to manner of movement would be considered ideophones. Others would be subsumed under "verbs" (defined by the lexical exemplar HAPPEN).<sup>110</sup> Ideophones occurring in isolation would not be covered by the theory.

Gabas and Van der Auwera (2004: 410), similar to Sasse, postulate a crosslinguistic definition of ideophones in terms of prototypes, involving different levels of linguistic analysis. They themselves refrain from doing so in their study of ideophones from the Tupian language Karo by pointing out that many additional descriptions of ideophonic systems across the world's languages are needed in order to understand the category.

Nuckolls (2001) compares the different grammatical functions Pastaza Quechua ideophones can assume in an utterance with morphosyntactic properties of traditional parts of speech. She classifies them with regard to their syntactic positions and semantic contributions as functioning like manner adverbs or the invariant parts of compound verbs, as restating a verb meaning in a different semiotic mode or as expressing verbal aspect.<sup>111</sup> She does not, however, categorize them as canonical verbs or adverbs, especially since there are several cases in her corpus of one and the same ideophone which can assume all of the functions she describes. In addition, the four functions cannot always be clearly differentiated, because the feature of semiotic distinctness in

<sup>&</sup>lt;sup>110</sup> The phenomena preliminarily classified as "group III" in section 1.2 would be defined as "interjections" by the semantic invariant "I feel something now" (Wierzbicka 2000: 295, 305).

<sup>&</sup>lt;sup>111</sup> See section 1.3.5 for details.

the "restating a verb meaning" function applies to all other functions, too. This relates to Nuckoll's (1996) earlier work where she emphasizes the "sound-symbolically performative" properties of ideophones, by which they can be distinguished from other words. Due to these properties, by which ideophones can simulate events so that they are directly experienced, they have a specific discourse-function of enhancing the involvement of the interlocutor(s). In Pastaza Quechua, for this reason, they characterize a specific speech style of amiable conversation and cannot, for example, be found in antagonistic discourse.<sup>112</sup>

Many recent approaches have proceeded to define the grammatical structure of ideophones for each language separately but to consider their semiotic heterogeneity, surfacing in their performative features, to be the characteristic by which they can be identified across languages.

### 2.3 The semantics of ideophones

The meaning of ideophones is difficult to capture, and speakers, when asked to paraphrase them, often recur to repeating their form in combination with modes of expression other than language (prosody, gesture, mimics).<sup>113</sup> Following his studies of ideophones (or 'mimetics') in the two Southeast-Asian languages Semai and Korean, Diffloth (1972) was the first to point out that their semantic analysis should be approached in a fundamentally different way from that of the rest of the lexicon.

Kita (1997), resuming this idea, proposes a two-dimensional semantic representation for ideophones and other linguistic phenomena with a non-arbitrary form-meaning relationship in human cognition. According to his theory, the meaning of these elements is not (only) represented in an 'analytic dimension' in a human's mental lexicon, where semantic partials are organized in a hierarchical structure, but (additionally or exclusively)<sup>114</sup> in an 'affecto-imagistic dimension', "in which language has direct contact with sensory, motor, and affective information" (Kita 1997: 380) and where this information remains modality-specific. The analytic dimension, by contrast, is decontextualized in the sense that it structures experience in terms of rational concepts such as agentivity or causativity.

<sup>&</sup>lt;sup>112</sup> Cf. Nuckolls (1996: 100).

<sup>&</sup>lt;sup>113</sup> Cf. Diffloth (1972: 441).

<sup>&</sup>lt;sup>114</sup> The two types of Japanese ideophones Kita takes into consideration differ in this respect, as will be shown further down.

The unit of representation of the affecto-imagistic dimension is an event with its facets belonging to different cognitive modalities – visual, auditory, tactile, motoric, emotive and affective. These are "re-experienced" in an image, whereby the modalities of experience are simply contiguous in space and time. According to Kita, the "expressive function" of language mentioned by Jakobson (1956) or Lyons (1977) is part of this affecto-imagistic dimension, which, however, has a more ample definition, not only subsuming information "about a speaker's affective attitudinal state, but also about outside events or states that are perceived by a speaker" (Kita 1997: 388). The analytic dimension, in which all words except ideophones are represented, involves cognitive processes and is characterized by the decomposition of a thought or experience into semantic units, which are organized in a proposition. The descriptive information contained in the analytic dimension may be asserted or negated, and is, in the ideal case, objectively verifiable.<sup>115</sup>

Kita develops his cognitive model on the semantic representation of ideophones by analysing Japanese sound and manner mimetics (*giongo/ gitaigo*). These have many of the formal characteristics described for ideophones across languages. They are described as a class of standardized words which are referential and at the same time "evoke a vivid at-the-scene feeling" (Kita 1997: 381). They conform to the phonological system of the language and obey the phonological processes which also affect other words. Mimetics can be mono- or disyllabic and may be repeated and/ or reduplicated. The relationship between the sound of these words and their meaning is perceived by native speakers as non-arbitrary, direct and immediate, i.e. there is a socially constituted association between form and meaning. Some of the mimetics are onomatopoeic in nature, but most of them refer to events or states (summarized by Kita as 'eventualities'), in which sound, if present, is not an essential part. Japanese mimetics, referring to an audible event (a), a visual perception (b) and a psychophysiological state (c) are given in (3):

(3) (Kita 1997: 381/2)

a. *pyon* 'a swift jump'

b. *pika* 'a flash of light'

<sup>&</sup>lt;sup>115</sup> Cf. Lyons (1977: 52) cited in Kita (1997: 386).

c. kutakuta 'being very tired'

According to Kita, of the two types of mimetics encountered in Japanese, the "nominal" ones encode their message in both dimensions, the "adverbial" ones in the affecto-imagistic only. "Nominal" mimetics are described as behaving different from adjectives or nouns as noun modifiers in taking other copulas and being combinable with a certain type of postposition. They either function as the predicative element of a clause when followed by a copula or can be part of a postpositional phrase. "Adverbial" mimetics have the function of an adverbial in a clause. In this case they are optionally followed by a complementizer.<sup>116</sup> Examples of nominal mimetics are given in (4)(a) and (b), of an adverbial mimetic in (4)(c):

(4) (Kita 1997: 385, (4) b, 383, (2) a)

- a. gutyagutya {?na /\*de aru / no} hikidasi messy (Mimetic) Copula Copula exist Copula drawer 'a messy drawer'
- b. kami wa [PP sarasara ga] yo i.
  hair Top smooth (Mimetic) Nom good Pres
  'As for hair, smooth (hair) is good.'
- c. [PP jitensya ga] [PP kabe ni] [ba:n to] butukat-ta.
  a bicycle Nom wall Dat Mimetic Comp run-into Past ba:n = 'intensive collision of heavy object'
  'A bicycle ran into the wall really hard.'

In order to account for the existence of the affecto-imagistic dimension and the respective status of the two types of Japanese mimetics, Kita provides several pieces of evidence. He shows that information encoded in an adverbial mimetic in contrast to regular adverbials never becomes redundant when e.g. a verb with the same meaning occurs in the clause. This absence of redundancy he explains with the idea that the semantic representation of the mimetic is in a different dimension, whereas in the case of a regular adverbial in combination with a referentially equivalent verb the respective piece of information encoded in each element belongs to the same analytic dimension.

<sup>&</sup>lt;sup>116</sup> Cf. Kita (1997: 386).

The same holds for nominal mimetics, which can be freely combined with other predicates having the same referential potential.

Adverbial mimetics cannot be negated unless the negation gets a meta-linguistic interpretation on the surface-utterance level, implying an alternative, more adequate mimetic to the negated one, e.g. a ball not rolling *gorogoro* but *korokoro* for the movement of a less heavy object. For Kita (1997: 390/1), the logical negation, being an operation in the analytic dimension, is not possible with a sentence containing a mimetic, since the semantic components of that sentence do not have a uniform level of representation and thus cannot be together in the scope of a negative operator. For nominal mimetics, however, logical negation is permitted. From this observation Kita concludes that nominal mimetics have representations in both dimensions. Their "dual status" or, more specifically, their participation in the analytic dimension also explains why nominal mimetics can fill a goal argument position in combination with certain predicates, which is not possible for adverbial mimetics. This is illustrated in (5):

(5) (Kita 1997: 392, (12) c)

*Taro ga kutakuta ni nat -ta.* Nom Mimetic Copula become Past 'Taro became very tired.'

Kita (1997: 406/7) further assumes that the affecto-imagistic dimension with its 'eventuality' representation of temporally organized perceptual-motor and contingent affective information is developmentally prior to the analytic dimension, where meaning is organized in an abstract way. This dimension is not only relevant for utterances containing ideophones. Moreover, most utterances have contents in both dimensions, e.g. verbal utterances which are accompanied by gesture, and this information is always coordinated in a similar fashion.

McGregor (2001, 2002), in his analysis of the development from ideophones to ordinary verbs in Australian languages, also points to the 'mimetic' characteristic of ideophones to "designate their referents by demonstrating them" (McGregor 2001: 216). He conceives of their grammaticalization into verbs as a "process of increasing the word's symbolic, arbitrary character" (McGregor 2001: 216), which corresponds to the transition from the affecto-imagistic dimension to the analytic dimension in Kita's theory.

A similar approach which, however, emphasizes the intentionality of a mimetic mode of communication is offered by Donald (1998), and refined with regard to ideophones by Güldemann (2008). Mimesis, according to Donald (1998: 49), is a cognitive capacity which in hominid evolution "led to the first fully intentional representations and set the stage for the later evolution of language". He describes it as a nonverbal representational skill, an ability to intentionally model the whole body in three-dimensional space and to thus provide a basis for a communicative environment without which language could not have evolved. Language developed later in the course of a growing need for disambiguation. Mimesis can account for what Donald (1998: 60) has called the "analog mode[s] of representation", e.g. pointing by gesture and gaze, pantomime, iconic gesture, ritual group action and various other forms which are used by modern humans alternatively to language.<sup>117</sup> These analog modes can fulfill different communicative needs such as establishing and maintaining contact, capturing attention, demonstrating or explicitly referring to events or actions. Donald points out that humans do not only communicate by mimesis as an alternative to language but that the mimetic capacity further provides a "communicative envelope of language" (1998: 62), e.g. eye contact, facial expression, prosody and gesture can meaningfully contribute to the interaction between several agents in a communicative setting. In addition, many expressive arts (e.g. dance, theatre, painting) are based on mimetic principles. Güldemann, who investigates in "quotative indexes" in African languages which he defines as words functioning as markers of direct speech and as predicators for certain invariant elements (e.g. ideophones, loanwords and representational gesture), concludes that these indexes in fact mark "mimetic signs", which are represented by all these elements. This approach to ideophones can account for further developments in Awetí and other Tupian languages and will be further pursued in chapter 5.3 and six.

A detailed semantic description of ideophones in Pastaza Quechua, taking into account their semiotic distinctiveness, is given by Nuckolls (1996). Nuckolls organizes the ideophones in Pastaza Quechua as subentries of specific "image schemata" in the sense defined by Lakoff (1989) and Johnson (1989: 19) as "embodied patterns of meaningfully organized experience". Examples for schemata on a general level are

<sup>&</sup>lt;sup>117</sup> See Donald (1998: 62, table 4.1).

"contact and penetration", "deformation" or "falling". Nuckolls (1996) provides a definition for each of her entries and additionally illustrates them with a diagram.<sup>118</sup>

Two examples of definitions of the ideophones *dzir* and *ling* under the heading of "contact and penetration" are given in (6) and (7):

# (6) (Nuckolls 1996: 189)

#### Dzir

Definition: (1) To pull or slide an object across a surface. Aspectually punctual, durative. To move by sliding, scraping, slithering, or slipping across, over, or down a surface; to grow by seeming to slide across a surface. Aspectually durative. (2) An idea of the sound made by such movements. Aspectually durative.

## (7) (Nuckolls 1996: 196)

## Ling

Definition: (1) To insert into an enclosed space. Aspectually completive, resultative. To enter a physically bounded space or to cross an obvious boundary, as between a forest and agricultural field. Aspectually completive, resultative. (2) To move quickly with back-and-forth or in and out motions. Aspectually iterative.

The examples illustrate that each of the ideophones, according to Nuckoll's definitions, has an inherent aspectual contour. Although Nuckolls (1996) lists for each of her entries several ideophone-verb collocations, i.e. verbs in the immediate syntactic environment of 'adverbial' ideophones, she claims in a later article (Nuckolls 2001: 284) that – unlike in many other languages<sup>119</sup> – collocational restrictions with verbs cannot be observed for Pastaza Quechua ideophones and hypothesizes that this could even be a typical Amazonian feature. Nuckoll's (1996) approach will be discussed in more detail in section 4.5.

# 2.4 Discourse function of ideophones

The semantics of ideophones are closely related to their discourse function which, according to Nuckolls (1995, 1996), is to highlight salient features of an event by

<sup>&</sup>lt;sup>118</sup> Johnson (1987: 23) points out that diagrams of this sort may be helpful to identify structural features of the schemata, but at the same time they misleadingly suggest that the schemata may be conceived of as mental pictures.

<sup>&</sup>lt;sup>119</sup> Collocational restrictions have been reported for African languages (e.g. Childs 1994). Note, however, that McGregor (2002) and Dickinson (2006) draw a distinction between ideophones and formally identical coverbs, of which only the latter are collocationally restricted, occurring only with one or a small set of finite 'light' verbs.

making its sensory qualities perceptible to the interlocutor(s). Nuckolls compares different performative features of ideophones in Pastaza Quechua with cinematographic techniques utilized in industrial societies to create involvement and empathy. Due to the performative quality of ideophones the interlocutor generally has the possibility to understand via direct experience what is being narrated: "just as audiovisual images can be used to share information, to verify understanding and to evoke or express emotional points of view, so too can sound symbolic images" (Nuckolls 1995: 163).

Similar observations are made for ideophones across languages.<sup>120</sup> Alpher (2001), investigating the occurrence of ideophones in the discourse of Yir-Yoront and two other Australian languages of the same geographic area, observes that verbs in these languages, when carrying new information or focus, are foregrounded by a preceding ideophone.

In section 4.6 the discourse function of Awetí ideophones will be explored in connection with the additional usage of co-speech gestures.

# 2.5 Ideophones, gesture and prosodic features

Ideophones all over the world have often been associated with gesture. Earlier studies pointing out a close relation between African ideophones and gesture are Samarin (1971) on Bantu and Kunene (1978) on Southern Sotho. Nuckolls (2001: 273) has termed ideophones in Pastaza Quechua as "verbal gestures" for having many functions in common with these. McGregor (2002: 335) refers to them as "vocal gestures" to account for their demonstrative use in Australian languages, and, in addition, assumes that they are often accompanied by manual gesture.<sup>121</sup> Güldemann (2008: 280), in his analysis of African ideophones, states that "metaphorically, one can characterize [them] as a performance or a gesture in the disguise of a word".

Kita (1997: 392) observes correlations between a certain type of ideophone ('adverbial mimetic'<sup>122</sup>), gesture and expressive prosody in Japanese, which – according to his theory already referred to in 2.3 – he treats as individual manifestations of the same 'affecto-imagistic dimension' of meaning representation. According to his findings, the utterance of the ideophone closely synchronizes with the stroke of an

<sup>&</sup>lt;sup>120</sup> Cf. section 1.3 and chapter six.

<sup>&</sup>lt;sup>121</sup> Cf. McGregor (2002: 335, footnote 181).

<sup>&</sup>lt;sup>122</sup> Cf. section 2.3.

iconic gesture.<sup>123</sup> If an utterance contains a prosodic peak, it also tends to fall on the ideophone.

The video data analysed by Kita, showing that spontaneous iconic gestures,<sup>124</sup> mostly performed by hands and arms and depicting motion or action, nearly always neatly co-occur with mimetics, was collected in a story-telling task with Japanese native speakers. The test persons were shown a short cartoon and asked to narrate what they had seen to a person who had not been present. They were not aware that gesture was of interest in this task. According to the analysis, 94 percent of the ideophones were accurately synchronized with the stroke of a co-expressive gesture. In addition, Kita found out that in most of these cases, namely 83 percent, the ideophone was the first word in the stroke. For comparative reasons the correlation of verbs and gesture strokes was also analysed with the result that only an average of 40 percent of randomly selected verbs for each speaker was accompanied by a gesture stroke, and only 52 percent of these synchronized with the stroke. With regard to expressive prosody Kita demonstrates that in an utterance, where there is an ideophone and a prosodic peak, the latter must be on the ideophone and not on any other elements in the utterance (see examples (16) to (18) in Kita (1997)). This close temporal coupling between the two phenomena he (again) attributes to their common underlying representation in the affecto-imagistic dimension, as outlined in section 2.3. In the literature on prosody there is agreement that the meaning carried by prosodic movements is at the same time "linguistic" or "grammatical" and "expressive" or "emotional". It has been proposed for prosodic peak to be associated - in addition to the discursive informational structure with the affective structure of an utterance, as is the case when coinciding with a mimetic.

Güldemann (2008), too, sees a connection between ideophones and representational gesture in considering both as 'mimetic signs' which in many languages are inserted into discourse by the same 'indexing devices' that are also used to mark direct reported discourse and non-linguistic sound imitation.<sup>125</sup> Güldemann (2008: 290) points out that gesture rarely replaces but rather overlaps with speech and attributes this feature to the fact that it relies on a different medium of expression.

<sup>&</sup>lt;sup>123</sup> Cf. Kita (2001: 426, table 2).

<sup>&</sup>lt;sup>124</sup> This type of gesture, according to Kita, is little conventionalized with regard to the pairing of form and meaning.

 $<sup>^{125}</sup>$  See section 5.3.2 for examples and further details.

# 2.6 Ideophones from a historical perspective

Several authors, studying ideophones from a historical perspective, have pointed out the close relation between these elements and verbs. McGregor (2001, 2002) describes compound verb constructions in Northern Australian languages, consisting of an inflected light verb and an uninflected part which originally had been an ideophone. For other languages, too, compound verb constructions of this type, most often involving a light verb with the meaning 'say', are attested. For the African Bantu language Setswana, where such complex verbs exist alongside inflected lexical verbs, Creissels (2001) hypothesizes that compound verb constructions formed with ideophones reflect a historical shift from an SVOX to an SOVX constituent order. Güldemann (2005) reports on a morphological change which has occurred in several languages of Northeast Africa. These languages display a suffixing conjugation class, which has replaced an older prefixing verb construction of an ideophone followed by an inflected light verb.

Other authors have found evidence that ideophones and other expressive vocabulary can be borrowed from neighbouring languages. Jarva (2001) describes the relation of expressive words in Finnish to their Russian source, showing that in the donor language the words do not need to have an expressive quality. Bartens (2000), on the other hand, illustrates that ideophones in different Atlantic creoles can be traced back to ideophones in their respective African substrate languages.

Possible historical processes involving Awetí ideophones will be outlined in chapter five and six.

## 3 Typological characteristics of Awetí

The Awetí language, representing a branch by itself within the Tupí-family, bears typical features of Tupian languages.<sup>125</sup> It is agglutinative, both prefixing and suffixing, predominantly head-marking and head-final. The latter can be seen in possessive constructions, postpositional phrases and complement clauses as well as in the tendency for OV in finite clauses and obligatorily in action nominal constructions. Descriptive verbs, when attributively used, and relative clauses, on the other hand, follow their head nouns<sup>126</sup>, and the default order of constituents (judging by frequency) in finite clauses with two overt NPs is SVO.<sup>127</sup>

As outlined in section 1.4.3, Awetí is closer to the languages of the Tupí-Guaranian<sup>128</sup> branch than to those of the other eight branches. According to Drude (2006) there are regular sound correspondences with cognate words in these languages. In addition, Awetí shares more morphosyntactic features with Tupí-Guaranian than was assumed in previous studies focusing on the internal classification within the Tupian family when only little data on the language was available.<sup>129</sup>

#### **3.1 Introduction**

The following typological overview serves as a first orientation. In sections 3.2 and 3.3 a detailed analysis, elaborating on those aspects that are relevant to the analysis of ideophones (phonological and syntactic structure, verbal aspect and certain derivational processes), will be given. Since it is not useful for the analysis to draw a clear line between morphological and syntactic features in Awetí, both are dealt with in one chapter. In Awetí nouns, verbs, adverbs and ideophones form the open word classes, whereas personal pronouns, demonstratives, postpositions, interjections and particles are closed word classes.

<sup>&</sup>lt;sup>125</sup> Cf. Gabas (2006: 147).

<sup>&</sup>lt;sup>126</sup> It is, however, neither an unusual pattern for relative clauses nor for attributively used adjectives (or stative verbs as in Awetí) to follow their head-nouns in head-final languages (see http://wals.info, maps 96A and 97A).

<sup>&</sup>lt;sup>127</sup> Cf. section 3.3.9.2, tables III.1 and III.2 (Appendix).

<sup>&</sup>lt;sup>128</sup> Moore (2006: 121) states that the geographically wide-spread Tupí-Guaranian branch with almost 50 languages still existent is rather atypical for the Tupian family. Unlike those of the other branches many of its languages have been studied since the 17<sup>th</sup> century starting with the Jesuits.

<sup>&</sup>lt;sup>129</sup> See e.g. Dietrich (1990), Rodrigues (1964, 1984/5).

The only real adjectives in Awetí are '*jyt* ('small') and *watu* ('big'), a typical feature of languages without a large class of adjectives (cf. Dixon 1982, 2004). Other properties are expressed by stative verbs.

# **Phonological features**

- Awetí has a simple phonological system with 15 consonants and a symmetric system of six oral and six nasal vowels.
- There is no distinction between long and short vowels.
- There is no tone or instead pitch-accent system.
- Stress in Awetí is predictable, falling on the last syllable of the stem.

# Lexical and morphological features

- Awetí nouns can be divided into three classes: inalienably possessible, alienably possessible and non-possessible nouns.
- There is no gender distinction in nouns.
- On nouns and demonstratives referring to humans number can optionally be indicated by the plural suffix *-za*. In rare cases reduplication is used to indicate plurality of non-human referents. Within the NP number can also be expressed by numerals.
- Pronouns as well as verbs distinguish between inclusive and exclusive in the first person plural.
- Pronouns have a lexical distinction between singular and plural.
- Awetí nouns can be marked for tense by suffixation.
- Awetí verbs are marked by different sets of person prefixes, distinguishing intransitive stative (descriptive), intransitive active and transitive active verbs. Within transitive active verbs two sets of person prefixes index or agree with subject or object.
- The Awetí verb shows derivational affixes for causative, reflexive and reciprocal action. The valency of a verb may further be decreased by object incorporation.
- Aspect of the verb is expressed lexically, morphologically by affixes and reduplication and by particles.

- Tense and mood are expressed by particles.
- Awetí verbs can be nominalized by different affixes. The resulting forms show nominal and verbal features to varying degrees.

# Syntactic features

- Core arguments are expressed by bare noun phrases while oblique arguments and adjuncts are introduced by postpositional phrases.
- The constituent order in a clause is variable and determined by the constituents' discourse function.
- The grammatical relations of subject and object are indicated by personal reference prefixes on the verb and only to some degree by constituent order.
- The syntactic functions of arguments are marked in a split ergativity system on the verb.
- There are clauses with non-verbal predicates in Awetí.

# Syntactic features of the noun phrase

- There is an alienable and an inalienable possessive construction. In both, the possessor is positioned immediately in front of the possessed noun, i.e. the syntactic relation is signaled by word order. In alienably possessed constructions the possessed noun is additionally marked by a relational prefix *e*-.
- The noun phrase minimally consists of a pronoun or a noun. A nominal head can be modified by demonstratives, numerals, possessive clitics or NPs, uninflected stative verbs (Desc) or their nominalized forms (NOMqual) and other nominalizations functioning as relative clauses (Rel)<sup>130</sup>. These occur in a fixed order as represented in (1):
- (1) NP  $\rightarrow$  ({Dem, Num}) (NP<sub>[POSS]</sub>) {N, PRO, DEM<sup>131</sup>} ({NOMqual, Desc, Adj, Rel}) NP<sub>[POSS]</sub>  $\rightarrow$  {N, Pro, DEM}

<sup>&</sup>lt;sup>130</sup> Cf. section 3.2.4.1.

<sup>&</sup>lt;sup>131</sup> By PRO a free pronoun occurring by itself as an NP is differentiated from a clitic pronoun Pro. Likewise, DEM is used to refer to a demonstrative pronoun as opposed to a demonstrative functioning as a modifier.

# Features of the verb complex

The verb complex minimally consists of a verb root (V) and a person prefix indexing subject or object (PERS-). It can incorporate the following particles and affixes:

- a split negation consisting of a proclitic particle and a suffix (NEG<sub>1</sub>, -NEG<sub>2</sub>);
- tense and/or mood particles which always occur in the second position<sup>132</sup> of the clause (TM);
- a valency-changing prefix (VAL<sub>1</sub>-);
- a noun in prenuclear position bearing the grammatical relation of an object (OBJ);
- a mood suffix (-M) immediately following the nucleus;
- an aspect suffix (-ASP);
- a causative suffix on transitive verb stems (-VAL<sub>2</sub>).

The order of elements in a verb complex can be schematized as follows:

# (2) (NEG<sub>1</sub>) (TM)<sup>133</sup> PERS- (VAL<sub>1</sub>-/OBJ-) V (-M) (-ASP) (-VAL<sub>2</sub>) (-NEG<sub>2</sub>)

The following concise description of the grammatical structure of Awetí does not make any claim of completeness but rather intends to introduce the most important features of the language in order to make the corpus examples transparent to the reader, focusing on those features which are relevant to the study of ideophones.

The remainder of this chapter is structured as follows: After a presentation of the phoneme inventory in subsection 3.2, the major phonological processes, the syllable structure and the orthography are described. In subsection 3.3 a unified overview over the morphology and syntax of the language will be given, starting with nouns and pronouns (3.3.1 to 3.3.3). In 3.3.4 the verbal paradigms are presented and TAM affixes and particles

<sup>&</sup>lt;sup>132</sup> The "second position" in an Awetí clause is occupied by one or more elements which occur in a certain order not further explored here. These elements may be TAM or evidential particles, topicalizers and other unclassified particles such as *(w)eti* ('or', 'if not') or *zanu* ('again').

<sup>&</sup>lt;sup>133</sup> The position of this element within the verb complex varies, depending on the clause position of the constituents.

are described. In the sections 3.3.5 to 3.3.7 the main characteristics of other word classes are summarized. In a larger section 3.3.8 derivational processes are described. These are nominalizations, a number of valency-changing processes and reduplication. In 3.3.9 Awetí sentence structure is reviewed, and a concluding section 3.3.10 sums up the major features of nominal and verbal negation.

#### **3.2 Phonology**

First observations on the phonology of Awetí were made by Emmerich/ Monserrat (1972). They are based on about 600 sentences which were collected during their fieldwork in July 1969. The Awetí Documentation corpus offers the possibility for a revised picture.

After presenting the phoneme inventory of the language in the following section, the major phonological processes, nasalization, palatalization and lenition of plosives in specific contexts will be outlined. Hereafter an overview will be given on syllable structure and stress patterns as well as on prosodic features encountered in the data, whereby the latter is of primary importance for the analysis of ideophones and will be discussed in more detail in chapter 4. The sub-section will close with a brief note on the orthography used in the Awetí examples throughout this dissertation.

## **3.2.1** Phoneme inventory

In Awetí 12 phonemic vowels can be distinguished by the parameters of place of articulation (front – central – back), level of opening (closed – open) and nasality. The symmetric vowel system which is also typical for Tupí-Guaranian languages<sup>134</sup> is summarized in table 1.

<sup>&</sup>lt;sup>134</sup> See similar analyses for the vowel systems of the Tupí-Guaranian languages Kamaiurá (Seki 2000:415) and Tapiete (González 2005:47/48). The presence of a nasal vowel corresponding to each oral vowel is characteristic for Tupian languages in general, and a system of six oral and six nasal vowels was proposed by Rodrigues & Dietrich (1997) for Proto-Tupí. According to Drude (unpubl. a: 4.1), the four unrounded and two rounded (back) vowels of the Awetí vowel system are a common feature of those Tupian languages that belong to what he calls the "Mawetí Guaranian branch" (cf. section 1.4.3).

Table 3.1: Vowels

		Front	Central	Back
Closed	Oral	i	1	u
	Nasal	ĩ	Ĩ	ũ
Open	Oral	3	a	0
	Nasal	ε	ã	õ

Vowels both with inherent nasality and orality may occur in stressed and unstressed syllables. The phonemes  $\langle \epsilon \rangle$  and  $\langle 5 \rangle$  and their nasal counterparts have phonetic realizations where the vowel height is open for  $\langle \epsilon \rangle$  and  $\langle 5 \rangle$  and open-mid for  $\langle \tilde{\epsilon} \rangle$  and  $\langle \tilde{5} \rangle$  in stressed syllables and varies between open, open-mid and close-mid realizations in unstressed syllables. The phonetic realization of the other vowels is [i], [ $\tilde{1}$ ], [ $\tilde{1}$ ], [ $\tilde{1}$ ], [ $\tilde{u}$ ], [ $\tilde{u}$ ], [ $\tilde{a}$ ] and [ $\tilde{a}$ ], irrespective of the syllable being stressed or not.<sup>135</sup> Unlike some other Tupian languages, there is no phonological distinction with regard to vowel length in Awetí.

The following minimal and near minimal pairs illustrate the above distinctions:

(1)a. /ati/	[a.'t∫i]	'granny'
b. /atatĩ/	[ã.tã.′t∫ĩ]	'I tie'
(2)a. /tuwitu/	[tu. <sup>'</sup> w <sub>1</sub> .tu]	'one who has a father'
b. /nã?awitu/	[nã.?ã.'wɨ̃.tu]	'he attacked him'
(3)a. /wɛj?uka/	[wɛj.'?u.ka]	'he did not eat it'
b. /wɛjũkatu/	[wɛ̃.ɲ.ũ.ˈkatu]	'he repaired it'
(4)a. /nɛ?ɛtu/	[nɛ.ˈʔɛ.tu]	'he grated'

<sup>&</sup>lt;sup>135</sup> In Drude's conception, there are 18 phonemic vowels. These consist of three series of six vowels each, one specified for nasality, one for orality and one for neither. The former two series mostly occur in stressed syllables, the latter in unstressed syllables of roots and in affixes. The phonemes of this series have two allophones, an oral and a nasal one, the occurrence of which is determined by the context. The more descriptive approach to Awetí phonology chosen here will not enter into theoretical details (see Drude unpubl. a). The "third series of unspecified vowels" is here considered to be a loss of phonemic distinctions under certain conditions.

b./tɛ?ɛntu/	[tɛ.ˈɛ̃n.tu]	'he vomited'
(5)a. /kita/	[k <sub>1</sub> .'ta]	'stone'
b. /kitã/	[kı.ltã]	'snail'
c. /kite/	[kı.'tɛ]	'knife'
d. /kɨtɨ/	[kı.'tı]	'for'
(6)a. /ɛʔɨwɔ/	[ɛ.ˈʔɨ.wɔ]	'with you'
b. /e?1wJ/	[ɛ.?ɨ.ˈwɔ̃]	'you shoot (with an arrow)'

In a number of words the contrast between /ɔ/ and /u/ is weak, and even individual speakers vary in their pronunciation (e.g. [mɔ.'at] vs. [mu.'at] '(civilized) person'). As reported by Soares & Leite (1991: 44) a pronunciation of /u/ as [o] is also permitted in the closely-related Tupí-Guaranian languages, and Drude (unpubl.: 1) states in this respect that in most of the other Tupian branches the distinction between two back rounded vowels does not exist at all.

Syllable-final nasal vowels are distinguished from oral vowels nasalized by a nasal consonant in the coda of the syllable as can be shown by the following minimal pair with the same phonetic realization where in (b) the negative suffix *-yka* (instead of *-ka* after vowels as in (a)) clearly brings to surface that the lexical root ends in a consonant:

In this environment, i.e. in word final position, the opposition between /VN/ and  $\tilde{N}$ / is neutralized, i.e. what has been interpreted as an oral vowel is phonetically realized as a nasal allophone in front of a nasal consonant, whereas phonemically nasal vowels only occur in open syllables.

Table 3.2 gives the inventory of 14 or arguably  $15^{136}$  phonemic consonants which are not evenly distributed over the system.

<sup>&</sup>lt;sup>136</sup> Including /y/, a phoneme which seems to have developed only recently.

	bilabial	alveolar	retroflex	palatal	velar	glottal
Stops	р	t			k	?
Affricates		<b>t</b> s				
Nasals	m	n			ŋ	
Fricative			Z		(y)	(h)
Flap		ſ				
Lateral		(1)				
Glides	W			j		

Table 3.2: Consonants (cf. Drude unpubl. a)

The phoneme /h/ which appears in brackets in the table is marginal in the system. It seems to occur primarily in loanwords from Portuguese (/kahawa/ [ka.'ha.wa] < garrafa [ga.'ha.fa] - 'bottle') and Arawakan (/kalahan/ [ka.la.'han] - 'pineapple') as well as in ideophones (e.g. /tohotoho / [to.'ho.to.'ho] 'cough', /tsakihi/ ['tsa.ki.hi] 'cut something through').<sup>137</sup> Phonetically, [h] frequently occurs at the beginning of the word as an allophone of /?/. The equally rare phoneme /l/ also presents a particularity of the Awetí language. It occurs in lexical items of typical Tupian origin but is unknown in the phoneme inventory of most Tupí-Guaranian languages as well as in the otherwise closely related Sateré-Mawé, where in cognate words there is usually a /r/ in this position (cf. Drude 2006: 39). The possibility of its acquisition as an areal feature (e.g. from Carib), however, may not be totally excluded either. Likewise, the phoneme /y/ is marked as marginal in the system, since all its occurrences can be historically linked to the plosive /k/. However, at the current stage of development there are a number of lexical items resulting from lexicalizations which indicate a contrast between the two phonemes. This also plays a role in a possible development from ideophones to verb roots.<sup>138</sup>

Another particular phoneme of Awetí which is absent in Tupí-Guaranian and in Sateré-Mawé is the retroflex voiced fricative /z/. In cognates in Sateré-Mawé this phoneme

<sup>&</sup>lt;sup>137</sup> Cf. Drude (unpubl. a).
<sup>138</sup> Cf. section 4.3.5 and 4.7.

sometimes corresponds to /r/ (as in /uzuwu/ vs. /uruwu/ 'vulture'), sometimes to /t/ (/azį?ip/ vs. /ti?ipi/ 'shoulder').<sup>139</sup>

With regard to plosives, there are examples of lexical roots with two alternate forms, an inflected one with a plosive /p/ at the onset, and an 'absolute' form with the corresponding nasal consonant /m/ (e.g. /i'pe/ 'my path' ~ /me/ 'path', /ɔpɔk'pɔɣe/ 'it burst' ~ /mɔɣ'mɔɣat/ 'the one that bursts'). This root allomorphy is not a consistent feature and does not extend to /t/ and /k/, so that an analysis of suprasegmental nasality in this case – as proposed by Rose (2003: 646ff.) for a similar phenomenon in Emerillon – does not hold for Awetí. There are, moreover, clear minimal pairs in Awetí where a stop, in coda position, contrasts with a nasal:

(8)a. /tap/ 'bee' versus /tam/ 'village'
b. /n+pɛk/ 'duck' versus /n+pɛŋ/ 'woodpecker'

The phonetic realizations of the consonantal phonemes are [p], [t], [k], [?], [ts], [m], [n], [ $\eta$ ], [z], [ $\gamma$ ], [h], [r], [l] and [j]. The realization of /w/ varies between [w] and [ $\beta$ ]. The phonemes /w/ and /j/, occurring at the coda of a syllable after a vowel or preceded by a consonant and followed by a vowel in one syllable, have been analysed as consonants because of syllable structure and economy of the phoneme system (see 3.2.3).

Historically, there seems to be a relation between /z/ and /r/. In addition to the fact that in some contexts (for example in ideophones) they occur in free variation, there are items in the word lists collected by Steinen (1894) and Schmidt (1905) which were transcribed with a /r/ where there is a /z/ in current usage (e.g. /taza/ < /tara/ `fire`). Based on this observation, Drude (unpubl. a: 4) hypothesizes that the development from one to the other must have been fairly recent and was possibly induced by language contact with the Arawakan language Waurá where a similar development has taken place. Likewise, there is a historical relation between /r/ and /t/ - in addition to the fact that in certain environments /t/ is realized as [r] – in that many words now having a flap /r/ seem to have derived from a

<sup>&</sup>lt;sup>139</sup> Cf. Drude (2006: 35).

word with a plosive /t/ in the same position. This subject will be further explored in section 4.

#### **3.2.2 Phonological processes**

If in a sequence of syllables in a word two vowels are adjacent to each other, two possible processes may happen, depending on the respective position of the syllable in the word and whether it is stressed or unstressed. Of two identical vowels one is deleted. If two different vowels occur next to each other and the first, either /i/, / $\epsilon$ /, / $\sigma$ / or /u/, belongs to an unstressed syllable, it may turn into a glide and cause a resyllabilitation of the whole sequence:

(9)a.  $/i + \epsilon k_0 / \rightarrow [j\epsilon.'k_0]$  'walk!' b.  $/n + \epsilon z_0 t_0 + a_W / \rightarrow [n\epsilon. z_0.'twaw]$  'taking it with him'

In addition to having phonemic nasal syllables<sup>140</sup> which are in most cases stressbearing, Awetí further shows suprasegmental nasalization, i.e. nasalization spreads over several syllables with nasal nuclei and (phonetically nasalized) semi-vowels.<sup>141</sup> Regressive nasal assimilation or nasal harmony spreading from right to left, a typical feature of Tupian languages, does not permit that a nasal vowel occurs after an oral vowel in the same word:

(10) a. /kajtɛtātu/ [kāŋ.tɛ̃.'tā.tu] 'we played/ fought'
b. /?ɨwɨkɨtiŋ/ [?ɨ̃.wɨ̃.kɨ̃ 'tʃiŋ] 'savannah'

This, however, only holds for lexical roots. At morpheme breaks nasalization may be blocked, as can be shown for nasal suffixes or if the preceding segment has an inherently oral vowel. In (11), neither of the two nasal suffixes *-e'ym* and *-zan* nasalize the preceding segments:

 $<sup>^{140}</sup>$  A nasal syllable is defined as either having a nasal vocal nucleus or a nucleus nasalized by a coda with one of the nasal consonants /m n  $\eta$ /.

<sup>&</sup>lt;sup>141</sup> See also Drude (2009) for a full account on nasal harmony in Awetí.

(11)(kal\_makawaja, 1432.64)
/tɨpɨɛ?mɨtuẓan/ [tɨ.pɨ.ɛ.'?ɨ.mɨ.ˌtu.ẓan] 'like what is without a bottom'
typye'ymytuẓan
t= ypy -e'ym -ytu -zan
3= bottom.st-NEG -NOMqual-ATT

The glide /j/ is nasalized in nasal environment, i.e. in front of or following a nasal vowel in the same syllable:

 $\begin{array}{ll} (12) a. \ /j/ \rightarrow [n] \ / \ N, \widetilde{V} & e.g. \ /kuj\widetilde{a}/ \ [k\widetilde{u}n\widetilde{a}] & `woman' \\ b. \ /j/ \rightarrow [n] \ / \ \widetilde{V}_{-} & e.g. \ /\epsilon k\widetilde{i}j/ \ [\widetilde{\epsilon}. \ 'k\widetilde{i}n] & `you \ killed' \end{array}$ 

In (12)(b), thus, nasality also spreads into the opposite direction, from left to right, whereby, however, it usually only affects the immediately following segment.

Stops and affricates following phonetically nasal vowels receive a prenasalized pronunciation which may result in a voicing of the stop or affricate (e.g. /im $\tilde{\epsilon}$ ptt/[i.m $\tilde{\epsilon}^{1.m}$ bt] 'my child'). This can be summarized as follows:

$$(13)/p \ t \ \widehat{ts} \ k/ \ \rightarrow [{}^m p \ {}^n t \ {}^n \widehat{ts} \ {}^n k] \sim [{}^m b \ {}^n d \ {}^n \widehat{ds} \ {}^n g] \ / \ \widetilde{V}_{\_}$$

According to Drude (unpubl. a: 5), the only elements in the whole Awetí phonemic system which do not interact with nasality, are the two glottals /?/ and /h/.

Plosives in Awetí are non-audibly released when occurring in front of other plosives or at the end of the word if the following word does not start with a vowel:

 $(14)/p t k/ \rightarrow [p^{\neg} t^{\neg} k^{\neg}] / \#C$ 

They are lenited at the end of a word when the next word starts with a vowel or in front of certain suffixes:

 $(15)/p t k/ \rightarrow [w r \gamma] / \#V$ 

While suffixes such as *-oko*, *-e'ym*, *-an*, *-eju* (with stative verbs) trigger a lenition of the plosive /p t k /, as in (16)(a), the contrary occurs in front of the suffixes -(t)u, *-ap*, *-at*, *-aw* and *-(e)ju* (in front of active verbs). Here the plosives maintain their non-lenited form, and if the preceding morpheme ends in a nasal consonant or glide (/m n ŋ w j /) a homorganic fortis plosive [p t k] is inserted.<sup>142</sup>

The processes described in (13) and (15) can be observed in the following phrase from the Awetí corpus, where /t/ after / $\tilde{a}$ / is prenasalized in the first word, a lenition of the stop occurs between the second and the third word as well as within the first word at the morpheme break between verb root and aspectual suffix:

```
(16) (awu_fishing, 1115.139)
tsãtagokotu pira'yt ete
'(when) they were about to cry for fish'
tsã= tak -oko -tu pira'yt ete
3pl= cry.iv -IMPF -NOM fish POSP
[tsã. <sup>in</sup>ta.yɔ.kɔ.tu.pi.ra.<sup>1</sup>?.rɛ.tɛ]
```

In addition, /t/ in coda position is also lenited when the following syllable starts with a glottal or a glide (see ex. (18) a. below).

At the beginning of a syllable /t/ in front of /i/ is realized as an affricate (e.g. (1) b. above):

 $(17)/t/ \rightarrow [t^j], [t\int] / _/i/$ 

With regard to glottal stops at the onset of a syllable metathesis can be observed as an optional rule in compounds where the preceding syllable is closed by a consonant:

(18) (Drude, unpubl. a: 7/8)

a.  $/kwat + ?_{4}p/$  [kwar.'?  $_{4}p^{\gamma}$ ] ~ [kwa?.'r\_{4}p^{\gamma}] 'kwarup, feast of the dead'

<sup>&</sup>lt;sup>142</sup> Cf. (27)(a) below and section 3.3.4.2

b.  $/3 + kam + ?u/ [\tilde{3}\eta.kam.'?\tilde{u}] \sim [\tilde{3}\eta.k\tilde{a}?.'m\tilde{u}]$  'he/she/they drank maternal milk'

In addition, the phonological status of glottal stops at the beginning of words is often dubious. In many cases they are phonetically inserted, but there are also minimal pairs of words with and without a glottal at the onset (e.g. /?ap/ as in  $n\tilde{a}'ap$  'his/her hair' vs. /ap/ as in *nap* 'his/her body hair'). In certain environments (e.g. at reduplication of verb stems or in compounds) consonants at the end of a lexical root are deleted in front of other consonants. This will be presented in more detail in section 3.3.8.3.

#### 3.2.3 Syllable structure, word stress and other prosodic features

In Awetí the nucleus of each syllable is a vocal phoneme. A syllable may also have a consonantal onset and/ or coda. According to Emmerich & Monserrat (1972: 3/4) the following syllable patterns can be found in Awetí: CV, CVC, VC and V. The first two of these are by far the most frequent, CV mostly for word-internal syllables and CVC either in monosyllabic lexical roots or as final syllables at morpheme boundaries. The syllable type V does not occur as an isolated word but as initial, medial or final syllable of a word. The syllable type VC is altogether rare.

In his most recent analysis, Drude (unpubl. a: 7) departs from the following disyllabic segment as the most typical mono-morphemic root in Awetí:

# $(19) \quad \begin{bmatrix} C_1 \, [w] \end{bmatrix} \begin{bmatrix} V_1 \, \begin{bmatrix} [j] C_2 [w/j] \end{bmatrix} \end{bmatrix} V_2 \begin{bmatrix} [j] \, C_3 \end{bmatrix}$

Optional elements are enclosed by square brackets, and the hierarchical bracketing indicates interdependencies between the elements. In order to obtain the structure for lexical roots with more or less syllables, the  $[V_1[C_2]]$ -part may be either repeated or omitted. The syllable with V<sub>2</sub> as a nucleus is in most cases stressed. In Drude's conception, V<sub>2</sub> is phonologically specified for nasality or orality and the preceding unspecified vowel(s)

in  $V_1$ -position need to adapt to this feature<sup>143</sup>. If there is no agreement between  $V_2$  and  $V_1$ ,  $V_1$  is inherently nasal and  $V_2$  inherently oral.

The distribution of the consonants in the above scheme is the following: /p, t, k, m, n, j / and /w/ may occupy all positions, i.e.  $C_1$ ,  $C_2$  and  $C_3$ . The phonemes /?,  $\widehat{ts}$ , h/ and /l/ may appear in  $C_1$  and  $C_2$ -position only at the onset of a syllable, e.g.:

(20) a. /ɔ?at/ [ɔ.'?at'] 'he/she/it fell'
b. /akitsɛ/ [a.'ki.tse] 'I cut'
c. /kalahaŋ/ [kã.lã.'haŋ] 'pineapple'

The fricative /z/ occurs at the syllable-onset in C<sub>1</sub> or inter-vocalically in C<sub>2</sub>-position, e.g.:

(21) a. /azįmanɛ/ [a.zį. ma.ne] 'I span around'

b. /taza/ [ta.'za] 'fire'

The nasal consonant /ŋ/ occurs only inter-vocalically or as the coda of a syllable in  $C_2$  and  $C_3$ -position, e.g.:

(22) a. /aŋɛ/	[a.'ŋɛ]	'Mummy'	
b. /kaŋ/	[ˈkaŋ]	'bone'	
c./a?aŋ/	[a.'?aŋ]	'image'	

The fricative  $/\gamma$  and the flap /r can be found likewise only inter-vocalically in C<sub>2</sub>-position, e.g.:

<sup>&</sup>lt;sup>143</sup> See also footnote 136. According to Drude's theoretical approach, inherently nasal vowels may occur in  $V_1$  and in  $V_2$ -position and inherently oral vowels only in morpheme-final  $V_2$ -position. The only counterexamples, where the vowel in  $V_1$ -position does not adapt to the inherent nasality of  $V_2$ , are demonstratives in male speech (e.g. /kitã/ [ki.' tã] 'that (one)'). Drude (unpubl. a: 8) explains them by lexicalization of an older composition for which there is some evidence in the language.

(23) a. /owłyɛ/ [o.'wł.ye] 'it finished'
b. /ikiraj/ [i.ki.'raj] 'it is tasty'

As also indicated in (19), certain positions between the segments of the basic structure  $C_1[V_1C_2]V_2C_3$  can additionally be occupied by the glides /w/ and /j/. /w/ may occur between a consonant and a vowel, whereby the consonant is either /p/ or /k/ (and rarely /?/):

(24) a. /apwaj/ [a'pwaj] 'I sent'
b. /jukwaŋŧt/ [jũ.'kwã.ŋ ŧt<sup>¬</sup>] 'urucum'
c. /ta?wat / [ta.'?wat<sup>¬</sup>] 'jaguar'

The glide /j/ sometimes occurs after a vowel in syllable-final position if the following consonant is not /j/ and may, as Drude (unpubl. a: FN 22) observes, in this position also be interpreted as the second part of a diphthong. In addition, Drude mentions the occurrence of /j/ after a glottal stop in C<sub>2</sub>-position, whereby he assumes that this is the result of a process of metathesis that occurred at some time. Examples for both occurrences are:

(25) a. /ɔ?ajpok/ [ɔ.?aj.'pok'] 'he/she returned'
b. /kɔ?iɛm/ [kɔ.'?jɛ̃m] 'tomorrow'

The advantage of this analysis of additional elements /w/ and /j/ is that on the one hand the basic syllable pattern does not need to be amplified by VV if they were treated as vowels, and on the other that no additional series of velarized or palatalized consonants, i.e.  $/p^w/$ ,  $/p^j/$ ,  $/k^w/$ ,  $/k^j/$  etc., need to be introduced to the phonemic system if they were considered part of the stop they are preceded by (cf. Emmerich & Monserrat 1972: 4/5).

According to Drude (unpubl. a: 9), affixes and clitics in Awetí also follow the phonological structure indicated in (19) with a few modifications. In prefixes the  $V_2$ -

position is rarely and the C<sub>3</sub>-position is never occupied.<sup>144</sup> Most suffixes and enclitics lack  $C_1$  and sometimes even  $V_1$ .

In order to achieve the typical alternation of C and V segments in the phonological shape of Awetí words, all prefixes have one or more allomorphs ending in a vowel, thus combining with a consonant-initial lexical root or intervening prefix. Similarly, most suffixes have an allomorph starting with a vowel, e.g. the suffix for verbal negation /ka/  $\sim$  /tka/.

According to Monserrat in compound words  $C_3C_1$ -sequences are avoided by elision of  $C_3$ . An example is (26) where the /p/ in the coda of the last syllable of *'akyp* is deleted:

(26) /?aki?wap/ [?aki'?wap] 'comb' (< 'akyp + 'u -ap 'louse-eater') louse eat.vt -NOMinstr

In reduplicated verb stems, however, there are numerous counterexamples to this,<sup>145</sup> freely alternating with elision of  $C_3$ , and, as pointed out by Drude (unpubl. a: 9), the same also happens with other lexical items when carefully pronounced. At this stage of analysis, therefore, it can only be stated that there are some lexical items resulting from composition which permit a CC-sequence and others which do not.

The stress in the mono- or disyllabic lexical roots falls on the only or on the last syllable. The only exceptions are disyllabic and also trisyllabic verb stems ending in  $/\epsilon/$ , where the word stress is on the penultimate syllable (e.g. (20) b., (21) a., (23) a.). These in several respects unusual verb stems will be discussed further down in connection with ideophones (section 4.3) and verb reduplication (section 3.3.8.3.1). In general, there are few lexical roots in Awetí which consist of more than two syllables. The stress in such lexical roots, also in nominals, seems to be mostly on the penultimate syllable (e.g. (24) a.). In

 $<sup>^{144}</sup>$  From this, Drude (unpubl. a: 9) concludes that "prefixes tend to harmonize with the stem", given that V<sub>2</sub> is the nucleus of the stress-bearing syllable and determines the nasality/ orality of the word. He admits, however, that some prefixes are inherently nasal themselves.

<sup>&</sup>lt;sup>145</sup> Cf. section 3.3.8.3.1.

order to understand the complex rules for the respective stress patterns, more research is needed.

On word-level the stress pattern may change, and secondary stress is applied according to the ability of bound forms to attract stress or not. Prefixes are always unstressed. With regard to suffixes it could be observed that there are stressed and unstressed suffixes<sup>146</sup>. This may be exemplified by the two aspectual suffixes -(e)ju, where stress occurs in its allomorph -eju with active verbs in (27)(a) but not with stative verbs in (b),<sup>147</sup> and -(z)oko in (c), which never changes the stress pattern of the word:

```
(27) a. (kal makawaja, 0816.384)
oti'ingkeju
                  [o<sup>n</sup>.tsin.'ke.ju]
                                        'he was talking'
o-ti'ing -eju
3-talk.vi -IMPF
b. (kal kwaza, 1684.241)
                    [i.tu?.'wł.wɛ.ju]
itu'wyweju
                                         'I (temporarily) have arrows'
it= u'wyp -eju
1sg=arrow.st -PERF
c. (kal makawaja) (0155.213)
ts\tilde{a}por\tilde{e}tuwokotu [ts\tilde{a}^{m}po.r\tilde{e}^{n'}.tu.wo.ko.tu] 'they were always listening'
tsã=por-
           ẽtup
                    -zoko -tu
3pl=ANTI- listen.tv -IMPF -NOM
```

Uninflected words can be divided into stressed and unstressed ones. The former include particles which may form an utterance by themselves (/'an/ – 'no',  $/\epsilon'h\tilde{\epsilon}/$  - 'yes', /'wan/ – 'already?'), a variety of "second-position-particles" (e.g. /'tɛnɛ/ 'without a cause', / tɛ'pɛ/ 'in vain', /'zanu/ 'again'), and some particles that occur in sentence-final position (e.g. /'?a/,

<sup>&</sup>lt;sup>146</sup> Stressed suffixes are *-eju*, *-tut* and *-(p)ut*. Unstressed suffixes are more frequent. These include *-an*, *-ap*, *-at*, *-aw*, *-e'ym*, *-ka/ -yka*, *-tu*, *-ytu*, *-za*, *-zan*, *-zoko/ -oko* (Drude et al. forthcoming: 16/7).

<sup>&</sup>lt;sup>147</sup> While in stative verb roots the consonantal coda in front of  $-e_{ju}$  is lenited, this does not happen with active roots, where it is even "fortified" with a plosive.

 $/^{2}\tilde{\epsilon}$ ,  $/^{1}m\epsilon$ ). Unstressed particles are /a?<sub>1</sub>t/, /ti/, /tuti/, /w $\epsilon$ ti/ in second and /a?<sub>1</sub>n/ and /ika/ in final position.<sup>148</sup>

Pitch variation, especially high pitch, in Awetí is used as a narrative device of emphasis. Other prosodic devices are variation in loudness, crescendo or decrescendo, in combination with repetition of verbs or parts of the phrase in order to indicate repetition of the event and increase (crescendo) or decrease (decrescendo) of size or number of participants. In addition, vowel lengthening is used to express length of time or spatial distance.

#### 3.2.4 A note on orthography

A first proposal for an orthographical representation of the Awetí language is Monserrat (1992). Monserrat, who had done linguistic fieldwork among the Awetí more than twenty years earlier, was asked to develop a spelling system in order to be used in the bilingual teacher training programme which had just been initiated in the Upper Xingu area. This orthography was further elaborated by Drude in collaboration with the two Awetí teachers in Drude et al. (forthcoming). Two principal ideas have been emphasized in this elaboration: wherever feasible the same phoneme is represented by the same grapheme or combination of graphemes, and no variation in the graphic representation of one and the same morpheme is aimed at. In this dissertation the most recent version of the Awetí orthography will be followed with few exceptions<sup>149</sup>.

The two sets of six oral and nasal vowels /i t u e c a / are represented with the letters <i y u e o a >. The grapheme <y> which in other orthographic systems often represents the glide [j] was chosen for the high front vowel /t/ as is a common feature in orthographies of Tupian languages. In cases of resyllabification of vowels to glides, i.e. /c/ and /u/ to [w] or /i/ and – rarely – /ɛ/ to [j] (cf. (9) above), the result of it, in this case <nezotwaw> and <jeko>, will be graphemically represented and not the underlying form.

<sup>&</sup>lt;sup>148</sup> For more information see Drude et al. (forthcoming: 17).

<sup>&</sup>lt;sup>149</sup> One exception is that the variation between /ɔ/ and /u/ in a number of Awetí words, which in the current orthography is reflected by a permission to write these words one way or the other, will not be permitted in the examples chosen for this analysis.

For the fifteen consonants / p t k ? m n n ts z (y) (h) w j c l / the graphemes < p t k ' m n ng ts z g h w j r l > are used. Allophones of the plosives /p t k/ which are the result of lenition before a vowel will be presented as <w r g> within a word but in its underlying form at word boundaries, obeying the principal idea of writing morphemes the same way wherever possible. The palatalization of /t/ before /i/ will not be graphically represented since this is a regular process. Instances of metathesis such as in (18) above are written in their underlying form. Glottal stops, although phonetically occurring in front of second person prefixes attached to verbs and proclitics on nouns, are not written. Independent second person pronouns which are formally related to the prefixes clearly start with a glottal phoneme ('en, 'e'ipe). Deictic and third person pronouns which all end in a nasal vowel have two allomorphs each. In front of the particles a'vn and a'vt they are written with an additional  $\langle n \rangle$  at the end (e.g.  $ts\tilde{a}/ts\tilde{a}n$  'they',  $kit\tilde{a}/kit\tilde{a}n$  'that one over there'), leaving the nasality of the vowel overtly marked. Where plosives in front of certain suffixes are not lenited or inserted after verb roots ending in /m n n w j /<sup>150</sup>, they are written accordingly as . A problematic case for orthographic representation is the sentence-final particle  $me^{151}$  which orthographically occurs in a number of forms (me, ne, nge, we, je) due to the fact that it phonologically interacts with the last consonant of the preceding word. While this final consonant is nasalized, the consonant of the particle assimilates in its place of articulation to it, leading to a phonetic fusion of both consonants<sup>152</sup>. The original graphic representation of the word preceding *me* is left untouched, e.g.:

(28) a. mo'aza epemut ne [mɔ.'?aza. $\varepsilon^{m}$ .pɛ.'mu.nɛ]

'what used to be the people's scraper'

b. *mi'ak nge* [mi.'?aŋ.yɛ]

'manioc flower'

<sup>&</sup>lt;sup>150</sup> See table in Drude et al. (forthcoming: 12) listing all possible combinations.

<sup>&</sup>lt;sup>151</sup> This is the variant which occurs after vowels and was therefore chosen as the "default".

<sup>&</sup>lt;sup>152</sup> Cf. Drude et al. forthcoming: 12/13.

Nasalisation in Awetí is graphically marked only once in a word due to the regular process of nasal harmony as described in 3.1.2. Exceptions with two nasal markers are compounds and words with a nasal prefix:

(29) (Drude et al.: forthcoming: 13) *nã 'ang* 'his/her shadow' as opposed to *na 'ang* 'his/her image'
nã='ang n=a'ang
3= shadow 3=image

Only inherently nasal vowels in coda position of a syllable are marked with a tilde. In a nasal syllable with a consonantal coda, the vowel is not marked for nasality.

# **3.3 Morphosyntax**

In subsections 3.3.1 to 3.3.7 the different word classes will be presented. In 3.3.8 an overview over derivational processes will be given, whereby verb reduplication is outlined in more detail due to its strong association with sound symbolism<sup>153</sup> and relevance for a historical process involving ideophones.<sup>154</sup> This subsection is followed by a description of the structure of Awetí sentences in 3.3.9 and a general overview over markers of negation in 3.3.10.

#### 3.3.1 The noun and the noun phrase

Inflection on the noun is marked by prefixes and suffixes. The only prefix is the socalled relational prefix that occurs in certain possessive constructions.<sup>155</sup> With regard to suffixes, a distinction can be made between grammatical (i.e. number and case) and modificational (i.e. diminution/ augmentation and nominal "tense") suffixes. On an Awetí noun no gender distinction is marked. Nominal negation is marked by the suffix *-e'ym*.<sup>156</sup> Nouns can be divided into three classes with regard to their ability to occur in different

<sup>&</sup>lt;sup>153</sup> Cf. Hinton et al. (1994: 9).

 $<sup>^{154}</sup>$  Cf. section 5.3.

<sup>&</sup>lt;sup>155</sup> Cf. section 3.3.1.6.

<sup>&</sup>lt;sup>156</sup> See section 3.3.10.

types of possessive constructions, as non-possessible, alienably possessible or inalienably possessible nouns.

# 3.3.1.1 Structure of the complex noun phrase

As in Tupí-Guaranian languages noun phrases in Awetí have a simple structure "since much of the modificational load is handled on the morphological rather than the syntactic level" (Jensen 1998: 513).

A noun phrase may consist of a pronoun or a noun as its head. Possible modifiers of a nominal head are demonstratives, numerals, possessive clitics or NPs, uninflected stative verbs or their nominalized forms and other nominalizations functioning as relative clauses. The order of these elements in a complex noun phrase, schematized in (1) in section 3.1, is repeated here:

(1) NP  $\rightarrow$  ({Dem, Num}) (NP<sub>[POSS]</sub>) {N, PRO, DEM} ({NOMqual, Desc/Adj, Rel}) NP<sub>[POSS]</sub>  $\rightarrow$  {N, Pro, DEM}

Examples are given in (2):

mokõj='jyt kujtã taza

```
(2) a. (kal_mene, 0746.099)
```

'only two of those there (are) on the fire'

two =DIM DEM fire POSP

*'apo* 

Num DEM

b. (tal\_kakaja, 1474.672)
awati kylaw -ytu
corn black.st -NOMqual

'black corn'

N NOMqual

c. (tal\_mamuti\_3\_8, 0759.067)

ta'wat	kang	mokurawut	'the jaguar's bone that has been swallowed'
ta'wat	kang	mokure -ap	-put
jaguar	bone	swallow -NOMinstr	-NPST
NP <sub>[POSS]</sub>	Ν	Rel	

# 3.3.1.2 Number

Most Awetí nouns may refer to a singular as well as a plural entity – which of them applies must be deduced from the context. For noun phrases referring to humans or protagonists with human qualities in narratives, i.e. anthropomorphized referents, there is the possibility to attach the suffix *-za* and thus refer to more than one person or to a group of people, as in (3):<sup>157</sup>

# (3) (ulawalu\_year, 0866.649)

Ujaza	Ujaza moretatawuza,		te	a'i'atu		
Uja-za	moretatat -put -za ta		ta'i='at -tu			
DEM-PL	DEM-PL invited.person-NPST-PL 3pl=arrive.vi -NOM					
otoaw ta'itepytu		tu	pepi'ĩkap	ywo.		
o= t	o -aw	ta'i=tepy	-tu	pepi'ĩkap	уwo	
3coref= g	go.vi-GER	3pl=sing.	vi-NOM	village.centre	POSP	
'These are the guests, they are arriving (lit.: they arrive going) and singing in the village						

centre.'

This non-obligatory suffix is also productive in demonstratives (e.g. *ujaza* 'these here' in (3) vs. *uja* 'this here') <sup>158</sup> and occurs in the interrogative pronoun *kapaza*<sup>159</sup> ('who'), always implying that the entity referred to is human:

(4) (kal\_awytyza1, 1594.494) *Kapa(t)-za jatã [...] tsã=kỹj -t -at ne?*who-PL DEM 3pl= kill.vt -EPEN-NOMag PART
'Who was their killer?'

<sup>&</sup>lt;sup>157</sup> For homogeneous groups of people there are fixed expressions with this suffix for which a transparent morphological segmentation can not always be provided, e.g.  $kuj\tilde{a}puryza$  – 'group of women' ( $kuj\tilde{a}$  – 'woman', -za – PL).

<sup>&</sup>lt;sup>158</sup> Cf. table 3.4, section 3.3.3.

<sup>&</sup>lt;sup>159</sup> From the corpus data no conclusion could be drawn whether in this case *-za* is an indicator of plurality or of 'humanness'. The only example with *kapat* – which would be the regular singular form – refers to an object, while all instances of *kapaza* refer to humans without clearly indicating plurality.

(lit.: 'Who (are) the ones who killed them?')

If attached to a noun ending in a bilabial nasal the plural suffix has the allomorph *-pa* (e.g. *tetampa* 'those from (other) villages', *tutare'ympa* 'those who didn't come'). Additionally, plurality may be expressed by reduplication. This possibility, too, seems to be semantically restricted and does not occur very frequently in the corpus.<sup>160</sup>

## 3.3.1.3 Case

In Awetí core arguments are not marked for case.<sup>161</sup> Their syntactic functions as subject or object can be deduced from the person agreement on the verb form where either the subject or the object – depending on their respective position in the person-animacy-hierarchy – is indexed<sup>162</sup>. Clauses with two overtly expressed 3<sup>rd</sup> person arguments may be ambiguous, since the constituent order is not totally fixed and only 3<sup>rd</sup> person subjects can be indexed on the verb form. The clause may be disambiguated by the surrounding discourse. Only with regard to action nominals the constituent order permits an unambiguous identification of core arguments.<sup>163</sup> Oblique arguments and adjuncts are marked by postpositions.

# The -(z)an complement

In some finite verbal clauses or action nominal clauses<sup>164</sup> as well as in a specific type of non-verbal clauses<sup>165</sup> a further complement marked by a suffix -(z)an with the allomorphs *-zan* and *-an* may occur. This suffix, also existent in TG-languages, introduces what in the Tupian tradition has been called an "attributive" (Jensen 1998, Seki 2000) or by some authors an essive case (Meira 2006, Drude forthcoming a). Jensen (1998: 507) describes it as either indicating "the role or function of a noun [referent], [...] the end product of a

<sup>&</sup>lt;sup>160</sup> Cf. section 3.3.8.3.2.

<sup>&</sup>lt;sup>161</sup> This feature is shared by most Tupian languages but not by TG-languages to which Awetí is closely related. See e.g. Jensen (1998: 505) for several TG-languages or Seki (2000:109) for Kamaiurá.

<sup>&</sup>lt;sup>162</sup> Cf. section 3.3.4.1.

<sup>&</sup>lt;sup>163</sup> Cf. sections 3.3.8.1.1 and 3.3.9.2.

<sup>&</sup>lt;sup>164</sup> For reasons outlined in 3.3.8.1.1 action nominals are not considered to be non-verbal predicates but rather equivalent to finite predicates.

<sup>&</sup>lt;sup>165</sup> Cf. section 3.3.9.1.

process [...] or a change of state". Syntactically, the NP marked by -(z)an has the function of an argument to a few intransitive verbs such as up ('to be (there)')<sup>166</sup> in (5), of an argument to a transitive verb as in (6) or constitutes the head of a predicative phrase as in (7).

(5) (kal\_awytyza1, 1646.979)

*O-pap tsã me, [...], (an)* **mo'a -zan** *o-up -eju -ka tsã me.* 3- terminate.vi 3plPRO PART, NEG person-ATT 3-remain.vi -IMPF -NEG 3plPRO PART 'All of them terminated, they did not remain (there) as persons (i.e. not one person stayed alive)'.

(6) (tal mamuti 1 8, 0376.989)

Tanumakalu mo'ege -zoko -tu kitã Wamutini me 'a, ta'wat aty-zan ne.PropNmake.vt -IMPF -NOM TOPPropNPART PART, jaguarwife-ATT PART'Wamutini was making Tanumakalu, as the jaguar's wife.'

(lit.: 'The making of Tanumakalu (was) Wamutini's, as the jaguar's wife.')

In non-verbal predicative constructions this specific case suffix – in comparison to predicative clauses with an unmarked second argument – can mark the head of the predicate phrase as expressing a relationship of classification instead of identification with regard to the subject referent. This is illustrated by (7) compared to (8):

(7) (kal\_mene, 2029.256) *Atit tut tapi'i-zan 'a.*1sgPRO FUT tapir -ATT PART
'I will be a tapir (i.e. belong to the class of tapirs).'

(8) (tal\_mamuti\_4\_8, 0447.371)

ApajItsumaryta'ytitã jatãatita'ynne.father.VOCPropNchild.of.manTOP DEM1sgPROPARTPART

<sup>&</sup>lt;sup>166</sup> Other typical verbs are *ekozoko* ('to live') or *wage* ('to turn into').

'I am the child of (my) Dad Itsumaryt.'

(lit.: 'The child of (my) Dad Itsumaryt, that is I (me).')

The -(z)an complement itself can also have another complement which is marked by a postposition as in (9) where the -(z)an complement is the complex agentive nominalization 'yta' $\tilde{a}j$  kojtazan ('earth digger') with okyty ('to them') as an (adnominal) adjunct having the semantic role of benefactive:

(9) (kal\_mene, 1023.969)

'Yta'ãj kojtazan okyty 'yto me, tatuwatu ete nãpo'atu. 'yta'ãj koj -t -at 0 =kyty 'yto me, -an tatuwatu ete nã=po'at -tu dig.vt-EPEN-NOMag-ATT 3coref=POSP so PART, big.armadillo POSP 3= make.vi -NOM earth 'So they<sub>i</sub> made a big armadillo to dig the earth for them<sub>i</sub>.'

(lit.: 'So as an earth-digger for them<sub>i</sub> it was their<sub>i</sub> making of a big armadillo.')

# Further candidates for morphological case marking

There are two forms *(y)wo* and *(y)pe* which can be analysed as morphological markers of locative case. An illustration is given in (10):

(10) (kal\_makawaja, 1324.875) *Pepi'ingkap ywo, kujtã tsu-at* ype, o-up -eju a'yn.
village.centre POSP DEM like -NOMag POSP 3-be.vi-IMPF PART
'In the village centre, one (a center) like that one over there, it remained.'

Drude (forthcoming a: 3) distinguishes a locative case marked by what he analyses as a suffix -(y)wo from a so-called "diffuse locative" marked by -(y)pe, a distinction which can also be observed in (10). He states that these markers of semantic case are restricted in their usage in that they may only be suffixed to nouns with non-human referents, which seems to distinguish them from (other) adpositions. Drude does not mention, however, that there are counterexamples to this restriction. These are instances with the verb 'e ('to say'), where the referent is predominantly human and the semantic role is not one of location but of addressee. An example is given in (11):

(11) (kal makawaja, 0118.0)

"Arukakyt" e'i itã  $n\tilde{a}=pe$   $ts\tilde{a}=(a)$ 'yza motemo'a-za. rooster 3say TOP 3= POSP 3pl= people ancestor -PL "Arukakyt" said their people, (their) ancestors to it."

(Arukakyt is an old form for 'rooster' which is now called 'ukakyt.)

The verb '*e* differs morphologically and syntactically from other verbs in the language so that at this stage of the analysis it is not yet clear whether it should be treated apart from ordinary active or stative verbs.<sup>167</sup>

Given the general continuum between morphological and – in the case of adpositional phrases – analytic case marking the analysis of (y)wo and (y)pe rather seems to be a matter of convention. Here they are treated as postpositions because they do not differ in any respect from other postpositions in the language.<sup>168</sup> Postpositional phrases with these postpositions syntactically function as oblique arguments and adjuncts. Depending on the predicate, they may express the semantic roles of place in (12) or instrument in (13), so that their analysis as specific semantic case markers does not seem to be appropriate:

(12) (kal\_awytyza1, 0787.586)

Kujtã t= e- tam -ut ywo wazotsu apajpo- mi'ing-ku nã 'ẽ.DEM 3= REL-village-NPST POSP onlyfather.VOC ANTI-tell.vt -NOM 3PRO PART'There in that (their) old village (my) Dad told it only (once).'

(13) (tal\_mamuti\_3\_8, 0447.964)

"Kari'aw uja e = tutyt e = tupiar -ap peti'a'azỹ wo me", why DEM 2sg=uncle 2sg=witchcraft.st-NOMinstr pequi.thorn with PART,  $n\tilde{a}='e$  -tu ti me. 3= say.vi-NOM EVID PART

"Why did you do harm to your uncle with the thorn of the pequi-fruit?", she asked."

<sup>&</sup>lt;sup>167</sup> See also the discussion presented in section 5.3.

<sup>&</sup>lt;sup>168</sup> See section 3.3.7.1.

(lit.: "Why was it your performing witchcraft on your uncle with the thorn of the pequifruit", she asked.")

For cognate forms in TG-languages the existence of locative case marking has been postulated.<sup>169</sup>

## 3.3.1.4 Augmentation/ Diminution

The augmentative suffix *-watu* and the diminutive suffix *- 'jyt* are attached to nouns and nominalized forms to indicate unusual large or unusual small size or quantity:

```
(14) a. (tal_kamu_kwat1, 0683.067)
mõj-watu 'a big snake'
snake-AUG
b. (kal_makawaja, 0542.47)
'yta'ãj-'jyt 'a little bit of sand/earth'
earth-DIM
```

In some cases, but very productively with regard to names of animal-species, the suffix and the word root have lexicalized into a new word:

(15) a. *akykywatu* 'red howler monkey'b. *akyky* 'common woolly monkey'

Both forms which are here analysed as suffixes also constitute the only real Awetí adjectives in non-verbal clauses. In addition formally identical clitics and second position particles can follow other word classes in different functions which will not be further described here.

<sup>&</sup>lt;sup>169</sup> Cf. Jensen (1998: 508), Seki (2000: 109/110).

#### 3.3.1.5 Nominal tense

A pair of nominal suffixes can be classified as expressing tense on nouns. In Tupian linguistics they are known as "devolved" and "anticipatory" suffixes. The devolved suffix -(p)ut in Awetí indicates that a noun referent "no longer serves its intended function", whereas with an anticipatory suffix -(z)an "it has not yet begun to serve its intended function" (Jensen 1998: 510). Henceforth the two suffixes will be referred to as markers of nominal past and future. Examples are given in (16) and (17):

(16) (kal awytyza1, 0567.71, 0569.873)

*Mo'a -za ikat -(t)u tepe ti nã, mo'at e'õ -put.* person -PL look.for.vt-NOM FRUST EVID 3PRO, person body -NPST 'He looked for people in vain, (for) people's corpses.' (lit.: 'He looked for [...] what used to be a person's body')

(17) (tal kamu kwat, 0763.983)

*Kyta mopug -ap -an ti wej-mo'ege a'yn.* stone drill.vt -NOMinstr-NFUT EVID 3- make.vt PART 'He made one (a bird) that would be an instrument to drill a stone.'

Both suffixes, when used on nominalized verbs as in (18), can function like verbal tense, indicating that an event or state has occurred in the past or will occur in the future:

(18) (kal\_sham\_1, 0729.649) *O-pap pe a'yn, n=e- mi- moto -put i= kyty me.*3-finish.vi tobacco PART, 3= REL-NOMpat-give.vt-NPST 1sg= to PART
'The tobacco that he had given to me was finished'

According to Drude (p.c.) the suffix -(z)an of nominal future has developed from the marker of attributive case -(z)an. Historically, there were two suffixes and still are in TG-

languages.<sup>170</sup> A differentiation in Awetí, however, in clauses with nominal predicates often is only possible with regard to the contextual environment and not syntactically, as in (19):

(19) (tal\_kamu\_kwat1, 0102.918)
[Tsã=njyt ti], Kamukuaka njyt okywan -an a'yn.
3pl= sister EVID, PropN sister girl.in.seclusion-ATT/NFUT PART
'[Their sister], Kamukuaka's sister was (in the function of a girl) in puberty seclusion.'
'Kamukuaka's sister was one who would be a girl in puberty seclusion.'

The second interpretation here can only be discarded, because the narrative provides the contextual information that at the time of reference the girl is already in seclusion.

A hybrid case between a *-zan* complement and a marker of future tense on a noun is also (7), repeated here for convenience:

(7) (kal\_mene, 2029.256) *Atit tut tapi'i-zan 'a.*1sgPRO FUT tapir -ATT/NFUT PART
a. 'I will be in the role of a tapir.'
b. 'I will be a future tapir.'

It can be argued that the future tense is already encoded in the future particle, functioning as a kind of 'invariant copula', so that the referent of the predicative complement should be regarded as expressing a relationship of classification with regard to the subject referent. However, it is equally possible in this case to assume a relationship of identification between the two noun referents, as expressed in translation b., so that the reason for listing two functions for the suffix -(z)an as a case marker and as a marker for future tense in a noun is mostly historical.

<sup>&</sup>lt;sup>170</sup> Cf. Jensen (1998: 507, 510).

#### **3.3.1.6** Nouns in possessive constructions

With regard to possession, nouns in Awetí can be divided in three groups. A first distinction can be made between possessible and non-possessible nouns. Most non-possessible nouns denote elements of nature and wild animals (e.g. 'y 'water, river'; *ta'wat* 'jaguar'). These nouns occur without a possessor, unlike possessible nouns.

There are two kinds of possessive construction on phrase level, the inalienable or direct construction and the indirect or alienable one. In both constructions the head noun refers to the possessum, while the possessor is expressed by a dependent pronominal clitic or by a noun or free interrogative pronoun, preceding the head noun. The two constructions differ in that in the indirect possessive construction the so-called "relational prefix" *e*- is attached to the head noun which is then preceded by the possessor noun or clitic. Nouns denoting body parts, kinship terms and few other culturally important items function as heads of direct possessive constructions with two nouns, a noun and an interrogative pronoun and an indirect possessive construction with a clitic pronoun are given in (20), (21) and (22) respectively:

(20) (tal kamu kwat1, 0109.715)

Kamukuaka njyttehei-katua'yn.PropNsisterINTERJ-beautiful3-good.stPART'Kamukuaka's sister was really beautiful.'

(21) (tal\_kujakyt, 0883.794)

"Koj mẽpyt jatã 'en",  $n\tilde{a}$ ='e-tu. who child.of.woman TOP 2sgPRO, 3=say-NOM ""Whose child are you?" he asked.'

(22) (kal\_kwaza, 1687.145) *It= e- 'yzapat mã me!*1sg=REL-bow here PART
'Take my bow!'

Double possessive constructions can be formed by setting a clitic pronoun or another possessor NP, as '*yzapat* ('bow') in (23), in front of the possessor NP:

(23) (kal\_awytyza1, 0271.768)
Nã=to -zoko-tu, tykyhy 'yzapat itat u'wyp.
3= go.vi-IMPF-NOM, IDEO.come.across bow master arrow
'He was going along [and] came across an arrow of a master of a bow.'

## **3.3.2 Pronouns**

In Awetí there are free as well as clitic pronouns, which are summarized in table 3.3. Of the free personal pronouns only the  $3^{rd}$  person plural of the variety used by male speakers  $ts\tilde{a}(n)$  as well as the  $3^{rd}$  person plural of the female variety ta'i are formally identical with the clitic pronouns. Of the free pronouns, except for the  $1^{st}$  person singular of the male variety, the clitics are clearly reduced forms of the free pronouns.

Person	Free pronoun	Clitic pronoun
1sg	atit ( $\bigcirc$ ) / ito ( $\bigcirc$ )	$i(t) =, i(j) = {}^{172}$
2sg	'en	<i>e(j)</i> =
1pl:incl	kajã	kaj=
1pl:excl	ozoza	020=
2pl	'e'ipe	e'i=
3 / 3pl ♂	$n\tilde{a}(n) / ts\tilde{a}(n)$	$n(\tilde{a}) = /ts\tilde{a}(n) =$
<b>3 / 3pl</b> ♀	ĩ / ta'i	i = /t = /ta' $i =$
3 refl/ coref	-	<i>o=/w=</i>

Table 3.3: Free personal pronouns<sup>171</sup> and clitic possessive pronouns

Full pronouns have all the distributional properties of noun phrases, i.e. they may occupy the position of a subject or an object NP in a clause. In (24) the personal reference

<sup>&</sup>lt;sup>171</sup> Cf. Drude (2002: 179, table 1).

 $<sup>^{172}</sup>$  In front of a root with a vowel in the onset an epenthetical /t/ is inserted, in front of /a/ a /j/ is inserted.

prefix on the verbal form shows subject indexing for the 1<sup>st</sup> person, while the free pronoun following the verb refers to a 3<sup>rd</sup> person object:

(24) (tal\_kujakyt, 1524.142)
It= eta tsu n=up -(p)u wo tut a- pytyk nãn a'yn ne.
1sg=eye like 3= be.vi-NOM SUB FUT 1sg- grab.vt 3PRO PART PART
'If it (the child) is like my eyes (i.e. has eyes like mine), I will accept it.'

Free pronouns, e.g. the  $2^{nd}$  person plural 'e'ipe in (25), can also function as the subject in a clause with a non-verbal predicate, here the NP *ita*'yre'ym ('not my child'):

(25) (tal\_mamuti\_3\_8, 1762.55) " $It=a'yr - e'ym it\tilde{a}$  'e'ipe a'yza",  $n\tilde{a}='e -tu$  ti me. 1sg= child-NEG TOP 2plPRO EMOT, 3= say.vi-NOM EVID PART "'You are not my children", he said.' (lit.: "'My children you are not", he said.'')

While  $3^{rd}$  person participants, especially when the referent is non-human (unlike (24)), tend to be not overtly expressed as arguments in a clause with a finite verbal predicate, pronouns are used for the explicit marking of  $2^{nd}$  person participants that are not marked by personal reference prefixes on the verb form. In (26) the verb form is indexed for a  $1^{st}$  person subject and the  $2^{nd}$  person object is expressed by the pronoun *'en*:

(26) (kal\_makawaja, 0027.82)
Nan=ete tut itã a- mowka 'en ne 'a.
3= POSP FUT TOP 1sg-tell.vt 2sgPRO PART PART 'About this I will tell you.'

The  $1^{st}$  or  $2^{nd}$  person participant which is indexed on the verb is not additionally expressed by a pronoun. This is only the case where  $1^{st}$  or  $2^{nd}$  person pronouns have the function of emphatic, as in (27), or contrastive subjects, as in (28):

(27) (tal mamuti 4 8, 0083.349)

*Ozoza ozojkwawap ozouwan 'en a'yn ne, apaj.* Ozoza ozoj- kwawap ozo= up -an 'en a'yn ne apaj 1pl:exclPRO 1pl:excl-know.vt 1pl:excl=father -ATT 2sgPRO PART PART, father.VOC 'As for us, we knew that you are to be our father, Dad.'

(28) (kal\_kwaza, 1668.725, 1684.241)
An e- u'wyw -yka, [...] atit wan it- u'wyw -eju a'yn.
NEG 2sg- arrow.st -NEG, 1sgPRO however 1sg- arrow.st -PERF PART
'You don't have arrows, but I do (have arrows)'
(lit.: 'You do not arrow, I however, I am arrowing.')

The pronouns  $n\tilde{a}(n)$  and  $\tilde{i}$  as well as the 3<sup>rd</sup> person prefixes on finite verb forms are unmarked for number, the pronouns  $ts\tilde{a}(n)$  and ta'i, however, function as plural subjects, as in (29), or objects:

(29) (kal\_makawaja, 0229.03) *O-wy'a -zoko a'yt 'ukakyt ete tsãn a'yn.*3-admire.vi -IMPF EMOT rooster POSP 3pIPRO PART
'They went on admiring the rooster.'

Clitic pronouns, which phonologically adapt to the word they attach to, are used to mark the possessor on nouns, the object in a postpositional phrase and the subject or object in a predicate consisting of an action nominal. The reflexive or coreferential clitic listed in table 3.3 is used for possessors that are identical with the subject referent, as shown in (30), or, as in (31), for marking the subject of a subordinate nominal predicate if the referent is identical with the referent of the subject of the predicate in the matrix clause:

(30) (tal\_mamuti\_3\_8, 0199.885)

Wej-mimo=kypy'yte-'aky'wapa'yn.3-steal.vt3coref=younger.sister REL- combPART'She stole her sister's comb.'

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(31) (kal_tawozy3, o170.342)
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Nã wan utepe w-ekozoko, jatã,

3PRO however IRR 3- live.vi, DEM,

o= mo'at-'utukat-'u -tukar-e -zoko

3coref=person-RED- eat.vt-CAUS-EPEN-IMPF(-NOM) SUB

'It<sub>i</sub> should not stay alive, you see, because it<sub>i</sub> (regularly) caused it (the other) to eat people.'

tiwo.

# **3.3.3 Demonstratives**

Demonstratives are treated as another class of words in Awetí since they can function as NP heads as well as noun modifiers, comparable to articles. Their main characteristic is that of expressing spatiotemporal deixis. Drude (2002) lists three degrees of proximity as well as different forms for the male and the female variety. Also, demonstratives inflect for number when referring to humans. This is summarized in table 3.4.

Degree of proximity	Male variety		Female variety	
	Singular	Plural	Singular	Plural
Close to speaker	jatã(n)	jatsaza	uja	ujaza
Close to hearer	kitã(n)	kitsaza	akyj	akyjaza
Distant from both	kujtã(n)	kujtsaza	akoj	akojaza

 Table 3.4: Demonstratives<sup>173</sup>

The parameter of proximity can be spatial as well as temporal, and visibility and audibility may also play a role for the correct choice of demonstrative<sup>174</sup>.

When used as demonstrative pronouns, i.e. as heads of an NP, these forms can occur as subjects or objects of a clause as in (32):

<sup>&</sup>lt;sup>173</sup> Except for the female plural forms the information contained in table 3.4 can be found in Drude (2002: 186, table 3).

<sup>&</sup>lt;sup>174</sup> Cf. example (39).

(32) (tal\_mamuti\_2\_8, 1299.837)
"Akyj-e'ym akyj it= e- mi'ũ -teju 'yto", nã='e -tu ti a'yn.
DEM -NEG TOP 1sg= REL-food.st-DESID so, 3= say.vt-NOM EVID PART
"It is not that there that I want to be my food", she said."
(lit.: 'That there is not the thing that I like to eat.')

Example (32) further illustrates that they may be negated like other NPs. Demonstratives can also constitute the objects of postpositions, where the PP has the syntactic relation of an oblique argument (as in (33)) or an adjunct:

(33) (tal\_mamuti\_1\_8, 0783.368)
Jo- tup, kaj= amũj e= jupã- jupã -tu me 'ẽ,
IMP-see, 1pl:incl=grandfather 2sg= RED- beat.vt-NOM PART PART,
akojaza 'epyrype t= emo'em-ytu.
DEM.PL because.of 3= lie.st -NOMqual
'Look, our grandfather beat you a lot, because of those ones over there who were lying.'

In (34) a demonstrative pronoun occurs as a possessor NP:

(34) (kup autobiogr, 1232.544)

 $N\tilde{a}nywo$  jatā **kujtsaza up**,  $n=am\tilde{u}j$  tomo'at -(t)u kype 'ē. for.this.reason TOP DEM.PL father, 3= grandfather celebrate.vi-NOM here PART 'It is for this reason that the father of those ones there, their grandfather celebrates (the Kwarup feast) here.'

Postpositional phrases with demonstrative pronouns as their objects frequently occur as locative adjuncts. This is illustrated in (35):

(35) (tal\_kujakyt, 0725.445) Jatãn ywã it = ut -(t)u atit. DEM POSP 1sg=come.vi-NOM 1sgPRO 'As for me, I came along this (way) here.' In (3), repeated here, a demonstrative functions as the subject in a non-verbal clause, agreeing in number with the nominal predicate:

(3) (ulawalu year, 0866.649)

Ujaza *moretatawuza*, ta'i'atu otwaw -put -za, ta'i='at Ujaza moretatat -tu 0 =to -aw DEM.PL invited.person-NPST-PL, 3pl=arrive.vi -NOM 3coref=go.vi-GER ta'itepytu pepi'ingkap ywo. ta'i=tepy -tu pepi'ingkap ywo 3pl=sing.vi -NOM village.centre POSP

'These are the guests, they are arriving (by going) and singing in the village centre.'

In (36) a demonstrative is used as a modifier in an NP, where it immediately precedes the head noun:

(36) (tal\_mamuti\_2\_8, 0561.035)
E = kypy'yt ete e = popap -(p)u jatã pe ywã a'yn ne.
2sg=younger.sister POSP 2sg= finish.off.vi -NOM DEM path along PART PART
'You have finished off your sisters along this path.' (male speaker)

When occurring at the end of a proposition, as in (37) and (38), the demonstrative functions like a vocative:

(37) (tal\_kujakyt, 2593.133) *Ikwakuwe'ymywo* akakyj uja tsu ange po'apo'aretu
I= kwakup -e'ym -y(tu) wo akakyj uja tsu ange po'a- po'ar -e -tu
1sg=like.vt -NEG -NOMqual SUB TOP DEM like mother RED- make.vt-EPEN-NOM

*it=ete a'yn ne, ujaza!* 1sg=POSP PART PART, DEM.PL

'Since she didn't like me, my mother treated me like that, (you) folks (nearby)!' (lit.: 'Since she didn't like me, my mother made like that with me, (you) folks (nearby)!') (38) (kal\_kamukuaka5, 0941.229)

*"E'i='epyrype jatã azo= to -zoko-tu, kujtsaza", nã'e.* 2pl= because.of TOP 1pl:excl=go.vi-IMPF-NOM DEM.PL, QUOT *"Because of you it is that we are about to go away, folks (there, far away)", he said."* 

By this means, the distance of the addressee(s) in relation to the speaker may be indicated.

However, as can be shown in (39), the degree of proximity does not seem to be the only criterion for the choice of demonstrative since the characterization 'close to hearer' (cf. table 3.4) for *kitsaza* does not apply:

(39) (kal\_makawaja, 1654.865)

*"Pej-ut etsan kat tup -aw, kitsaza!", e'i a'yt tepe ti a'yn.* IMPpl-come.vi for.a.while beast see.vt -GER, DEM.PL, 3say EMOT FRUST EVID PART 'Come and see the beast(s), folks!", the poor one said in vain.'

## 3.3.4 Verbal inflection and the verbal paradigm

In this subsection the different types of verbs are described. Thereafter the TAM affixes, especially the interaction between lexical aspect and the two aspectual suffixes - (z)oko and -(e)ju, are presented, followed by an overview over the most frequently occurring TAM particles.

#### **3.3.4.1** Verb types

Verbs in Awetí can be classified by dividing them into what in Tupian linguistics have been termed "active" or "agentive" verbs<sup>175</sup> on the one hand and "descriptive", "stative" or "non-agentive" verbs<sup>176</sup> on the other. This distinction is based on morphosyntactic and – to a lesser degree – on semantic criteria. Unlike active verbs, stative verbs show a certain morphosyntactic overlap with nouns which will be further described when characterizing

<sup>&</sup>lt;sup>175</sup> Cf. "active verb" in Seki (2000) and Drude (2008), "agentive verb" in Jensen (1998). <sup>176</sup> The term "stative intransitive verbs" is used by Drude (2008), "verbos descritivos" ("descriptive verbs") by Seki (2000). Jensen (1998) classifies them as "non-agentive intransitive verbs". Meira (2006:190), in order to avoid a classification as either verb or noun, opts for the term "stative words".

these verbs. There is also a rough semantic correspondence between 'active' verbs mostly referring to dynamic states-of-affairs<sup>177</sup> on the one hand, and 'stative' verbs referring to static ones on the other. Henceforth the terms 'active' and 'stative' will be used which to a large extent correspond to the semantic distinction between dynamic and static verbs.

A further syntactically-based division in the Awetí system of verb classification can be made by opposing intransitive active<sup>178</sup> and stative verbs, requiring one semantic role encoded by a term, to transitive active verbs with two term arguments. Altogether the distinction between these formal verbclasses manifests itself in four paradigms of personal reference marking on verbs. These are summarized in table 3.5, which also includes the clitic possessor pronoun for the purpose of comparison.

	Active ve	e verbs		Stative verbs	Clitic pronouns
Person / Function	Α	Р	SA	SP	Possessor
1sg	a-(t-)	i-(t-)	a-(j-)	<i>i-(t-)</i>	i(t) =, i(j) =
2sg	e-(t-)	e-(j-)	e-(j-)	e-(j-)	<i>e(j)</i> =
1pl:incl	ti-(t-)	kaj-	kaj-	kaj-	kaj=
1pl:excl	ozoj-(t-)	020-	020-	020-	ozo=
2pl	pej-(t-)	e'i-	e'i-	e'i-	e'i=
3	wej-(t-)		0-/ w-	<i>i-/ t-</i>	$n\tilde{a} = /ts\tilde{a} = (c)$
					$i = /t = /ta$ ' $i = (\bigcirc)$
3refl/ coref					<i>o</i> =/ <i>w</i> =

Table 3.5: Personal reference marking on active and stative verbs<sup>179</sup> and on nominalizations

<sup>&</sup>lt;sup>177</sup> A 'state-of-affairs' is characterized as an entity which "can be located in space and time and can be evaluated in terms of its reality" (Hengeveld 2004: 1104). States-of-affairs are mostly represented by predications, consisting of the combination of a predicate with the appropriate number of arguments.

<sup>&</sup>lt;sup>178</sup> Included are also those active verb roots which are morphologically intransitive, i.e.they can only have a subject encoded as a term argument, but semantically have an agent and a patient. In such cases the patient is encoded as an oblique argument.

<sup>&</sup>lt;sup>179</sup> Cf. Drude (2002: 184, table 2).

The prefixes are listed according to the functions as subjects of intransitive verbs ( $S_A$ and S<sub>P</sub>), transitive subjects (A) and transitive objects (P).<sup>180</sup> In some of the forms an epenthetical element, set in parentheses, is required if the verb stem is vowel-initial. In the 3<sup>rd</sup> person of stative verbs there are two prefixes, the first for consonant-initial and the second for vowel-initial stems. As can be seen, a singular - plural distinction only exists for 1<sup>st</sup> and 2<sup>nd</sup> person reference. Within the 1<sup>st</sup> person plural, personal reference marking on Awetí verbs distinguishes between an inclusive form referring to the speaker and the interlocutor and an exclusive form which refers to the speaker and (a) person(s) other than the interlocutor. Clitic pronouns are formally identical to the prefixes of personal reference marking on stative intransitive and active transitive verbs when referring to the P argument. The only exception is the third person, which cannot be indexed in the P paradigm of transitive verbs and which on stative verbs corresponds to the female singular clitics. Compared to prefixes, possessor clitics in the third person encode more referential information in distinguishing between a singular and a plural form. In addition, coreference between subject and possessor can be marked, and the forms used by male speakers differ from those of female speakers. Unlike person prefixes which only occur on verbs, clitic pronouns also attach to postpositions<sup>181</sup> and to action nominals where they are pronominal arguments and no indexing markers as there are on finite verb forms.<sup>182</sup>

Table 3.5 indicates that the personal reference system of the Awetí language mostly displays an ergative-absolutive pattern: one set of prefixes is used to index the subject of an intransitive active  $(S_A)$  and stative  $(S_P)$  or the object of a transitive clause (P) and a distinct set of prefixes to index the subject of a transitive clause (A). Only the person prefixes for the 1<sup>st</sup> person singular and the 3<sup>rd</sup> person deviate from this pattern. In the 3<sup>rd</sup> person there is a different prefix for  $S_A$ ,  $S_P$  and A, and for P no marking at all. The pattern for the 1<sup>st</sup> person singular can be analysed as reflecting an active system in that the marking of  $S_A$  and

<sup>&</sup>lt;sup>180</sup> The abbreviations follow the terminology established by Dixon (1979) and (1994). In this context, "P" is used instead of "O" in order to differentiate between word order phenomena (referred to with S and O, see section 3.3.9.2) and indexing of/ agreement with arguments (referred to with S, A and P).

<sup>&</sup>lt;sup>181</sup> Cf. section 3.3.7.1.

<sup>&</sup>lt;sup>182</sup> Except for those cases where emphatic pronouns or 3<sup>rd</sup> person subject NPs co-occur within the same sentence, the person prefixes index rather than agree with the subject or object. Cf. section 3.3.2.

A, identical in front of consonant-initial and similar in front of vowel-initial verb stems, is opposed to the marking of P and  $S_p$ .<sup>183</sup> Without taking into account stative verbs which in several respects are different from active verbs, the 1<sup>st</sup> person singular could also reflect an accusative system<sup>184</sup> with P radically differing from  $S_A$  and A or – if taking into account that  $S_A$  and A also differ in front of vowel-initial stems – a tripartite alignment pattern. The assumption of an accusative pattern for the 1<sup>st</sup> person corresponds to what is said about systems of split ergativity based on the person-animacy hierarchy where categories towards the higher end of the scale, with the 1<sup>st</sup> person at its end, tend to follow the accusative pattern, and the categories towards the lower end of the scale, represented by inanimate common nouns in case marking and 3<sup>rd</sup> person agreement marking on verbs, follow the ergative pattern (Dixon 1994: 83ff.).

# **Active Verbs**

Within active verbs intransitive verb roots are distinguished from transitive ones on the syntactic basis that transitive verbs take an object while intransitives do not. Awetí also has a number of ditransitive verbs which require an agent, a recipient-like and a theme argument with the theme argument being expressed by an object term and the recipient argument by an oblique.

Semantically, active verbs roughly correspond to 'activity', 'accomplishment' and 'achievement terms' in Vendler's (1967: 102 ff.) terminology, corresponding to 'actions', 'gradually terminative' and 'totally terminative states-of-affairs' in Sasse's (1991: 36) classification<sup>185</sup>.

<sup>&</sup>lt;sup>183</sup> A consistently active language structure was postulated by Bossong (1985) for Paraguayan Guaraní, a related TG-language. In this language  $S_A$  is marked by the same person prefixes on the verb as A, and P receives the same prefixes as  $S_P$ . There is even differential object marking in this language with regard to "activeness", i.e. direct objects which refer to animate and definite entities are especially marked (by the postposition pe), unlike other direct objects which are not case-marked.

<sup>&</sup>lt;sup>184</sup> Cf. Drude (2008: 77) who also points out that the prefixes for the 2<sup>nd</sup> person singular are identical for S, A and P in front of consonantal stems.

<sup>&</sup>lt;sup>185</sup> See section 3.3.4.2 for further information on Sasse's model. Sasse (1991: 36) criticizes Vendler's classification for not clearly differentiating between lexical semantics and sentence aspect.

The following sentences exemplify the marking of participant reference on active verb stems as listed in table 3.5; (40) for intransitive subjects  $(S_A)$ , (41) for transitive subjects (A) and (42) for transitive objects (P):

(40) (mopot birth, 0172.153) Taza 'apo o-pupure -ju a'yn. POSP 3-boil.vi -IMPF PART fire 'It keeps boiling on the fire.'

(41) (mop manioc, 0141.624) Ozo= e- tigap ozoj- tupit ne. 1pl:excl=REL-stool 1pl:excl-take.vt PART 'We take our stool.'

'a!". "Karawna kaj- mota'ok -eju eti 'en EVID 1pl:incl-lie.vt -IMPF must.not 2sgPRO PART,  $ts\tilde{a}='e$  -tu ti  $n\tilde{a}=pe$ a'vn. 3pl= say-NOM EVID 3= POSP PART "You mustn't continue lying to us!" they said to him."

Only one argument, either A (as in (41)) or P (as in (42)), can be marked on transitive verbs. The respective marking depends on the person-animacy-hierarchy<sup>186</sup>, i.e. a 1<sup>st</sup> person participant is marked before a 2<sup>nd</sup> person participant and both are marked before a 3<sup>rd</sup> person participant, independent of whether these function as subject or object of the clause.<sup>187</sup> In (41) the subject and in (42) the object, both in the 1<sup>st</sup> person, are indexed by ozoj- and kaj- respectively due to their higher position in the hierarchy compared to the other participant which in (41) is a 3<sup>rd</sup> person inanimate entity *ozoetigap* ('our stool') and in (42) a 2<sup>nd</sup> person human referred to by the free pronoun 'en. If both participants of a

<sup>&</sup>lt;sup>186</sup> See e.g. Kroeger (2005: 109, figure (16)).
<sup>187</sup> For a detailed account see Drude (2008: 76/77).

transitive action are in the 3<sup>rd</sup> person, only the subject is marked, as can be seen by the gap in the paradigm for object marking in table 3.5 and as illustrated in (43):

(43) (kal\_awytyza1, 1531.203)
N=e'õ -put a'yt wej-zoto, n=e- 'inĩ pywo, pok.
3= body-NPST EMOT 3- take.vt 3= REL-hammock POSP, IDEO.put.
'They took (what used to be) his body and put (it) into his hammock.'

The same is shown in (44) for a typical ditransitive construction with the active verb *moto* ('to give') requiring three arguments to which the semantic roles of agent, theme and recipient are assigned:

(44) (kal\_mene, 0979.044)
W= e'entat 'yto wej-moto nã=kyty tsãn a'yn.
3coref= rest.of.potion so 3- give.vt 3= POSP 3plPRO PART
'So they<sub>i</sub> gave the rest of their<sub>i</sub> potion to him.'

While in (44) the agent argument  $ts\tilde{a}n$  ('they') and the theme argument *we'entat* ('their potion') are unmarked for case, the recipient argument is formed by the postpositional phrase  $n\tilde{a}kyty$  ('to him'). The example further shows that the verbal prefix for 3<sup>rd</sup> person (subject) reference is unmarked for number and can be disambiguated by overtly expressing the argument with a free personal pronoun. Example (45) illustrates object reference in an equally ditransitive construction with the verb *mi'ing* ('to tell'):

(45) (tal\_kujakyt, 2568.207)

"I- mi'ing eti akyj 'e'ipe ange kyty me ' $\tilde{e}$ ",  $n\tilde{a}$ ='e -tu ti me. 1sg- tell.vt must.not DEM 2plPRO mother POSP PART PART, 3= say-NOM EVID PART "You mustn't tell (my) mother about me", she said.' (lit.: "You mustn't tell me to (my) mother", she said.') In (45) the theme is encoded by the 1<sup>st</sup> person indexing on the verb, while the agent is overtly expressed by the free pronoun '*e'ipe* ('you'), lower in the person-animacy-hierarchy, and the recipient *ange* ('mother') is marked as an oblique argument.

Both ditransitive constructions illustrate that Awetí in the typological classification established by Malchukov, Haspelmath & Comrie (2007: 3/4) follows the indirective alignment type. According to this type the encoding of the recipient argument differs from that of the theme argument in a ditransitive as well as that of the patient argument in a typical transitive construction. In Awetí the former is expressed by an oblique argument, the latter two are marked the same way and expressed by terms.

#### Stative verbs

This class of words, here treated as another subclass of verbs, is set in opposition to the active intransitive and transitive verbs for being morphologically and semantically distinct. With regard to their semantic properties the major part of them can be classified as denoting states, including emotional states and qualities, as described by Vendler (1967: 107/8).

Examples of stative verbs are given in (46) and (47):

(46) (tal\_mamuti\_1\_8, 0831.367)

"*T- aty 'ytoto atu i= jupã- jupã -tu 'yp ywo*",  $n\tilde{a}='e$  *-tu ti a'yn*. 3- hurt.st INTENS grandfather 1sg=RED- beat.vt -NOM stick POSP 3= say-NOM EVID PART "(My) grandfather's repeatedly beating me with a stick hurt a lot." he said.'

(47) (kup\_autobiogr, 1217.352)

*I*- popy'yj wian it = ekozokw-aw a'yn ne.
1sg- be.interested.st still 1sg= live -GER PART PART
'I was still interested in living (like that).'

As pointed out by Drude (2008: 79), except for the first person singular and third person the marking of subject reference on these forms is identical to that of the intransitive active forms. At the same time there is a certain overlap between possessed nouns and

stative verbs owing to the fact that – with the exception of the third person<sup>188</sup> – the same clitics, respectively prefixes are used to mark the possessor on the noun and the agent on the stative verb<sup>189</sup>. Meira (2006: 190) observes that this is a feature Awetí shares with Tupí-Guaranian languages and with Mawé, the language it is closely related to<sup>190</sup>, but not with Tupian languages of the other branches. Another common feature is that in all these languages a noun may function as a predicate where it occurs with verbal morphology (verbal prefixes, negation and aspect), as in example (28) from above, repeated here, and example (48), which clearly shows the 3<sup>rd</sup> person prefix of the stative intransitive paradigm *t*- instead of a clitic  $n(\tilde{a})$  for the possessor on nouns in a male speaker's utterance<sup>191</sup>:

(28) (kal\_kwaza, 1668.725, 1684.241)

*An e- u'wyw -yka*, [...] *atit wan it- u'wyw -eju a'yn*. NEG 2sg- arrow.st -NEG, 1sgPRO however 1sg-arrow.st-PERF PART 'You don't have arrows, but I do (have arrows)' (lit.: 'You do not arrow, but I am arrowing.')

(48) (kal\_awytyza2, 0655.135)
An ti t- u'wyw -yka a'yn.
NEG EVID 3- arrow.st -NEG PART
'They didn't have arrows.'

Meira (2006: 212) suggests that the basic distinction might not be one of noun vs. verb but of reference vs. predication. Alternatively one could analyse stative verbs of this type as the result of conversion, whereby the additional semantic component is 'to have X'. This alternative analysis, however, would not account for occurrences like in (49), where a nonpossessible noun is used as a predicate with verbal negation in an existential clause:

<sup>&</sup>lt;sup>188</sup> Cf. section 3.3.1.6.

<sup>&</sup>lt;sup>189</sup> Cf. columns 4 and 5 in table 3.5.

<sup>&</sup>lt;sup>190</sup> See section 1.4.3.

<sup>&</sup>lt;sup>191</sup> Cf. table 3.5.

(49) (kal\_makawaja, 0176.449) *Mote wian an 'ukakyr -yka a'yn.*long.time still NEG rooster -NEG PART
'A long time ago there were no rooster(s) yet.'

Awetí, in addition to the verbal forms presented in this section, has the tendency to use nominalized deverbal forms as predicates. These, similar to the nouns used with verbal morphology in (28) and (49), show properties of both verbs and nouns, as will be discussed in detail in section 3.3.8.1.1. Since action nominals, especially those derived from active verbs, are frequently used alternatively to verbal forms and are freely combined with TAM markers, they will also occur as predicates in the examples of the following section.

### 3.3.4.2 Tense, mood and aspect

Tense, mood and aspect in Awetí are expressed morphologically on verbs and deverbal nouns and by particles. In table 3.6.1 the TAM marking is listed in separate sections for suffixes and particles. A division according to tense, mood and aspect is not suitable due to the fact that there are forms such as the particle *ari* of a "reassured future", which are temporal as well as modal. The imperative paradigm, expressed by verbal prefixes, is listed separately in table 3.6.2.

Suffix	Function	Particle	Function
-(e)ju	imperfective	tut	future
-(z)oko	imperfective	ari	'reassured' future
$(-(z)\tilde{a})^{192}$	(perfective)	(t)utepe	irrealis
-tu(t)	optative	tepe	frustrative
-teju	'desiderative'	wã	'completive'
		wian	'interim' (indicative)
		etsan	'interim' (imperative)
		kware	negative imperative

Table 3.6.1: TAM suffixes and particles

Table 3.6.2: The TAM prefixes of the imperative/hortative paradigm

	Singular	Plural
2 <sup>nd</sup> person (intransitive verbs)	i-	pej-
2 <sup>nd</sup> person (transitive verbs)	jo-	pej-
1 <sup>st</sup> person inclusive (intr. verbs)	-	kaj-
1 <sup>st</sup> person inclusive (tr. verbs)	-	ti-

# 3.3.4.2.1 TAM affixes

There is no morphological tense marking on the verb form. According to Drude (2008: 82) the unmarked form should rather be categorized as expressing perfective aspect than past or present tense. This clearly applies to active verbs, whereas stative verbs, expressing properties or states, are imperfective by definition.

It could further be observed that in texts referring to events situated in present time or descriptive texts referring to timeless recurrent activities there is a tendency for the frequent use of action nominals instead of finite verbal forms. This observation points in the direction of a universal tendency of coupling past tense and perfective aspect, as outlined in Bybee & Dahl (1989: 83), according to which systems where the marking of "a 'perfective

<sup>&</sup>lt;sup>192</sup> This suffix is problematic in only manifesting itself in a few fossilized active stems, partially having simple stative counterparts, so that historically it must be considered derivational rather than inflexional.

past' is opposed to everything else" are a frequent phenomenon. More detailed analyses, taking into account the lexical aspect of individual verbs as well as other structural devices (e.g. time adverbs, particles and nominalizations), are necessary to determine to which exact proportions temporal reference is expressed in different forms and constructions. This, however, would exceed the scope of this grammatical overview.

Since the category of aspect plays an important role in the analysis of ideophones, it will be described here in more detail. In order to be able to account for the interaction between the lexical aspect of verbs and aspectual distinctions expressed by suffixes, the approach outlined in Sasse (1991) will be described. Sasse<sup>193</sup>, adopting a cognitive viewpoint, considers (grammatical) aspect and aktionsart or lexical aspect as conceptually the same, whereby languages differ in whether they encode specific aspectual distinctions grammatically or lexically. Sasse (1991: 41/2) distinguishes three basic types in the languages of the world:

- 1. an "interactional" type, such as Modern Greek, in which lexical and grammatical aspect interact;
- 2. a "purely morphosyntactic" type, represented by Samoan which encodes aspectual differences grammatically;
- 3. a "lexical" type, such as German which does not have a grammatical category of aspect and expresses aspectual differences lexically.

Awetí, as will be shown, belongs to type 1, because it lexically draws a distinction between active and stative verbs and additionally has two aspectual suffixes which – in combination with the active and stative verbs express different states-of-affairs.

Aspect in general is related to the processing of different types of states-of-affairs with or without conceptual boundaries. Sasse draws a first distinction between stative and dynamic states-of-affairs. Stative ones are characterized by being relatively time-stable and giving more importance to the situation (S) itself than to a situation change (SC), while in the less time-stable dynamic states-of-affairs a situation change is conceptually involved. Examples for stative states-of-affairs are:

<sup>&</sup>lt;sup>193</sup> Sasse elaborates on a model proposed by Breu (1985, 1988, 1991).

(51) (Sasse 1991: 34, 37)

a. to be at a certain place	
b. to love	(vs. to fall in love)
c. to be blind	
d. to know something	(vs. to come to know something).

Dynamic states-of-affairs are:

(52) (Sasse 1991: 34, 35)

a. to work

b. to die

c. to explode

d. to find.

Dynamic states-of-affairs may be further subclassified into those conceiving of a situation change as potential, and others to which the situation change is inherent. Under the former Sasse subsumes processual states-of-affairs or activities, comprising an event in its totality, such as (52)(a). The latter, exemplified by (52)(b) to (d), focus on the situation change more than on the situation. Therefore, a boundary is inherent and the state-of-affairs – consequently – terminative.

Both stative as well as terminative states-of-affairs may then be subdivided into two types each, depending on whether they purely conceptualize a situation or a situation change respectively, or whether the complementary point of view may also have some relevance for the respective state-of-affairs. Thus, in a stative state-of-affairs an entering phase may play a role in addition to the state, and in the conceptualization of a terminative state-of-affairs a prefinal stage may be involved. Stative states-of-affairs like (51)(b) and (d) therefore in some languages are encoded in lexicalized forms referring to the beginning of a state (expressed in English by verb phrases, e.g. *come to know* or *fall in love*), and terminative states-of-affairs may also be conceptualized as the prefinal stage (e.g. *be dying*) rather than as an abrupt situation change, as illustrated by (52)(b) in comparison to (52)(c)

and (d). This leads to maximally five different states-of-affairs which Sasse (1990: 36) schematizes as follows, with square brackets indicating their conceptual boundaries:

(53)(Sasse	1991:	36,	figure 4)
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a. "Totally stative" states-of-affairs (TSTA)	$SC_1$	[S]	$SC_2$
b. "Inchoative-stative" states-of-affairs (ISTA)	$[SC_1$	<b>S</b> ]	$SC_2$
c. Processual states-of-affairs (ACTI)	$[SC_1$	S	$SC_2$ ]
d. "Gradually terminative" states-of-affairs (GTER)	$SC_1$	[S	$SC_2$ ]
e. "Totally terminative" states-of-affairs (TTER)	$SC_1$	S	$[SC_2]$

These states-of-affairs may be encoded to differing degrees in the lexical semantics of verbs of a specific language. In addition, grammatical aspect may describe certain states-of-affairs whereby the imperfective aspect corresponds to stative situations and the perfective aspect to situation changes, i.e. inchoative and terminative states-of-affairs. In interaction with the lexical aspect of the verb different portions of the states-of-affairs characterized in (53) are selected. Table 3.7 summarizes the results of the interaction as described by Sasse (1991: 37), who uses Modern Greek as a model<sup>194</sup>.

State-of-affairs/Gram.	Imperfective aspect	Perfective aspect
Aspect		
TSTA <sup>195</sup>	imperfectivity	-
ISTA	resulting state	entering phase of state
ACTI	progressivity	holistic reading
GTER	prestadial phase	end of state-of-affairs
TTER	(habituality)	perfectivity

Table 3.7: Interaction of lexical and grammatical aspect

<sup>&</sup>lt;sup>194</sup> For a demonstration of the combination of lexical and grammatical aspect in Modern Greek verbs see Sasse (1991: 37).

<sup>&</sup>lt;sup>195</sup> TSTA verbs are normally purely imperfective and TTER purely perfective, whereby the latter may assume a habitual reading when combined with a marker of imperfective aspect.

In Awetí, the two suffixes, -(e)ju and -(z)oko, which immediately follow the verb stem and are mutually exclusive, mark aspectual distinctions in all verb types on ordinary verbs and deverbal nominalizations. The allomorph -ju is used after vowel-final verb stems, as in (54)(a), -eju after roots ending in a consonant. If this consonant is voiceless, it retains this quality in active verbs but not in stative ones, as in (54)(b), if it is voiced, it remains voiced in stative roots, but in active verbs it is 'fortified' by a corresponding voiceless plosive, as in (54)(c):<sup>196</sup>

(54)

a.	ikatuju	'it was becoming	good'		
	i-katu-ju				
	3-good.st-PERF				
b.	otakeju	'he was crying'	but	ita'ogeju	'he was getting angry'
	o-tak-eju			i-ta'ok-eju	
	3-cry.vi-IMPF			3-angry.st-PERF	
c.	tangeju	'it (the fire)is lit'	but	o'ampeju	' he was getting up'
	t-ang-eju			o-'amP-eju	
	3-glow.st-PERF			3-get.up.vi-IMPF	

The allomorph *-zoko* occurs after vowel-final stems and stems ending in /t/, as shown in (55)(a), *-oko* after consonants, as in (55)(b), whereby in this case voiceless stem-final consonants are lenited:<sup>197</sup>

(55)

- a. *ouzoko* 'he was approaching' ('he was about to come')
  o-ut-zoko
  3-come.vi-IMPF
- b. *wejtuwoko* 'he/ she usually saw something/ someone' wej-tup-oko
   3-see.vt-IMPF

<sup>&</sup>lt;sup>196</sup> Cf. section 3.2.3, example (28)(a).

<sup>&</sup>lt;sup>197</sup> Further examples for the allomorphy of both forms are given in Drude (2008: 79/80).

The interaction of these grammatical aspect markers with the lexical semantics of the verb they combine with is summarized in table 3.8. This analysis will be supported by non-elicited corpus data and partly contrasts with Drude (2008).

State-of-affairs/	-(z)oko	Example	-(e)ju	Example
Gram. aspect				
TSTA	entering phase of state	(61)	entering phase	(66), (67), (68)
ISTA <sup>198</sup>	-	((60))	-	((60))
ACTI	progressive, habitual,	(59)(a), (b),	progressive	(42)
	prestadial phase	(68)		
GTER	prestadial phase, progressive	(58), (57)	progressive	(62), (63), (64)
TTER	habitual	(56)	progressive	(64)

Table 3.8: Interaction of lexical and grammatical aspect in Awetí

According to Drude (2008: 82), who illustrates his observations with elicited data<sup>199</sup> but does not take into account the lexical aspect of the verbs itself, different 'meaning effects' may be attributed to each of the aspectual suffixes. He discerns certain core meanings which for him justify their analysis as two distinct aspect categories.

### -(z)oko with active verbs

For -(z)oko in active verbs Drude states that two meaning effects are possible, irrespective of the lexical aspect of the verb: an "imperfective" (habitual or durative) and an "inchoative"<sup>200</sup> one. The expression of habituality can be illustrated by (56) and of an "inchoative" aspect, corresponding to a 'prestadial phase' in Sasse's terminology, by (57):

<sup>&</sup>lt;sup>198</sup> A combination of verbs lexically encoding inchoative-stative states-of-affairs with the two grammatical aspect markers is not possible. See also the discussion of the examples listed in (60).

<sup>&</sup>lt;sup>199</sup> Drude (2008: 81) corroborates his analysis with regard to active verbs with the ACTI verbs *tan* ('run') and *tet* ('sleep'), the TTER verb *tup* ('encounter/ have a look at') and the GTER verb *tem* ('get outside'). According to Drude's elicitations, each of these verbs is combinable with both aspectual suffixes.

<sup>&</sup>lt;sup>200</sup> Note that Drude's "inchoative" aspect – henceforth in quotation marks – does not correspond to the inchoative-stative state-of-affairs (ISTA) described by Sasse (1990).

(56) (awu fishing, 0573.932)

Ozo = e - mi - pytyg - oko a'yt itä kitän a'yt ne, tuj ymoj'õ -tu wo. 1pl:excl=REL-NOMpat-take.vt -IMPF EMOT TOP DEM EMOT PART, liana beat.water -NOM SUB 'What we usually catch is that, when the liana poisons the water.' (lit : 'Ours that is usually caught is that [-1'])

(lit.: 'Ours that is usually caught is that, [...]')

(57) (kal\_sham\_1, 1755.277)
Nanype apaj o-majõ-zoko a'yn.
there father.VOC 3-die.vi -IMPF PART
'There (my) father was about to die.'

Taking into account the lexical aspect (aktionsart) of the verbs as proposed in the analysis by Sasse (1991), the two readings are typical for the imperfective aspect. In (56) *-oko* is combined with a TTER verb, i.e. the conceptualization of "a pure situation change without reference to a situation leading to the change" (Sasse 1991: 36), resulting in a habitual reading as outlined in table 3.7 and 3.8, which – according to Sasse (1991: 40), too – is always possible for any lexical verb. More problematic is Drude's statement that an "inchoative", i.e. prestadial phase reading can also be derived from a combination with any state-of-affairs expressed by the respective verb. This could not be confirmed by corpus data. Here the instances with a 'prestadial phase' reading<sup>201</sup> were of the type illustrated in (57) where the combination of the imperfective aspect morpheme with a GTER verb describes the phase preceding the end of a state-of-affairs.

However, a combination of -(z)oko with GTER verbs, as in (58), can also yield a progressive reading:

(58) (tal\_kamu\_kwat1, 0652.413, 0654.686)

O-tet ti a'yn.  $N\tilde{a}=te(t)$  -zoko-tu, nãtezokotu, nãtezokotu, nãtezokotu. 3-fall.asleep.vi EVID PART 3= fall.asleep-IMPF -NOM Mã katu ti o-mỹje 'yto a'yn. now right EVID 3-wake.up.vi then PART

<sup>201</sup> Cf. table 3.7.

'It (the big snake) fell asleep. It slept (for a long time). Then, right at this time it woke up.'

The following example (59)(a) illustrates a progressive reading resulting – as predicted in table 3.7 – from the combination of an ACTI verb with the imperfective aspect:

(59) (a) (kal\_awytyza1, 1476.213)

*"Koj itã, kujtã tan -oko -tu a'yza jatsaza", Enumania 'e -tu ti a'yn ne.* there DEM DEM run.vi-IMPF-NOM PART PART, Enumania say.vi-NOM EVID PART PART

(b) (kal\_kwaza, 0301.653, 0304.036)

(59)(b), with the same verb *tan* ('run') as in (59)(a), is an example for a habitual reading which – according to Sasse (1991: 40) – is always applicable. In Awetí a habitual reading is rather typical for verbs suffixed by *-zoko* which corresponds to Drude's analysis (2008: 82).

## **ISTA verbs**

Verbs expressing inchoative-stative states-of-affairs (ISTA) present an interesting case of the interaction of lexical semantics and grammatical aspect. All of these verbs belong to the intransitive active type but historically seem to have formed by a combination of a stative verb root with a suffix  $-(z)\tilde{a}$ . Since this derivational process synchronically does not seem productive it has not been included in section  $3.3.8^{202}$  Examples for active verb stems with this fossilized morpheme and the stative verb roots they have derived from are given in (60):

<sup>&</sup>lt;sup>202</sup> See Drude (forthcoming b: 13/14) who presents several elicited examples ((31) to (35)), clearly showing that the stems formed with  $-(z)\tilde{a}$  are intransitive active. An interesting observation with regard to this formerly-productive process is that the complex verb stems have changed their set of prefixes from stative to active but that the semantic role of the subject referent remains that of a patient.

(60) a. (ulawalu year, 0040.098)

 $Mu'j\tilde{e} \ t = u'\tilde{a}z\tilde{a} \ -tu \ watu, \ ta'\tilde{e} \ u'\tilde{a}z\tilde{a} \ -tu.$ already 3F= become.full.vi-NOM big, pot become.full.vi-NOM 'They (the pots) have already filled up a lot, the pots are becoming full.' ( $< t-u\tilde{a} -$ 'it is full')

b. (ti\_a\_autobiogr, 0045.544)  $Mu'j\tilde{e} \ t = \ uwuz\tilde{a} \ -tu \ me'\tilde{e}, \ t-uwut.$ already 3F= become.big.vi-NOM PART, 3-big.st 'It (the belly) was already becoming big, it was big.' (< t-uwut - 'he/she is big')

c. (tal\_awaniwani, 0545.487)

 $N\tilde{a}$ =ta'og $\tilde{a}$  -tu w= epuza-put ezo- to -tu wo. 3= become.angry.vi-NOM 3coref=bird -NPST COM-go.vi -NOM POSP 'He<sub>i</sub> became angry when he<sub>j</sub> took away his<sub>i</sub> former bird.' (< *i*-ta'ok - 'he/she is angry')

d. (kal\_kamukuaka4, 1418.98)
Wej-mo- pozã watu a'yn.
3- CAUS-become.full.vi big PART
'They filled up the big one('s stomach).'
(< i-pot - 'it is full')</li>

As illustrated by (60)(a) in comparison to (b), (c) and (d), there used to be two allomorphs,  $-z\tilde{a}$  after vowel-final roots and  $-\tilde{a}$  after consonantal codas, which were additionally lenited.

Another possibility is to describe  $-(z)\tilde{a}$  as an equally non-productive perfective suffix which used to combine with verbs encoding totally stative states-of-affairs, resulting in inchoative-stative states-of-affairs conceptualizing the entering phase of a state. This analysis is corroborated by the fact that verbs resulting from this combination – as indicated in table 3.8 – can neither be suffixed by -(z)oko nor by  $-(e)iu^{203}$  which are also mutually exclusive. In addition,  $-z\tilde{a}$  – like the two imperfective suffixes – never forms part of the reduplicant in verb reduplication, while for derivational affixes this is not a consistent pattern.<sup>204</sup> This analysis as an aspectual suffix, however, does not explain the change of the verb prefixes from stative to active. Therefore no clear categorization of this fossilized suffix will be attempted.

#### -(z)oko with stative verbs

For stative intransitive verbs Drude observes only an 'imperfective' (as opposed to 'inchoative') effect and points out that a combination of -(z)oko with these stems rarely occurs altogether, which can be confirmed by corpus data where two such combinations were found (see (61)). Following Sasse's (1991: 37) analysis, most of the Awetí stative verbs can be subsumed under TSTA verbs and therefore in principle only have an imperfective reading as indicated in table 3.7, which may explain the restricted combinability with the aspectual suffix -(z)oko observed by Drude. Two of the few examples illustrating the entering phase of a totally stative state-of-affairs (TSTA), resulting from a combination of a stative verb with the aspectual suffix -(z)oko, are given in (61):

(61) a. (kal awytyza2, 1620.246) An ti [...] t-atywatu -zoko -ka ts $\tilde{a}$  = kyty. NEG EVID 3-grieve.st -PERF-NEG 3pl= because.of 'They stopped grieving because of them.' (lit.: 'They started to not feel grief because of them.')

b. (kal awakap1, 0878.619) Wei-t--oko ti. i=ta'og -e *ẽtuw* -zoko-tu ti [a'yn]. 3- EPEN-listen.vt -IMPF EVID 3=angry.st-EPEN-IMPF-NOM EVID 'He was listening (to them and) became angry.'

 <sup>&</sup>lt;sup>203</sup> Cf. Drude (forthcoming b: 18).
 <sup>204</sup> Cf. section 3.3.8.3.1.

This shows that -(z)oko cannot be simply categorized as a grammeme of imperfectivity but as an aspectual grammeme which in combination with active verbs results in an imperfective, but in combination with stative verbs in a perfective reading.

### -(e)ju with active verbs

Where -(e)ju is attached to a verb stem, Drude (2008: 81) identifies a progressive aspect as its most general reading. Corpus examples for -(e)ju in combination with active verbs are given in (42), repeated here, (62), (63) and (64):

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(42) (kal makawaja, 1762.214)
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"Karawna kaj- mota'ok -eju eti 'en 'a!", EVID 1pl:incl- deceive.vt -IMPF must.not 2sgPRO PART,  $ts\tilde{a}='e$  -tu ti  $n\tilde{a}=pe$  a'yn. 3pl= say-NOM EVID 3= POSP PART "You mustn't continue deceiving us!" they said to him.'

(62) (tal\_mamuti\_4\_8, 0962.011)

"Kapatsu e- up -eju?" "A- te -ju,  $jat\tilde{a}!$ ",  $n\tilde{a}='e$  -tu ti a'yn. what 2sg-happen.vi-IMPF 1sg- fall.asleep.vi-IMPF DEM, 3= say-NOM EVID PART ""What was happening to you?" "I was asleep, you know!" he said."

(63) (kal\_mene, 1105.476)
Mu'jē me. Tsān=etse -ju -tu a'yn.
ready PART 3pl= enter.vi -IMPF -NOM PART
'(The hole in the ground was) ready. They were getting inside it.'

(Context: The women of a village gather in a row and one after the other get into a tunnel.)

(64) (ti\_a\_autobiogr, 0234.456) *A- tup -eju apaj majõ -ju -tu a'yn.*1sg-see.vt -IMPF father.VOC die.vi -IMPF -NOM PART
'I saw (my) father dying.'

As stated in table 3.8, each of the examples reflects different kinds of interaction of the grammatical aspect marking and the lexical semantics of verbs as predicted in Sasse's analysis<sup>205</sup>, i.e. a progressive reading for the ACTI verb in (42) but also for the GTER verbs in (62) and (63). In (64) both the ACTI verb *tup* ('see') and the GTER verb *majõ* ('die') have a progressive reading.

## -(e)ju with stative verbs

For stative verbs Drude states that -(e)ju, alternatively to a progressive, can have an 'inceptive'<sup>206</sup> meaning effect. He illustrates this with the stative verb *jem* ('to stink') which, according to his elicitations, can have either interpretation when uttered in isolation:

(65) (Drude 2008: 81, (18))*i-jem-eju*a) it's stinkingb) it's beginning to stink

Examples (66) to (68) illustrate the combination of stative verbs with *-(e)ju* leading to a perfective reading:

(66) (kal\_awytyza2, 0407.359) *Kujtã oteny pywo t-u'ã -ju<sup>207</sup> tsãn a'yn.*DEM door in.front.of 3-full.st -PERF 3plPRO PART
'In front of that door over there they were gathering (lit.: 'becoming full').'

(Context: In order to attack, a group of indigenous people is surrounding the village of an enemy, silently gathering in front of the entry of each house at daybreak.)

<sup>&</sup>lt;sup>205</sup> Cf. table 3.7.

<sup>&</sup>lt;sup>206</sup> Drude follows the terminology defined in Comrie (1976a), with the exception of "inceptive" which corresponds to "ingressive" used by Comrie.

<sup>&</sup>lt;sup>207</sup> Note that  $tu'\tilde{a}$  in combination with -ju is used with a subject referring to animate agents, while in (60)(a), where the same verb combines with  $-z\tilde{a}$ , the subject referent is a patient. Since the morpheme  $-z\tilde{a}$  is not productively used it is difficult to draw any conclusion from this observation without further elicitation.

#### (67) (tal kakaja, 0876.109)

ikatu**ju** 'Ypytako me, mani'yp ypy'oku ti wezotsu a'yn. nã me, -ju 'ypytako me, mani'yp ypy'ok -ku ti i-katu wezotsu a'yn nã me. at.night PART, manioc.sprout pull.out.vt-NOM EVID 3PRO PART, 3-clear.st -PERF only PART 'At night they pulled out the manioc sprouts, it (the field) was becoming quite clear (i.e. without any plants).'

(68) (kal angut1, 1569.136)

It-e=jo'yg -eju -tu jatã 'a. I= to -zoko-tu itã taza kyty 'a. 1sg=be.cold.st -PERF-NOM TOP PART 1sg= go.vi-IMPF-NOM TOP fire for PART 'I'm getting cold. I will go and look for fire(wood).'

This combination of stative verbs with -(e)ju seems to occur more frequently than the combination of stative verbs with -(z)oko. Examples (66) to (68) have the 'inceptive' reading observed by Drude, here described as the 'entering phase of a state'.

When comparing the states-of-affairs obtained by a combination of lexical and grammatical aspect in Awetí, as summarized in table 3.8, with the states-of-affairs of the Modern Greek model in table 3.7, several differences can be observed. Most notable is that both aspectual suffixes in Awetí – depending on whether they are attached to active or to stative verb stems – have completely different functions, giving an imperfective reading to a stative verb.

Another noteworthy difference between the two tables is that in Awetí a combination of stative or intransitive active ISTA verbs is not possible with either of the aspectual suffixes -(z)oko and -(e)ju. This type of state-of-affair is expressed purely lexically in current Awetí, even though a possible derivational process from stative to active ISTA verbs by suffixation of a now fossilized morpheme -(z)a is still transparent.

The combinations of active verbs, lexically expressing ACTI, GTER and TTER statesof-affairs, with the two aspectual suffixes do further not show the same clearly distinguishable imperfective readings as in Modern Greek. Moreover, the states-of-affairs obtained by combining either -(z)oko or -(e)ju with active verbs of any of the lexical aspect classes are very similar to each other. A similar observation can be made for stative verbs expressing TSTA states-of-affairs. In combination with either of the two suffixes these receive an "entering-phase-of-state" reading. It must be added, however, that examples of stative verbs with -(z)oko are altogether rare in the corpus.

Corpus data as well as Drude's elicited data show that many active verb stems may be combined with either suffix. Other verbs conceptualizing different states-of-affairs may prefer one or the other. One preference is the combination of active TTER verbs with -(z)oko for the expression of habituality, while a combination of GTER verbs with -(z)oko most often seems to indicate a prestadial phase. In combination with -(e)ju active verbs of all lexical aspect classes seem to have the progressive as the preferential imperfective interpretation. A consistent checking and quantitative analysis of all aspectual marking on different verb stems in the Awetí corpus may reveal further tendencies and regularities. Drude's analysis based on elicited data implies that speakers perceive aspectual differences when combining the same verb stem with one aspectual suffix or the other. The considerable overlap between the two, permitting various imperfective readings when combined with verbs of the same lexical aspect class, as observed in the corpus data, does not support this idea.

An analysis of both grammatical aspect markers in Awetí as purely imperfective, as suggested by Drude (2008: 82), who differentiates between a "progressive" and an "imperfective" aspect, is also problematic. Their combination with stative verbs results in an inceptive reading as Drude (2008: 82) himself mentions and as illustrated in (66) to (68). In this case, a situation change is implied turning the state-of-affairs from 'totally stative' (TSTA) to 'inchoative-stative' (ISTA) and thus perfective where the unmarked form used to have an imperfective aspect. In Awetí active verbs, by contrast, the unmarked aspect is perfective, as can be seen in example (69), containing a verb expressing a gradually terminative state-of-affairs (GTER), and in (70) with a TTER verb:

(69) (tal mamuti 2 8, 0203.981)

 $Ts\tilde{a} = to$  -zoko -tu ti me, **o-tige** ti a'yn. 3pl= go.vi-IMPF -NOM EVID PART, 3-sit.down.vi EVID PART 'They were going (along) and sat down.' (70) (kal\_mene, 1751.878) *Wariwyty tetampaza, tykyhy,* wej-tup ti tsã.
PropN people IDEO.encounter 3- see.vt EVID 3pIPRO
'The Wariwyty people, tykyhy, they (once) saw them.'

In both cases the unmarked verb form indicates that the event has been completed as a whole, an effect which in (70) is reinforced by an ideophone representing a punctual event<sup>208</sup>.

Another open question is to which degree morphological aspect in Awetí in general has grammaticalized or even fully lexicalized by fusion with the verb as in the case of  $-(z)\tilde{a}$ . In related languages marking of grammatical aspect has developed to differing degrees. One relevant observation may be that in Kamaiurá, the TG-language most Awetí speakers are proficient in, no consistent marking of aspect by suffixes with clearly distinguishable meaning effects exists.<sup>209</sup>

# Imperative and hortative

In addition to the indicative mood<sup>210</sup> expressed by the prefixes of subject or object reference on verbal predicates, there are four prefixes to mark the imperative mood. A permission rather than a command is semantically expressed by the forms *i*- for the imperative singular on intransitive active verb stems, *jo*- for singular on transitive stems and *pej*- for either of the stems in the plural.<sup>211</sup> These are illustrated by (71), (33), repeated here, (72) and (73):

<sup>&</sup>lt;sup>208</sup> Cf. section 4.3.

<sup>&</sup>lt;sup>209</sup> Cf. Seki (2000: 132, 135, 142/3).

<sup>&</sup>lt;sup>210</sup> The term 'mood' is understood in the sense described by Bußmann (1990: 496) who defines it as a grammatical category of the verb expressing "die subjective Stellungnahme des Sprechers zu dem durch die Aussage bezeichneten Sachverhalt" ("the subjective statement of the speaker regarding the situation referred to by the proposition" [my translation]). According to Bußmann, most languages have an indicative, a subjunctive and an imperative mood. By this definition 'mood' is distinguished from a semantic category of 'modality'. The latter, in a wider sense, subsumes not only grammatical categories of mood under its label but also different sentence types (declaration, question etc.) and may be expressed by morphological, lexical and syntactic means (cf. Bußmann 1990: 490/1).

(71) (tal kakaja, 0054.823)

*I-* kutap ='jyt etsan 'yto, a'yza,
IMPsg-cultivate.field.vi =DIM for.a.while so, EMOT, *e-j-* aty por- 'u -ap -an jomem!
2-EPEN-wife ANTI- eat.vt-NOMinstr-NFUT manioc.cake

'Then just cultivate your field for a little while, man, so that your wife will have manioccake to eat.'

(33) (tal mamuti 1 8, 0783.368)

Jo- tup, kaj= amũj e= jupã- jupã -tu me 'ẽ, IMP-see.vt, 1pl:incl=grandfather 2sg= RED- beat.vt -NOM PART PART, akojaza 'epyrype t-emo'em-ytu. DEM.PL because.of 3-lie.st -NOMqual 'Look, our grandfather beat you a lot, because of those ones over there who were lying.'

(72) (kal\_tawozy4, 1304.944) *Pej- to a'yt tsã=mowk-aw we, tsã='ajpok -apan ne!*IMPpl-go.vi EMOT 3pl=tell.vt -GER PART, 3pl= return.vi -in.order.to PART
'Go and tell them (in order for them) to return!'
(lit.: 'Go and tell them for their return')

(73) (kal\_awytyza2, 0910.069) *Pej- tup a'yt o-ur -yka tsã me 'a!*IMPpl-see.vt EMOT 3-come.vi -NEG 3plPRO PART PART 'Look, they won't come!'

Since *pej*- is also the prefix used on indicative transitive verb stems in the  $2^{nd}$  person plural, this form is ambiguous in combination with transitive stems. In the Awetí corpus no instance of a stative verb in the imperative mood could be found, corroborating Drude's (2008: 80) doubts as to the acceptability of such forms which could only be obtained by direct elicitation.

An exhortation can be expressed in main clauses by the  $1^{st}$  person plural inclusive prefix *kaj*- on intransitive verbs, as is illustrated in (74), or *ti*- on transitive verbs, as in (75):

(74) (tal\_kujakyt, 2507.199) *Kaj- etse me, totĩ*!
1pl:incl-enter.vi PART, daughter
'Let's go inside, my daughter!'

(75) (kal\_kamukuaka6, 1366.689) *Ti- puka tsã ne!*1pl.incl- expel.vt 3plPRO PART
'Let's expel them!'

## **Optative and 'desiderative'**

The mood suffix -tu(t) expresses volition. This suffix with the two allomorphs -tut and -tu is immediately attached to a finite verb stem or to the verb stem of a nominalization, e.g. the action nominal in (76):

(76) (kal tawozy5, 0224.984) "Jomoto [...]", kitã 'etu 'yto tepe ti zanu a'yn, jomoto, kitã 'e -tu 'yto tepe ti zanu a'yn, DEM say-NOM then FRUST EVID also IMPsg-give.vt, PART, nãporezajpoktutu a'vn ne. nã=por- ezajpok -tut -tu a'yn ne 3= ANTI-return.sth.vt -OPT-NOM PART PART "Give (them) to me [...]", he<sub>i</sub> then said also in vain, he<sub>i</sub> wanted him<sub>i</sub> to return them."

Sive (mem) to me [...] , net then sure also in vani, net wanted ming to retain them.

This suffix can be combined with the aspectual suffixes -ju and -oko attached to it. Examples are given in (77) and (78):

(77) (kal sham myth1, 0130.51) *E*-*tẽtup* -tu -ju me. 2-EPEN-understand.vt -OPT-IMPF PART 'You (continually) want to understand (it).'

(78) (kal awytyza2, 1237.314) Tsãmopaptuzokotu me. -tut -oko -tu tsã=mopap me. 3pl=CAUS- finish.vi -OPT-IMPF-NOM PART 'They (always) wanted to finish (them) off.'

While the combination with -(z)oko still permits the regular analysis of an underlying -tut combined with the allomorph -oko, leading to a voicing of the alveolar voiceless plosive to the retroflex fricative  $[z]^{212}$ , in the combination of -tut with -(e)ju the final plosive has clearly been dropped.

Another indicator showing that -tu(t) is integrated in the verbal form as a suffix and does not follow it as a clitic particle is its combination with -(y)ka, the suffix of verbal negation, shown in (79):<sup>213</sup>

(79) (awu fishing, 0694.876) *Kitã w*= *e- miat ete t=ekaraty -(y)tu* me. it= vwvt, DEM 3coref=REL-fish POSP 3= greedy.st -NOMqual PART, 1sg=younger.brother, wej-poaka -tur -yka a'yn. an NEG 3- share.vt -OPT-NEG PART

'That one, is (a) greedy (one) with his, fish, my little brother, he doesn't want to share it.'

In action nominals, too, the negative suffix follows the optative suffix. Here, as shown in (80), the whole complex is negated with the suffix -e'ym for nominal negation:<sup>214</sup>

<sup>&</sup>lt;sup>212</sup> Cf. example (55)(a) in section 3.3.4.2.1. <sup>213</sup> Cf. section 3.3.10.

<sup>&</sup>lt;sup>214</sup> Cf. section 3.3.10.

(80) (kal awakap1, 0665.262)

An ti o-temoto -ka a'yn,  $n\tilde{a}$ = temoto -tur -e'ym -pu ti kit $\tilde{a}$  me. NEG EVID 3-surrender.vi-NEG PART, 3= surrender-OPT-NEG -NOM EVID DEM PART 'They say that he did not surrender, they say (that) he (that one there) did not want to surrender.'

Another morphological mood suffix is *-teju* expressing volition or rather a desiderative mood in certain active verb forms referring to physical appetite, and in their corresponding nominalizations. Examples are (32) above and (81):

(81) (tal\_mamuti\_2\_8, 1303.152) *"Jumem a- 'u -teju", n\tilde{a}= 'e -tu ti me.* manioc.pancake 1sg- eat.vt-DESID, 3= say-NOM EVID PART *""I want to eat manioc pancake", she said.'* 

This suffix only occurs very marginally.

# 3.3.4.2.2 TAM particles

The basic distinction in the Awetí tense system is between future and non-future, whereby future tense – also in an extended sense for unrealized, possible or potential situations – is periphrastically marked by particles.

When locating an event in the future, *tut* appears to be invariant and occurs as a second position particle followed or preceded by a verb. An example with a finite verb form is (82), with an action nominal (83):

(82) (tal\_mamuti\_1\_8, 0820.331)
An tut a- zoto -ka 'en e= men kyty me 'a.
NEG FUT 1sg- bring.vt-NEG 2sgPRO 2sg=husband to PART PART
'I will not bring you to your husband.'

(83) (tal mamuti 1 8, 1458.319)

Itutututitemani'ypkytya'yn.It= ut-tututit= e-mani'ypkytya'yn.1sg=return.vi-NOM FUT1sg=REL-manioc.sproutforPART'I will return and get my manioc-sprouts.'---

(lit.: 'My returning will be for my manioc-sprouts.')

*Tut* may also occur as a TAM particle in non-verbal clauses, whereby in this environment it is difficult to draw a boundary between a temporal and modal function. In (7), repeated here, the modal function described in the preceding section is equally possible due to the absence of a copula verb to which the suffix -tu(t) may be attached:

(7) (kal\_mene, 2029.256) *Atit* tut tapi'i-zan 'a.
1sgPRO FUT/OPT tapir -ATT PART
'I will/ want to be (in the role of) a tapir.'

Instead of *tut* another periphrastic construction with *ari* may be used to express future time. This particle occurs in the same syntactic position. According to Drude (2008: 91) the semantic difference between the two constructions is that in the case of *ari* there is an additional pragmatic component typical of a mood category by which "the speaker signals that he knows that the event is wanted by the hearer" who "need not be worried about the fulfillment of his wish". Therefore Drude labels it a category of "reassured future". An example is given in (84):

(84) (tal\_mamuti\_1\_8, 1810.535) *A- pytizyk ari e= (e)te me, atu.*1sg- pray.vi FUT 2sg= POSP PART, grandchild
'Don't worry, I will pray for you, granddaughter.'

According to Drude (2008: 91) *tut* and *ari* belong to a series of particles, syntactically all occurring in the second position, which express various kinds of modality. Two further

ones are the irrealis particle *(t)utepe* and the frustrative particle *tepe* which here are categorized as purely modal, while *tut* is purely temporal and *ari* can be subsumed in either category.

The modal particle *(t)utepe* is mutually exclusive with *tut* and *ari* and indicates that an event is hypothetical as in (85) or counterfactual as in (86) where this information is given by the temporal adverb *mote* ('a long time ago'):<sup>215</sup>

(85) (kal tawozy3, 0749.584)

Nã=tsu-e'ym utepe pira'yt tene 'u -zoko -tu nã,
3= like-NEG IRR fish simply eat.vt-IMPF-NOM 3PRO,
an utepe wej-mo- kyr'azã-ka a'yn.
NEG IRR 3- CAUS-be.fat.vi-NEG PART
'It wouldn't be like that if he simply had the habit to eat fish, he wouldn't make him put on weight.'<sup>216</sup>

(86) (kal makawaja, 1205.103)

Mhmhmhm, wej-'uwãtutepe tiApyawazaamũj-za motekat a'yn.IDEO.beast.eating, 3-eat.completelyIRREVIDPropNancestor -PL long.ago beast PART'The beast would have eaten all the ancestors of the Kamaiurá people a long time ago.'

As also illustrated by (85) and (86), there are two allomorphs, *utepe* after a final consonant and *tutepe* after vowels. A combination of *utepe* with the particle *wan*, as in (31), repeated for convenience, indicates that the speaker does not want or believe or is not certain about the event described by the predicate:

<sup>&</sup>lt;sup>215</sup> Cf. Drude (2008).

<sup>&</sup>lt;sup>216</sup> A literal translation trying to capture the nominalized predicate of the first clause is not appropriate since the action nominal construction, formally a possessive construction, is not only "interrupted" by the second position particle *tene* ('simply') intervening between the nominalized form *'uzokotu* ('habitual eating'), functioning as possessum, and a patient NP *pira'yt* (fish') in possessor function, but the subject as a second argument is also given by the pronoun  $n\tilde{a}$  at the end of the clause. Thus the construction syntactically rather resembles a VP than an NP (cf. section 3.3.8.1.1).

```
(31) (kal_tawozy3, 0170.342)
Nã wan utepe w-ekozoko, jatã,
3PRO however IRR 3- live.vi, DEM,
o= mo'at-'utukat-'u -tukar-e -zoko tiwo.
3coref=person-RED- eat.vt-CAUS-EPEN-IMPF(-NOM) SUB
'It<sub>i</sub> should not stay alive, you see, because it<sub>i</sub> (regularly) caused it (the other) to eat people.'
```

Drude (2008: 92) assumes that *(t)utepe* has developed from a combination of *tut* with the frustrative particle *tepe*. Jensen (1998: 538), who lists frustratives – partially clearly cognates – for a variety of TG-languages, characterizes them as "indicating that the initiated action did not accomplish its intended result". This can be illustrated by (87) where this particle occurs in combination with a marker of volition and by (88), a complex structure of two clauses:

(87) (kal\_angut2, 1150.292)
Nã=po- kỹj -tu -tu tene tepe ti nã.
3= ANTI-kill.vt-OPT-NOM simply FRUST EVID 3PRO
'He simply wanted to kill him (but didn't succeed).'<sup>217</sup>

(88) (kup\_autobiogr, 1150.597)
It= eko-tu a'ang tepe, i= te- 'a'aka -'a'aka -zoko-tu tene.
1sg=walk.vi-NOM EVID FRUST, 1sg=REFL-RED- knock.vt-IMPF-NOM simply
'When I try to walk, I just keep knocking (myself) against things.'
(lit.: 'My walking in vain (is) simply my continuously knocking myself.')

The so-called completive particle  $w\tilde{a}^{218}$  combines with active verbs. It immediately follows the finite verb or action nominal, as in (89) and (90) respectively:

<sup>&</sup>lt;sup>217</sup> See previous footnote.

<sup>&</sup>lt;sup>218</sup> See Jensen (1998: 537) for cognate forms in TG-languages.

(89) (kal\_awytyza1, 1804.277)
Tsãn=e- kar -ut a'yt ti wej-zezut =wã ti
3pl= REL-thing-NPST EMOT EVID 3- bring.vt=COMPL EVID
w= e- ka -zan tsã.
3coref= REL-thing-ATT 3plPRO
'All of what used to be their<sub>i</sub> things they<sub>i</sub> brought to be their<sub>i</sub> things.'

(90) (kal\_kamukuaka5, 0288.585)
Nã=loge -tu =wã tut o= to -aw wẽ.
3= get.out.vi -NOM=COMPL FUT 3coref=go.vi-GER PART
'It (the snake) will completely get out (and go out)side.'

According to Awetí consultants this clitic TAM particle, which indicates the complete involvement of the intransitive subject or the transitive object referent, can co-occur with both aspectual suffixes, whereby the order is as illustrated in (91):

(91) (Awajatu & Waranaku Awetí, October 2007) *A- kwawaw-oko =wã me.*1- know.vt -IMPF=COMPL PART
'I'm about to know everything.'

Corpus data suggests that in the case of 'u ('to eat, smoke') the verb stem has fused with this clitic to form a new verb stem ' $uw\tilde{a}$ . This can be shown in (92), contrasting with (88) in that the former clitic has been integrated into the nominalized verb form and is directly attached to the stem, preceding the TAM suffix and thus occurring in reverted order:

(92) (tal\_kamu\_kwat1, 0586.518)

Kaj= 'uwã-zoko -tujatãmõjjẽ.1pl:incl=eat.completely-IMPF-NOM TOPsnakePART'The snake is about to eat all of us.'

Another possibility to account for the form in (92) is that the TAM particle is currently undergoing a process towards an aspectual suffix as has already occurred with cognate forms in related languages.<sup>219</sup> Points of departure for this development seem to be action nominal constructions rather than finite verb forms where no instance of reversal of order could be encountered. In (92) *-wã* – occurring inside the nominalization – can only be analysed as a suffix or as part of the stem.

Two second position particles which Drude (2005, unpubl.) analyses as auxiliaries indicating an 'interim' aspect are *wian* and *etsan*.<sup>220</sup> The former occurs with predicates in the indicative, the latter mostly with predicates in the imperative mood, as shown in (47) and (39) respectively, both repeated here:

(47) (kup\_autobiogr, 1217.352) *I-popy'yj* wian it= ekozokw-aw a'yn ne.
1sg-be.interested.st still 1sg=live.vi -GER PART PART
'I was still interested in living (like that).'

(39) (kal\_makawaja, 1654.865)

*"Pej-ut* etsan kat tup -aw, kitsaza!", e'i a'yt tepe ti a'yn. IMPpl-come.vi for.a.while beast see.vt -GER, DEM.PL, 3say EMOT FRUST EVID PART 'Come and see the beast(s), folks!", the poor one said in vain.'

Reasons for their classification as aspectual auxiliaries and not as adverbs are for Drude (2005, unpubl.) their considerable frequency, their occurrence in the second position like other TAM particles, their complementary distribution indicating a high degree of grammaticalization and the fact that *etsan* disambiguates certain imperative constructions, as in (93):

<sup>&</sup>lt;sup>219</sup> Cf. Jensen (1998: 537) and Rose (2003: 421-423).

<sup>&</sup>lt;sup>220</sup> The two particles can syntactically occupy the 2<sup>nd</sup> position in combination with other so-called "second position particles" which are a typical phenomenon in Tupian languages (cf. 3.1, footnote 132; 3.3.7.2). See also Seki (2000:91ff.) for an in-depth study of these particles in the related language Kamaiurá.

(93) (Drude 2005: 26, (41) d.) *I- tup etsan*!
1sg-see.vt for.a.while
'(Please), look at me for a moment!'

Since in examples like (93) with an object higher in the person-reference hierarchy than the subject, the verb is marked with the  $1^{st}$  person singular object prefix instead of an imperative prefix *jo*-, the imperative in such cases is only expressed by the auxiliary particle.

Imperatives are negated by combining the sentence-initial particle *kware* with an action nominal as a predicate<sup>221</sup>:

(94) (awakap1, 0058.355) *Kware* e'i=topat -(t)u, kaj- kỹj -tukat eti 'e'ipe.
IMP.NEG 2pl=lose.way.vi-NOM 1pl:incl-kill.vt-CAUS or 2plPRO
'Don't lose your way or you will make them kill us!'

#### 3.3.5 Adverbs

This class of words summarizes a number of elements for which no stable parameters can be established and which may partially correlate with members of other classes. In Awetí words expressing temporal and locative concepts as well as most interrogatives<sup>222</sup> are subsumed under this category. Syntactically these words have the function of clause or phrase-level adjuncts.

In addition to demonstrative pronouns used in this function a number of temporal and locative deictic adverbs, indicating direction and location, could be identified which mostly occur sentence-initially, as *mimo* ('yesterday') in (95) and  $m\tilde{a}$  ('here, now') in (96):

<sup>&</sup>lt;sup>221</sup> Cf. section 3.3.10.

<sup>&</sup>lt;sup>222</sup> These include interrogatives of place, time, manner, quantity and reason. Interrogatives referring to entities expressed by term arguments are classified as pronouns, like *kapaza* ('who') in section 3.3.1.2.

(95) (tal\_kyjakyt, 0858.541) *Mimo a- mo- loge ĩ akoj ype =katu,*Yesterday 1sg-CAUS-get.out.vi 3sgPRO DEM POSP=INTENS, *a- mo- loge ĩ a'yn ne.*1sg- CAUS-get.out 3sgPROPART PART
Yesterday I pulled it out right there.'

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(96) (kal_awytyza1, 1602.064)

M\tilde{a} it\tilde{a} n=u'wyp a'yn ne.

here TOP 3= arrow PART PART

'Here are their arrows.'
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They may also, in a less fixed position, be inserted towards the end of the sentence, like *mote* ('a long time ago') in (97) or in (86) above:

(97) (ama\_dry\_season, 0366.856)
Nã=tsu tsã=to -ez -ekozoko-tu wian mote me.
3= like 3pl= REC -COM -live.vi -NOM still long.ago PART
'They were living with one another like that in the old days.'

Interrogative adverbs occur sentence-initially. Most of them are morphologically transparent, showing that they have developed from postpositional phrases formed by an interrogative pronoun  $*kapat^{223}$  and different postpositions, e.g. *tsoa* ('towards') in (98) and *ype* ('at', 'in') in (99):<sup>224</sup>

(98) (tal\_kaminu, 0458.327) *Kapatsoa tut e= to -tu me?*where.to FUT 2sg= go.vi-NOM PART
'Where are you going?'

<sup>&</sup>lt;sup>223</sup> Synchronically, there is only a plural form *kapaza* ('who') (cf. 3.3.1.2). The singular interrogative pronoun is *koj*.

<sup>&</sup>lt;sup>224</sup> The same applies to several non-interrogative adverbs, e.g. *nanype* (>  $n\tilde{a} + ype$ ) ('there').

(99) (tal\_mamuti\_4\_8, 0280.435) *Kaparype=katu nã me, atu?*Where =INTENS 3PRO PART, Granddad
'Where exactly is it, Granddad?'

When combined with verbal negation, as in (100), interrogatives replace the negative particle an:<sup>225</sup>

(100) (tal\_kakaja, 0607.555)
Kari'aw e'i-to -ka ozo= ewizako?
why 2pl-go.vi-NEG 1pl:excl=behind
'Why didn't you go after us?'

An element which may either form a clause by itself, as in (101), with (or without) a sentence-final particle, or occur as an adverb in the first position of a clause with a finite verb or, as in (102), with an action nominal as a predicate, is  $mu'j\tilde{e}$ :

(101) (kal\_tawozy3, 0202.359)

 $N\tilde{a}='apo$  wene ti  $n\tilde{a}=po$ - mong-mong -e -tu ti  $n\tilde{a}$ , **mu'jẽ** a'yn. 3= on.top.of still EVID 3= ANTI-RED- paint.vt -EPEN-NOM EVID 3PRO, already PART 'On top of it she still painted it (i.e. her son's body) again and again, (until the paint was) finished (up).'

(102) (kal\_mene, 1285.492)

*Kitã ma'ẽ -tu a'yt zanu ti, mu'jẽ tsã='apypap -eju -tu [me].* DEM look.vi -NOM EMOT again EVID, already 3pl= go.under.vi -IMPF -NOM PART '(They say that) the poor one looked again, they had already finished going under (getting inside a hole in the ground).

<sup>&</sup>lt;sup>225</sup> Cf. section 3.3.10.

In (102) the progressive nature of the event (one person after another getting inside a hole) is expressed morphologically with the imperfective aspect while the perfectivity of the event as a whole in relation to another event, expressed in the preceding clause, is marked by the adverb.

 $Mu'j\tilde{e}$  can also be used in combination with an ideophone to express the perfectivity of the depicted event, as will be described in section 4.4.

#### 3.3.6 Numerals and other quantifiers

Numerals in Awetí do not form a word class by themselves for having properties of determiners and nouns. They can function as noun modifiers as in (103) where they occupy the position directly in front of the head of the NP, in this case the noun '*ywykwat* ('hole'):

(103) (tal\_mamuti\_3\_8, 1233.049) *Mokõj 'ywykwat koj-tu ti tsã me.*two earth.hole dig-NOM EVID 3plPRO PART
'They dug out two holes.'

But they can also be the most important element in a headless NP, as in the nonverbal clauses in (104) and (105):

(104) (tal\_mamuti\_2\_8, 0411.81)  $Mok\tilde{o}j n\tilde{a} = to -tu a'yn, momozotsu n\tilde{a} = 'at -(t)u 'y wo me.$ two 3= go.vi-NOM PART, one 3= fall.vi -NOM water POSP PART 'Two (sisters) went away, one (sister) fell into the water.' (lit.: Two (was) their going away, one (was) her falling into the water.')

(105) (kal\_mene, 0184.869) **Kajpopap** tut azo = ka'at -(t)u", e'i ti tsãn a'yn. five FUT 1pl:incl=sleep.in.forest.vi-NOM, 3say EVID 3plPRO PART "We will sleep in the forest (for) five (nights)", they said." (lit.: "Five (is) our future sleeping in the forest", they said.') Quantifiers like *momati* ('all') in (106) and (107) syntactically occur in the same positions as local and temporal adverbs. Unlike nouns but like numerals they cannot be modified:

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(106) (awu fishing, 1040.592)
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Momati zanu ti tsãn=eko -tu, w-eko *-ka*. an o =mowo EVID 3pl= walk.vi-NOM, NEG 3coref=alone 3- walk.vi-NEG all also -za ti a'yn. atu grandfather -PL EVID PART 'They also walked all (together), they didn't walk on their own, our grandfathers.'

(lit.: 'All (was) also their walking, they didn't walk on their own, our grandfathers.')

(107) (tal\_kakaja, 0869.936) *Kakaja ut -(t)u ti momati me.*seagull come.vi -NOM EVID all PART
'The seagulls came all (of them together).
(lit.: The seagull's coming (was) all (of them together).')

## 3.3.7 Minor word classes

Other word classes will be briefly presented in this section.

## **3.3.7.1** Postpositions

An overview of the most important Awetí postpositions is given in table 3.9.

Postposition	Meaning	Postposition	Meaning
ete	'with', 'on', 'at', 'about'	tiwo	'after'
eze	'mixed with'	wo	'for', 'in', 'to'
kyty	'for', 'to'	<i>wypywo</i>	'around'
pe	'to'	wyrype	'underneath'
pyterype	'in the middle of'	уре	'at', 'in'

ружо	'into'	ywã	'along'
ta	'accompanied by'	ужо	'by means of'/ 'with', 'in'
tsoa	'towards'	ʻapo	'on'
tsu	'like'	'ytang	'in front of'
ti	'from', 'of'	'ywo	'with'

Several of these postpositions, *ti*, *tiwo*, *wo*, and *ywo*, can also be used as subordinators.<sup>226</sup>

Postpositions in Awetí show nominal as well as verbal properties. A nominal property is that they take the same set of clitic pronouns as possessed nouns from which cross-linguistically they most often develop historically.<sup>227</sup> This is shown by the 3<sup>rd</sup> person plural proclitic  $ts\tilde{a} = in$  (108):

(108) (tal\_mamuti\_2\_8, 1534.855) *Itsumaryt to -tu ti tsã='ytang nge.* PropN go.vi-NOM EVID 3pl= in.front.of PART 'Itsumaryt went in front of them.'

Similar to possessed nouns, postpositions take the clitic reflexive pronoun o= if the subject and the object of the postposition are co-referent as in (9), repeated here:

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(9) (kal_mene, 1023.969)
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'Yta'ãj kojtazan okyty 'vto me, nãpo'atu. tatuwatu ete 'yta'ãj koj -t -at -an o =kyty 'yto me, tatuwatu ete nã=po'at -tu dig.vt-EPEN-NOMag-ATT 3coref= POSP so PART, armadillo.big POSP 3= make.vi -NOM earth 'So they, made a big armadillo to dig the ground for them,'

(lit.: 'So as an earth-digger for them<sub>i</sub> it was their<sub>i</sub> making of a big armadillo.')

A verbal property is that postpositions can take a reflexive marker *te*- for reflexive, as in (109), or a reciprocal marker *to*- for reciprocal actions, as illustrated in (110):<sup>228</sup>

<sup>&</sup>lt;sup>226</sup> Cf. section 3.3.9.4.2.

<sup>&</sup>lt;sup>227</sup> Cf. Payne (1994: 336).

<sup>&</sup>lt;sup>228</sup> Cf. section 3.3.8.2.2.

(109) (tal\_mamuti\_2\_8, 1230.958)
Wej-zezut ti o- te= 'ytang a'yn.
3- bring.vt EVID 3coref- REFL= in.front.of PART
'He brought her (making her walk) in front of himself.'

(110) (ulawalu year, 1050.353)

*Ijãtiti 'yto ta'i=to -tu o-* to = kyty, ta'i=to- pytyk-eju -tu a'yn. after.that so 3pl= go.vi -NOM 3coref- REC=POSP, 3pl= REC-grab.vt -IMPF -NOM PART 'Then, after that they walk towards each other, they start to fight with each other.'

This possibility to mark whether one or more participants are involved corresponds to the  $n\tilde{a}=/ts\tilde{a}=$  opposition by which non-co-referent singular and plural objects of postpositions are marked.

Another nominal property of postpositional phrases is that they are negated with the suffix *-e'ym* like nominal constituents. Examples are (111) and (112):<sup>229</sup>

(111) (ti-a\_autobiogr, 0561.804)
It= ajw -oko -tu apaj ete -(e)'ym a'yn.
1sg= grow.up.vi-IMPF -NOM father.VOC with -NEG PART
'I was growing up without (my) Dad.'

(112) (tal\_mamuti\_2\_8, 0082.709)
"E=pe -(e)'ym akakyj i= 'e -tu a'yto akyj", nã='e -tu ti me.
2sg=POSP -NEG TOP 1sg=say.vi -NOM EMOT, DEM, 3= say-NOM EVID PART
'It wasn't to you that I spoke, you (know)", she said.'

Likewise, they can have a suffix of nominal tense attached to the postposition, e.g. *-put* for nominal past in (113):

<sup>&</sup>lt;sup>229</sup> Cf. section 3.3.10.

(113) (a) (kal\_awytyza1, 0164.808)

Nãtotuti,momotykyhyme'ywãmutti[a' yn].Nã=to-tuti,momotykyhyme'ywã-putti[a' yn].3=go.vi-NOMEVID, otherIDEO.encounterpath along-NPSTEVID'He went on, encountered others on what used to be the path.'

A verbal property can be found with the in several respects deviant postposition *tsu* in combination with a clitic pronoun or a demonstrative as its object. This PP with the function of a manner deictic can be nominalized like a verb stem by the suffix  $-at^{230}$  to refer to a deictic location, as in (114), or an agent/patient:

(114) (kal\_kwaza, 0643.4)
Jatã tsu-at ete ti kitã mo'aza ikaz-oko-tu.
DEM like-NOM POSP EVID DEM people search.vt-IMPF-NOM
'In a place like this one he was looking for people.'

The latter, if referring to a human, can be pluralized, as in (115):

(115) (kal\_kwaza, 0719.633) *Kaminu'aza jatã tsuaza* 'e, pokpokpokpokpokpok.
Kaminu'at-za jatã tsu-at-za 'e, pokpokpokpokpokpok.
boy-PL DEM like-NOMpl-PL PART, IDEO.put
'Children like these here, he put (them) (in a row).'

Depending on the verb they occur with, postpositional phrases can have the syntactic function of an oblique argument or of an adjunct.

As was demonstrated for noun phrases,  $^{231}$ too, postpositional phrases – apart from their referential function – can have a predicative function as in (116), where the PP *jatãn ete* is combined with verbal negation:

<sup>&</sup>lt;sup>230</sup> Cf. section 3.3.8.1.4.

<sup>&</sup>lt;sup>231</sup> Cf. section 3.3.4.1.

(116) (tal\_kamu\_kwat1, 0676.092)

*Nanywo ti jatã taty a'yt-'jyt an jatãn ete-ka me*. For this reason EVID DEM moon child-DIM NEG DEM POSP-NEG PART 'For this reason the little star (lit.: child of the moon) is not at this place (any more).'

Some postpositional phrases have lexicalized and are synchronically classified as adverbs.<sup>232</sup> An example is *nanywo* ('for this reason') in (116) which has developed from a combination of the 3<sup>rd</sup> person pronoun  $n\tilde{a}$  with the predominantly locative postposition *ywo* ('into'). Another example is the semantically more transparent *nanype* ('there'), resulting from  $n\tilde{a}$  combined with *ype* ('at', 'in').

### 3.3.7.2 Particles

Apart from the TAM particles introduced in 3.3.4.2.2 there are various others occurring in the second or in the final position in the clause. These include evidential particles, particles of epistemic modality as well as topicalizers. Both, the second and the final clause position can be occupied by more than one particle whereby these occur in a fixed order which will not be further explored here. Another group of particles which occur as enclitics to host words of different classes are intensifiers.

# **3.3.7.2.1** Evidentiality, epistemic modality and expression of emotional involvement of the speaker

Aikhenvald (2004) describes evidentiality as a grammatical category which encodes the source of a piece of information, specifying the type of source it is based upon, e.g. visual or auditory evidence perceived by the speaker, inference from indirect evidence or information given to the speaker by another person. According to Aikhenvald, and unlike the conventions adopted by several other researchers, evidentiality encodes the way in which information was acquired, but does not necessarily relate to its reliability (the degree of a speaker's certainty), speaker attitude, or the truth value of the speaker's statement: "[...] expressing an appropriate information source [...] has nothing to do with one's 'epistemic stance', point of view or personal reliability'' (Aikhenvald 2004: 5). Aikhenvald

<sup>&</sup>lt;sup>232</sup> Cf. section 3.3.5.

argues against the fusion of evidentiality with such related categories (e.g. its subcategorization as part of epistemic modality) since it is fully independent of these in many languages of the world. Therefore she suggests that in order to classify a grammatical marker as belonging to the category of evidentiality its core meaning must be "source of information". Evidentials may, however, acquire "epistemic extensions", secondary meanings of reliability, probability or possibility, as also seems to be the case in Awetí. Another group of particles is used to express attitude or different degrees of emotional involvement of the speaker with regard to the utterance.

In the following only a few particles which can be unambiguously attributed to one or the other category will be illustrated by examples from the corpus. Most particles relating to these concepts require further analysis with data directly elicited from the speakers and participant observation of spontaneous conversation in order to be fully understood. For some particles distinct forms seem to exist in the male and the female variety of the language.

An evidential particle marking narrative discourse, indicating that the speaker has obtained the information by oral transmission and not witnessed the event him- or herself, is *ti*. This second position particle occurs in many of the examples from narrative texts used throughout this chapter.

Sequences of direct speech are often concluded with  $n\tilde{a}'e$ , a short form of the nominalized verb  $n\tilde{a}'etu$  ('he/she said') which may be alternatively used. Due to its frequent occurrence on its own, i.e. without any overt argument, this form has been analysed as a quotative,<sup>233</sup> marking the information as having been uttered by a specific person given by contextual information.

Another particle of evidentiality, however with epistemic extensions, is *a'ang* which is consistently used when speakers refer to events which have occurred in their own lives a long time ago or when giving general descriptions of things they know from personal experience. An example is (88), repeated here for convenience:

<sup>&</sup>lt;sup>233</sup> Cf. example (38).

#### (88) (kup\_autobiogr, 1150.597)

*It*= *eko-tu* **a'ang** *tepe*, *i*= *te-* '*a'aka -'a'aka -zoko-tu tene*. 1sg=walk.vi-NOM EVID FRUST, 1sg=REFL-RED- knock.vt-IMPF-NOM simply 'When I try to walk, I just keep knocking (myself) against things.' (lit.: 'My walking in vain (is) simply my continuously knocking myself.')

The information is thus marked as being first-hand but at the same time not verifiable by observation or – as Seki (2000: 345) puts it for a corresponding cognate particle in Kamaiurá: "[a'an] é usada nas situações em que as evidências disponíveis não são observáveis, mas internas ao falante".<sup>234</sup> The same particle, when used in a narrative text, may acquire an extended epistemic meaning, as in (117), where by using *a'ang* the narrator marks the truth-value of the proposition as false, suggesting that the protagonist tries to deceive someone:

(117) (tal\_kujakyt) 1490.606

N=upap a'ang ti kitã n=e-mi-pytyk.
3=vessel EVID EVID TOP 3=REL-NOMpat-take.vt
'(She made it appear as if) it had been the vessel that she had taken.'
(lit.: '(She made it appear as if) the vessel was her thing taken')

A clause-final epistemic particle, used to mark uncertainty with regard to the truthvalue of the proposition, is ika(za), as can be illustrated by (118):

(118) (kal\_mene, 2117.172)

*An ti-tuw-yka me, wan a'yt kara'iwa po-tup-u koj na'yt ikaza.* NEG 1pl:incl-see.vt-NOM PART, INTERR EMOT non-Indian ANTI-see-NOM there PART EPIST 'We didn't see them, whether the non-Indians saw them somewhere there, we don't know.'

The example further contains the frequently used second position particle a'yt, by which speakers generally signal their empathy with regard to the content of the utterance,

 $<sup>^{234}</sup>$  "[a'a $\eta$ ] is used in situations where the evidence available is not observable but internal to the speaker" [my translation].

especially when the narrated events are to the disadvantage of the protagonists. Another particle of this type, indicating some kind of emotional involvement of the speaker and occurring in clause-final position, has a male and a female variant. Examples for the male form *a'yza* are given in (25) and (71), the female form is *a'yto* as in (112):

(112) (tal mamuti 2 8, 0082.709)

"E=pe-(e)'ym akakyj i='e-tu a'yto, akyj",  $n\tilde{a}='e-tu$  ti me. 2sg=POSP-NEG TOP 1sg=say.vi-NOM EMOT, DEM, 3=say-NOM EVID PART 'Not to you was it that I spoke, you (know)", she said.

#### **3.3.7.2.2** Particles related to information structure

Two further particles which need to be mentioned here, since either one of them or a combination of both occur at the end of almost every clause in Awetí, are *a'yn* and *me*.<sup>235</sup> The specific function of these particles is not at all clear yet. Drude (2005, unpubl.) hypothesizes that it is related to information structure, distinguishing new information – communicated by a'yn – from given information, marked by *me*.

Other particles, occurring in the second clause-position, are related to and partially formally identical with demonstratives. Their function is to mark the constituent to their left as introducing a new topic or re-introducing a topic which had been mentioned before. This, as stated by Lambrecht (1994: 195), is the function of topicalization as well as left dislocation constructions. Foley (2007: 443) distinguishes between the two construction types by stating that in left dislocations a pronominal element within the clause referring to the topic NP must be present which is absent in topicalization. As stated by Drude (2006, unpubl.),<sup>236</sup> there are three topicalizing particles each in the male and the female variety of Awetí, as summarized in table 3.10

<sup>&</sup>lt;sup>235</sup> Since the initial consonant of the particle *me* adapts in place of articulation to the final consonant or glide of the previous word, there are the variant forms *ne*, *nge*, *wẽ* and *jẽ* (cf. Drude et al. forthcoming: 14, 4.5).

<sup>&</sup>lt;sup>236</sup> In a more recent analysis Drude (forthcoming a: 12, footnote 17) analyses them as elements typically marking cleft clauses.

Male variety	Female variety
jatã	ија
kitã	akyj
itã	akakyj

**Table 3.10: Topicalizers** 

Data suggests that these, from top to bottom, indicate an increasing spatial or temporal distance of the speaker towards the event. With the exception of those in the bottom row, they are formally identical with demonstratives.<sup>237</sup> The fact that they always occur in second position – following the topicalized constituent in the first position and any other second position particle in the clause – is the reason for analysing them as topicalizers in a topicalization construction. The topicalized constituents to their left thus occupy what Lambrecht (2001: 1052) calls a 'pre-clausal complementizer position' where they preserve their syntactic and semantic roles as complements of the verb.

The topicalized constituents can belong to the syntactic categories of NP, PP, verb and adverb. Topicalized NPs are illustrated by examples (119) and (120). They may consist of a simple noun or pronoun (*uja*), as in (119), a nominalization referring to a participant (*tukyt e'i'jap* ('the thing you call salt')), as in (120), or of an action nominal construction (*oywyza mota'oku*), as in (121), forming the predicate in a non-verbal clause:

(119) (tal\_kaminu, 0610.937)

*Uja akakyj tuky-zan e'i=e- mi- moypap a'yn ne.* DEM TOP salt -NFUT 2pl=REL- NOMpat- dry.vt PART PART "This is what you dry to become salt."

(lit.: "It is this to become salt, the thing that you dry.")

(120) (tal\_kaminu, 0615.404)

Tukyte'i = 'japakyjujaa'ynneuja'' $n\tilde{a} = 'e$ -tutia'ynsalt2pl= say-NOMinstrTOPDEMPARTPART, DEM, 3=say-NOMEVIDPART""The thing you call salt is this, you see", she said."

<sup>&</sup>lt;sup>237</sup> Cf. table 3.4 in section 3.3.3.

(lit.: "Your thing called salt is this, you see", she said.)

(121) (kal\_awakap1, 0123.05) *O*= ywy -za mo- ta'ok -(k)u ti kitã nã me.
3coref= brother-PL CAUS-angry.st -NOM EVID TOP 3sgPRO PART
'(They say that) he<sub>i</sub> deceived his<sub>i</sub> brothers.'
(lit.: 'The deceiving of his own brothers, this was (what) he (was).')

When a topicalized element consists of a PP, it may have the grammatical function of an oblique argument, as in (112), or of an adjunct, as represented by (37), where the PP formed with the postposition (y)wo represents a subordinate adjunct clause. Both examples are repeated here:

(112) (tal\_mamuti\_2\_8, 0082.709)

"E = pe -(e)'ym akakyj i = 'e -tu a'yto akyj",  $n\tilde{a} = 'e -tu$  ti me. 2sg=POSP-NEG TOP 1sg=say.vi -NOM EMOT, DEM, 3= say-NOM EVID PART "It wasn't to you that I spoke, you (not far)", she said.' (lit.: "Not to you it was my speaking, you", she said.')

(37) (tal\_kujakyt, 2593.133)

Ikwakuwe'ymy	WO	akakyj	uja	tsu	ange	po'apo'aretu	
I= kwakup -e'ym -y(tu)	wo	akakyj	uja	tsu	ange	po'a- po'at -e	-tu
1sg=like.vt -NEG -NOMqual	SUB	ТОР	DEM	like	mother.VOC	RED-make.vt -EPE	N-NOM
it= ete a'yn ne, ujaza	!						

1sg=POSP PART PART, DEM.PL

'It was because she didn't like me that my mother treated me like that, (you) folks (nearby)!'

(lit.: 'Because of (her) not liking me like that was my mother's making with me, (you) folks (nearby)!')

Adverbs, like other adjuncts, may also be topicalized.

(95) (kal\_awytyza1, 1602.064)  $M\tilde{a}$  *itã* n=u'wyp a'yn *ne*. here TOP 3= arrow PART PART 'Here are their arrows.'

## 3.3.7.2.3 Intensifying particles

Intensifiers occur as clitics after the heads they modify. These can consist of active or stative verbs, as in (122) and (123), nouns, as in (124), postpositions, as in (95), adverbs, as in (99), and interjections, as in (125):

(122) (kal\_tawozy3, 0275.022)

Mu'jẽ ti'yto kaminu'at o-kyzyge=katu'yto, t-uwur-uwut =katu'yto me.already EVID soboy3-grow.vi =INTENSso3-RED- tall.st =INTENSsoPART'There the boy had already grown a lot, there he had become quite tall.'

(123) (kal\_tawozy4, 0492.076) *I-katu = 'ytoto jatã nã me.*3-good.st=INTENS TOP 3PRO PART
'This is really good.'

(124) (kal\_kamakuaka6, 1310.526) *Ta'wat='ytoto i=pinim -ytu*jaguar =INTENS 3=spot.st -NOM
'The real jaguar is (the) spotted (one).'

(95) (tal\_kyjakyt, 0858.541)

*Mimo a- mo- loge*  $\tilde{\iota}$  *akoj ype* =*katu, a- mo- loge*  $\tilde{\iota}$  *a'yn ne.* Yesterday 1sg-CAUS-get.out.vi 3sgPRO DEM POSP=INTENS, 1sg-CAUS-get.out 3sgPRO PART PART Yesterday I pulled it out right there.' (99) (tal\_mamuti\_4\_8, 0280.435) *Kaparype=katu nã me, atu?*Where =INTENS 3PRO PART, Granddad
'Where exactly is it, Granddad?'

(125) (tal\_mamuti\_3\_8, 0961.288)

Atsy ='ytoto uja tsu i= po'a- po'ar -e -zoko-tu it= ete me, uja! INTERJ =INTENS DEM like 3sgF=RED-make.vt -EPEN-IMPF-NOM 1sg= POSP PART, DEM 'It's really disgusting that she keeps treating me like that, you know!' (lit.: 'Her constantly treating me like that is really disgusting, you know.')

The choice of intensifier further seems to depend on the word class or even on the individual lexeme it attaches to.

## 3.3.7.3 Interjections

Another word class in Awetí is formed by interjections. Interjections are morphologically invariant. Like ideophones they have been referred to as "vocal gestures"<sup>238</sup>, possibly to account for the marked prosody they are uttered with. Unlike many ideophones, however, interjections are in most cases uttered only once. Only some of them can be repeated. Syntactically, an interjection may form a clause by itself, as in (126):

(126) (kal\_sham\_myth, 0785.131)

Ho,mo'at a'yn,n=apatema'yn.INTERJ-admiration.of.sth.big,person PART,3= witchcraft.itemPART'It was huge,it was (like) a person,his witchcraft item.'

However, it may also function as a non-verbal predicate, occurring with a subject NP. This is shown in (127) and in (125), repeated here, where the interjection is additionally modified by an intensifier:

<sup>&</sup>lt;sup>238</sup> Cf. Ameka (1992: 106).

(127) (tal\_mamuti\_2\_8) (0583.331)

N=e- miwãjpe Pirekytang, n=e- miwãjpe ti **tehe**.<sup>239</sup> 3= REL-collar kind.of.bird, 3= REL-collar EVID INTERJ-admiration.of.beauty 'Its collar, the Pirekytang('s collar), its collar was tehe (beautiful).'

(125) (tal\_mamuti\_3\_8, 0961.288)

Atsy ='ytoto [uja tsu i= po'a-po'are-zoko-tu it= ete] me, uja! INTERJ=INTENS DEM like 3sgF= RED- make.vt-IMPF-NOM 1sg=POSP PART, DEM 'I'm really disgusted that she keeps treating me like that, you know!' (lit.: 'Her constantly treating me like that is very disgusting, you know.')

If interjections do not form an independent clause, they most often occupy the first clause position, as in (125) and (126). Unlike ideophones which vary in this respect, all interjections are conventionalized. Semantically, interjections represent human attitudes and physical or mental sensations and thus correspond to the semantics of stative intransitive verbs. They may be vocalized as part of reported speech or constitute a metacommentary of the speaker or narrator. Their forms are clearly not motivated by sound. As outlined in the introduction, interjections and ideophones in Awetí have several features in common and in a few cases it is difficult to clearly differentiate one from the other. This can be illustrated by the example of aka, a form which always occurs repeatedly. In (128) it depicts the vocal act of crying and may thus be classified as an ideophone of group II, but these ideophones have a non-arbitrary sound-meaning relation which is not given by aka:

(128) (tal\_kamu\_kwat1) (0628.839)

Kyryryryry kaminu'd	at pyw,	aka aka aka aka,	pok	-yhy
IDEO.drag boy	IDEO.grab	cry.with.fear	IDEO.pt	ut -INTENS
mõj watu kyty,	kyryryry kyryry	vry, kon.		
snake big for	IDEO.ingest	IDEO.swallow		

<sup>&</sup>lt;sup>239</sup> There are three variants of this ideophone: *te*, *tehe* and *tehehe* whereby the addition of a syllable seems to enhance the intensity of beauty of the person or object admired. This behaviour is similar to that of the suffix -y(hy) occurring with ideophones (cf. section 4.3). However, unlike the suffix -y(hy) the extension *-hehe* is restricted to the interjection *te*.

'He dragged along a boy who was crying, held him (by the wrist). He threw him to the ground for the big snake to fetch him. The snake ingested and swallowed him.'

Another hybrid case is given in (129) from a narrative, in which a character, by whistling to his family, tries to catch their attention to warn them of a danger they are unaware of:

(129) kal\_makawaja, 1646.41)

"Wiw". e'i a'vt tepe ti a'yn,  $n\tilde{a}$ =tepopy -tu me. wo INTERJ 3say EMOT FRUST EVID PART 3= whistle.vi-NOM SUB PART "Wiw, pej- ut kat tup -aw, kitsaza", e'i a'vt tepe ti etsan a'vn. INTERJ, IMPpl-come.vi for.a.while monster see.vt-GER, DEMpl 3say EMOT FRUST EVID PART 'The poor one tried to catch their attention in vain, when he whistled. "Wiw! Come and see the monsters, folks", he said in vain.'

The element *wiw* has been analysed as an interjection referring to the attitude of calling attention or warning, especially since a following temporal subordinate clause *nãtepepytu wo* ('when he whistled in vain') should give supplementary information and not – if *wiw* were classified as an ideophone depicting the act of whistling – simply repeat the information of the main clause. In other contexts, however, *wiw* can have the function of an ideophone. Therefore it is assumed that the interjection has formed from the ideophone in attributing a specific attitude to an activity which is depicted by imitation of sound.

#### 3.3.8 Derivation

The most productive process of word formation in Awetí is affixation. Derivational morphemes are attached to specific word categories to form new lexical items. This may lead to a change of word class, basically between nouns and verbs, or of valency in verbs. With the exception of noun-incorporation which may be regarded as such, there is no compounding in Awetí. Instead, two nouns may be combined in a possessive construction.<sup>240</sup>

<sup>&</sup>lt;sup>240</sup> Cf. section 3.3.1.6.

In the following the derivational affixes will be presented and exemplified.

## 3.3.8.1 Change of word class: Nominalizations

There are a number of deverbal nominalizations in Awetí, formed with the suffixes -(t)u, -ytu, -at and -ap or with the prefix *mi*-.<sup>241</sup> Depending on their degree of nominalization determined by context, these may function as nominal constructions, referring to different aspects or participants associated with the event expressed by the verb, or they may be sentential, expressing a complete proposition. In the latter case, they function as predicates of non-verbal clauses alternatively to finite verbs, as predicates in subordinate structures or – in combination with specific verbs – as sentential complements in verbal clauses.

The respective degree of nominalization of these forms is reflected in their combinability with nominal and verbal morphological and syntactic features.

Another type of nominalization, which in Tupian studies has been termed a 'gerund', is formed with the suffix *-aw*. Although it has mostly nominal features, it differs from the other nominalizations in always having a verbal reading. The types of nominalizations are summarized in table 3.11.

Affix	Nominalization Type	Section
-tu	Action nominal: main clause	3.3.8.1.1
	complement clause	3.3.9.4.1
	adjunct clause	3.3.9.4.2
	Object/ result nominal	3.3.8.1.2
-(y)tu	Nominalization of bearer of quality	3.3.8.1.3
-at	Agentive nominalization; nominalization of	3.3.8.1.4
	bearer of quality	
-ap	Instrumental/ locative nominalization	3.3.8.1.5

**Table 3.11: Types of nominalizations** 

<sup>&</sup>lt;sup>241</sup> Several of these forms have various allomorphs due to morphophonological processes described in section 3.2. See also 3.2, footnote 148 for a variant behavior with regard to lenition of preceding consonants, depending on the specific suffix in question.

	relative clause	3.3.9.4.3
	adjunct clause	3.3.9.4.2
mi-	Patient nominalization	3.3.8.1.6
	relative clause	3.3.9.4.3
-aw	'Gerund'; subordinate action nominal	3.3.8.1.7

Before describing the nominal and verbal properties of each form and the different functions it can assume, the features which generally distinguish nouns from verbs in Awetí are summarized in table 3.12.

 Table 3.12: Nominal and verbal features in Awetí

Nominal affixes	Verbal affixes
Relational prefix <i>e</i> - for alienable possession	Subject/ object prefixes
(REL)	Valency-changing affixes (VAL)
'Attributive' case suffix -(z)an (ATT)	Incorporated objects (INCORP)
Nominal tense suffixes -(p)ut, -(z)an (TempN)	Aspectual suffixes -(z)oko, -(e)ju (ASP)
Plural suffix <i>-za</i> (when denoting humans) (PL)	Negation with -(y)ka
Negation with -e'ym (NegN)	
Modifiers of nouns	Dependents of verbs
Possessor NP/ proclitic pronoun	Subject/ object NP unmarked for case (DepNP)
(NP-Poss/ Pro-Poss)	Postpositional phrase adjunct/ oblique argument
Demonstratives	(DepPP)
Numerals	
Stative verbs	
Relative clauses (nominalizations) (RC)	
Syntactic context of noun phrase	Syntactic context of verb phrase
Argument in verbal clause	Independent clause
Predicate in non-verbal clause	Main clause in clause chain
Predicate in subordinate clause	Predicate of verbal clause
complement of postposition (CompPP)	

Table 3.13 gives an overview over the nominal and verbal properties of each type of nominalization. Apart from the nominalization of stative verbs with *-at* which is relatively rare in the corpus, these will be illustrated in the sections thereafter. The nominalizations with *-ap* and *mi*- are listed twice, because in their function as relative clauses (RC)<sup>242</sup> they have got slightly different properties from the nominalizations discussed in sections 3.3.8.1.5 and 3.3.8.1.6.

NOMINAL	-tu	-ytu	-at	-at	-ap	-ap	mi-	mi-	-aw
Verb type	active	stative	active	stative	all	all	transitive	transitive	active
REL		Х			Х		X	(X)	
ATT		Х	Х						
TempN		Х	Х		Х	Х	X	Х	
PL		Х	Х						
NegN	Х	Х	Х		Х		X		Х
Poss	Х	Х	Х	Х	Х	Х	X	Х	Х
RC		Х				Х		Х	
Term	Х	Х	Х		Х		X		
CompPP	Х	Х	Х		Х	X	X	Х	

Table 3.13: Nominal and verbal properties of nominalizations

VERBAL	-tu	-ytu	-at	-at	-ap	-ap	mi-	mi-	-aw
VAL	Х								
INCORP	Х						Х	Х	
ASP	Х		Х		Х	Х	Х	Х	Х
ANTI	Х				Х	Х			Х
ТАМ	Х	Х							Х
DepNP	Х								
DepPP	Х		Х				Х	Х	Х

<sup>&</sup>lt;sup>242</sup> See section 3.3.9.4.3.

#### **3.3.8.1.1** Action nominal constructions

The most frequent type of nominalization in Awetí is formed by suffixing an active verb stem with -tu (or its allomorphs  $-u \sim -ku \sim -pu$ , depending on the coda of the verb stem<sup>243</sup>). It has all the characteristics described for "action nominals" by Comrie (1976b). According to his definition, which also underlies subsequent analyses by Comrie & Thompson (1985/2007) and Koptjevskaja-Tamm (1993, 2003), action nominals are "nouns derived from verbs (verbal nouns) with the general meaning of an action or a process, capable of inflecting or taking prepositions or postpositions in the same way as non-derived nouns, and showing reasonable productivity" (Comrie 1976b: 178). Action nominals constitute the heads of action nominal constructions (ANCs), and their dependents refer to the participants in the actions or processes expressed by the action nominals.

In Awetí, the relation between an action nominal and its dependents is signaled by nominal as well as by sentential syntactic means. Thus it corresponds to the first universal stipulated by Koptjevskaja-Tamm for ANCs, stating that their syntactic structure is always "parasitic", i.e. that the marking they use also serves other functions in the language, more specifically those of marking the elements in finite clauses or in possessive NPs.<sup>244</sup> This specific marking is due to their intermediate position between verbs and nouns. Of the four major types of ANCs identified by Koptjevskaja-Tamm<sup>245</sup>, on a scale ranging from a purely sentence-like to a purely NP-like type, the third, an 'ergative-possessive', and the fourth, a 'nominal' one, can both be found in Awetí. It is, however, difficult to draw a clear distinction between the two types in this language since the double-possessive nominal type always also can be classified as an ergative-possessive type, as will be explained further down.

## **ANCs as complements**

The 'nominal' type is represented by action nominal constructions which have the function of complements in matrix clauses, i.e. ANCs which constitute subordinate clauses functioning as arguments of finite verbs as well as of other ANCs. These complement clauses occur especially in sentences where the object referent semantically corresponds to

<sup>&</sup>lt;sup>243</sup> See Drude (2008: 83, footnote 24).
<sup>244</sup> Cf. Koptjevskaja-Tamm (2003: 725, 747).

<sup>&</sup>lt;sup>245</sup> See Koptievskaia-Tamm (2003: 726-736).

a stimulus, while the subject has an experiencer role.<sup>246</sup> In this type of ANC the only argument of an intransitive action nominal<sup>247</sup> as well as both arguments of a transitive action nominal occur in a possessive or double-possessive NP construction where – as in non-derived nouns – the possessor precedes the possessum.<sup>248</sup> In (130) and (131) the ANCs based on intransitive verbs have the function of object complements:

(130) (ti\_apuku, 0280.873) *Apaj tak -eju -tu a'yt a-kwawap*.
Dad cry.vi-IMPF-NOM EMOT 1sg-remember.vt
'I remember (my) Dad's crying.'

(131) (kal\_tawozy2, 0861.152)

*Mu'jẽ a'yt tepe itã n=ap kuje-tu ti- tup a'yza.* already EMOT FRUST TOP 3=wing fall.vi-NOM 1pl:incl-see.vt EMOT 'We have already seen his wings falling.'

(lit.: 'It is already that we have seen his wing's falling.')

Where the A and the P argument of the complement clause occur in a double possessive construction, A normally precedes P, an order which was also observed by Koptjevskaja-Tamm (2003: 732, 748) for other languages. The element directly preceding the action nominal has the function of a possessor and may consist of a full NP or of a proclitic pronoun which is formally identical to the possessor clitic on non-derived nouns.<sup>249</sup> In ANCs this element refers to the S or P argument of the verbal base. In the two direct possessive constructions<sup>250</sup> (132) and (46), repeated here for convenience, a pronominal P argument precedes the A argument:

<sup>&</sup>lt;sup>246</sup> According to a theory established by Vendler (1967), noun clauses, i.e. ANCs in complement position, may refer to propositions, facts and/or events, depending on the semantics of the matrix verb.

<sup>&</sup>lt;sup>247</sup> Following Koptjevskaja-Tamm (1993: 11), action nominals derived from intransitive verbs will henceforth be referred to as 'intransitive action nominals' and those derived from transitive verbs as 'transitive action nominals'.

<sup>&</sup>lt;sup>248</sup> Cf. section 3.3.1.6.

<sup>&</sup>lt;sup>249</sup> Cf. section 3.3.1.6, table 3.3.

<sup>&</sup>lt;sup>250</sup> Cf. section 3.3.1.6.

'I resent a lot that your mother scolded me.'

(lit.: 'I resent a lot your mother's scolding of me.')

(46) (tal\_mamuti\_1\_8, 0831.367)
"T-aty ='ytoto atu i= jupã-jupã-tu 'yp ywo", nã='e -tu ti a'yn.
3- hurt.st=INTENS Granddad 1sg=RED- beat -NOM stick POSP 3= say-NOM EVID PART A P

"It hurt a lot that Granddad repeatedly beat me with a stick", he said."

(lit.: "Granddad's repeatedly beating of me with a stick hurt a lot." he said.")

While in (132) the ANC functions as an object to the transitive matrix verb *atyka* ('resent'), in (46) it has the function of a subject to the intransitive stative matrix verb *aty* ('hurt').

In addition to its function as a subject or an object argument in a clause with a verbal predicate, this type of ANC can occur as an object in a postpositional phrase. Examples are given in (133) and (134) where the ANCs *o'ywo'ywõtu* ('the killing of him') and *tsãmopapu* ('the finishing off of them') are complements of the postpositions *pe* and *ete* respectively, together constituting oblique arguments:

(133) (kal\_awakap1, 1157.321)
Nan=ete ti kitã nã='e -tu u'wyp pe,
3=POSP EVID TOP 3= refer.vi-NOM arrow POSP,
o= 'ywo-'ywõ -tu pe 'e.
3coref=RED- kill.with.arrow.vt-NOM POSP PART

'By this heir refers to the arrow, to the killing of himi with arrows.'

(134) (kal awytyza2, 1231.295)

**Tsã=mopap-u** ete  $n\tilde{a}='ywy$  -zoko -tu a'yn. 3pl=finish.off.vt-NOM POSP 3= think.vi-IMPF-NOM PART 'He continuously thought about how to finish them off.' (lit.: 'He thought about the finishing off of them.')

The postpositional phrases are complements of  $n\tilde{a}$  'etu ('his saying', 'he said') in (133) and  $n\tilde{a}$  'ywyzokotu ('the killing of him') in (134) – themselves action nominals based on formally intransitive verbs which function as predicates in the independent matrix clause. They represent the other type of action nominals corresponding in function to a finite predicate, as will be described further down.

Apart from the features shown so far which illustrate that this complement-like type of ANC syntactically functions like an ordinary NP in Awetí, it also has a number of verbal features. One of them is that it obeys the restriction described for finite verbs which determines that only the term higher in the person-hierarchy can be marked on the verb form: While in examples (132) and (46) the obligatory order of A and P arguments corresponds to the natural order on the person-hierarchy with P in the 1<sup>st</sup> person ranking over A in the 2<sup>nd</sup> and 3<sup>rd</sup> person respectively, this is not so in (135). Here the subject referent in the 2<sup>nd</sup> person ranks higher than the 3<sup>rd</sup> person object referent which would normally occur as a proclitic pronoun or a lexical NP in front of the action nominal.

In order for the possessive construction to allow a direct marking of the A argument on the 'possessum', a special kind of 'antipassive' prefix po(r)-, directly attached to the transitive verb stem, needs to be inserted which has the function of demoting the P argument into an 'oblique' position.<sup>251</sup>

(135) (tal\_kujakyt, 2162.113)

*E=po- jopa-jopã -tu a'yt an a- kwakuw -yka.* 2sg=ANTI- RED- beat.vt -NOM EMOT NEG 1sg-want.vt -NEG 'I didn't want your beating (him) up.'

<sup>&</sup>lt;sup>251</sup> See section 3.3.8.2.3 for an analysis of this morpheme.

According to Queixalós & Gildea (2010: 14) many South American languages have an ergative organization of action nominalizations. This also applies to Awetí where the P-argument in an unmarked transitive ANC occupies the same position as the only argument in an intransitive ANC, while the A argument – as in the 'antipassive' construction in (135) – needs to be especially marked to occur in this position.<sup>252</sup>

Thus, example (135), which cannot be subsumed under what Koptjevskaja-Tamm terms the 'nominal possessive' type, may be classified as representing the 'ergative-possessive' type of ANCs characterized as showing a "genitivization of the Ps and Ss [...], which receive identical marking as opposed to the As" (Koptjevskaja-Tamm 2003: 729). Double-possessive constructions as in (132) and (46) where the order of A and P corresponds to the order prescribed by the person-hierarchy may be classified as both, purely 'nominal' and 'ergative-possessive' due to the fact that possessors as well as term arguments are unmarked for case and therefore formally identical and that S and P in ANCs by default occupy the same 'absolutive' position which makes the whole construction ergative.

Example (135) further illustrates that  $3^{rd}$  person arguments need not be overtly expressed, as is also the case in clauses with predicates consisting of finite verb forms. However, as in (136) from the same text, the object may also be given, and in this case – compared to (132) or (46) – the object follows the action nominal instead of preceding it as a second 'possessor', in order not to disrupt the natural A-P order in double possessive constructions. This way the structure becomes more clause-like:

(136) (tal\_kujakyt, 2166.159)

*"An a-kwakuw-yka", nã'e, "e= po- jopã-jopã -tu ĩ me."* NEG 1sg-want.vt-NEG QUOT 2sg=ANTI-RED- beat.vt-NOM 3sgFPRO PART *"I didn't want", she said, "your beating him up.""* 

This complement type of ANC may – as with *yp ywo* ('with a stick') in (46) above – additionally have its own oblique argument and/or adjunct. This is a clear verbal feature

<sup>&</sup>lt;sup>252</sup> The ergative marking of transitive subjects in predicates formed with -(t)u was already observed by Monserrat (2002: 197) who, due to a number of inconsistencies in her analysis of verbal prefixes (cf. Monserrat 1976), assumed that the ergative pattern was restricted to these forms.

which is not possible in an ordinary possessive construction. Another example for this feature is given in (137) where the PP *kitã tsu* ('like that') and the oblique argument *otutyt ete* ('(to) his uncle') are part of the ANC. In the mythological narrative the son, who is the chief of the jaguars, makes his uncle, a different species of cat, eat a soup containing thorns of the pequi fruit. These get stuck in his throat and henceforth make him roar in a characteristic way:

(137) (tal\_mamuti\_3\_8, 0532.255)

[An] nã=ty a'yt, Uperiru, an wej-kwakuw -yka o=mẽpyt kitã tsu
NEG 3=mother EMOT, PropN, NEG 3- like.vt -NEG 3coref=child DEM like
nã=po'a -tu o=tutyt ete ti [a'yn].
3= make.vi -NOM 3coref=uncle POSP EVID
'[Not] his mother, Uperiru, she didn't like that her son made his uncle (be) like that.'

(lit.: Not his mother, Uperiru, didn't like her son('s), his<sub>i</sub> making his<sub>i</sub> uncle like that.'

The marking of the oblique argument in (137) with the postposition *ete* is identical to the marking of this argument in a clause with the corresponding finite intransitive verb po'at ('make'), given in (138):

(138) (tal\_awaniwani, 0203.322)
Awaniwani ti 'azat ete o-po'at.
PropN EVID macaw POSP 3-make.vi
'Awaniwani made a macaw.'

This 'complement inheritance' in nominalizations has been observed crosslinguistically and discussed under different perspectives.<sup>253</sup> The order of constituents in (137) is not fixed, but it can be observed that the components of the ANC form one unit, i.e. they are not separated by any element of the matrix clause. This feature also applies to all the preceding examples. Furthermore, the whole construction must be seen as one clause

<sup>&</sup>lt;sup>253</sup> See Hoekstra (1986) who distinguishes a 'categorial' from a 'thematic' view on this matter.

constituent, which is clearly visible in examples like (130) above, where the second position particle *a'yt* occurs after the complex ANC *apaj takejutu* ('Dad's crying').

#### ANCs as clauses

A second type of ANC in Awetí differs in various respects from the complement-like type described so far in having additional verbal features and thus being more clause-like. These ANCs occur as independent clauses alternatively to finite verbal clauses, as in (139):

(139) (kup\_autobiogr, 1746.917)

*Kitā tsu-at e- mi'ing-mi'ing -e -tu tsā i=kyty.* DEM like-NOMag REL-RED- tell.v t-EPEN -NOM 2plPRO 1sg=POSP 'They kept telling those things to me.'

(lit.: 'The constant telling of those things were they to me.')

ANCs can further constitute subordinate clauses, when forming a sequence with a finite clause, as in (140), where the matrix clause is predicated by a finite form of the verb *ta'ok* ('to be angry'):

(140) (tal kakaja, 0630.764)

*An ti i-ta'og -yka a'yn*, *n=atitoza por- a'o -ju -tu nã*. NEG EVID 3-angry.st -NEG, PART 3= mother-in-law ANTI-scold.vt -IMPF-NOM 3PRO 'He wasn't angry (when) his mother-in-law was scolding him.'

Note that in both examples the elements of the ANC form a tight unit as they do when forming the complement of a matrix verb. That this need not be the case for this type of ANC can be illustrated by (141) to (143) where clitic pronouns refer to the respective S (in (141)), P (in (142)) or A argument (in (143)) of the action nominal in question:

(141) (kal\_awytyza1, 1377.712) *Kut, kut. Nã='y'u -tu ti 'y ete me.*IDEO.drink, 3= drink.vi -NOM EVID water POSP PART
'Kut kut kut. He drank water.'

(142) (kal awytyza1, 0369.924)

*Waraju jatã e'i=kỹj -tu, jatsaza.* savage TOP 2pl=kill.vt-NOM, DEM.PL 'It was the savages who killed you, folks.'

(143) (kup\_autobiogr, 0802.339)
I= por- ezo-to -tu kitã nã me.
1sg=ANTI- COM-go.vi-NOM TOP 3PRO PART
'I took her away (with me).'
(lit.: 'It was my going away with her.')

As in the complement type of ANCs, the arguments referring to the higher-ranking participant occupy the 'possessor' position immediately to the left of the action nominal. However, the unity of the ANCs is interrupted by other clausal elements such as a second position evidential particle *ti* in (141) or the second position topicalizing particles *jatã* and *kitã* in (142) and (143).<sup>254</sup> In addition, the clauses with an action nominal as a predicate are concluded by discourse particles (*me*) or demonstratives directed towards the interlocutor(s)<sup>255</sup> as in ordinary verbal clauses to which – according to the results at the present stage of analysis – they seem to completely correspond in function.<sup>256</sup> Thus, a sentence like (141) could equally be expressed by a finite structure, as illustrated by a similar example (144) with a finite predicate:

(144) (tal\_kakaja, 1200.969)

*O-'y'u* ti nan=ete, mani'oky ete a'yn.
3-drink.vi EVID 3=POSP, manioc.drink POSP PART
'He drank it, manioc drink.'

<sup>&</sup>lt;sup>254</sup> Cf. section 3.3.7.2.2.

<sup>&</sup>lt;sup>255</sup> Cf. section 3.3.3.

<sup>&</sup>lt;sup>256</sup> See, however, section 3.3.9.3 for a theory of a thetic/ categorical distinction in discourse, outlined by Sasse (1987), which may at some point have been relevant for the choice between a finite predicate and a nominalization in Awetí.

In ANCs derived from transitive verbs with two  $3^{rd}$  person arguments not only the P argument, as *ka'awatu* ('forest') in (145), may occur in the 'possessor' position immediately in front of the action nominal, but also the A argument, as *apaj* ('Dad') in (12), repeated here:

(145) (tal\_kakaja, 0111.016)

Ka'awatu tup-utinã.forestsee.vt-NOMEVID3PRO'(They say that) he saw a forest.'

(12) (kal\_awytyza1, 0787.586)

Kujtã t = e- tam -ut ywo wazotsu **apaj po- mi'ing -ku nã** ' $\tilde{e}$ . DEM 3= REL-village-NPST POSP only Dad ANTI-tell.vt -NOM 3PRO PART 'There in that (their) old village (my) Dad told it only (once).'

In example (12) the use of the 'antipassive' construction seems to be semantically or pragmatically motivated in that an animate agent participant in a transitive clause is more prominent than an inanimate patient. Therefore the possessor NP *apaj* ('Dad') immediately in front of the action nominal refers to the agent. However, the prefix po(r)- may also be inserted when both 3<sup>rd</sup> person term referents are on an equal level with regard to animacy. In this case, as will be outlined in section 3.3.8.2.3, the prefix has a pragmatic function of change of perspective.

The fixed order within this clausal type of ANC of one term argument to directly precede the action nominal, while the other term may occur in different positions or be altogether unexpressed, is not the only pattern encountered in Awetí. Example (85), repeated here, illustrates that this type of ANC admits a second position particle *tene* between the 'possessor' *pira'yt* ('fish') and the action nominal '*uzokotu* ('habitual eating'):

(85) (kal\_tawozy3, 0749.584)
Nã=tsu-e'ym utepe [pira'yt tene 'u -zoko-tu nã ].
3= like-NEG IRR fish simply eat.vt-IMPF -NOM 3PRO,

An utepe wej-mo- kyr'azã -ka a'yn.

NEG IRR 3- CAUS- become.fat.vi -NEG PART

'It wouldn't be like that, if he simply had the habit to eat fish. He wouldn't become fat.' (lit.: 'Not like that would be his habitually eating fish. It wouldn't make him fat.')

At the same time this example is a good illustration of the hybrid status of the ANC by having two second position particles in one sentence at different positions: *tene* in the second position within the ANC, making it clause-like, the other, *utepe*, after the adjunct *nãtsue'ym* ('not like that'), thus turning the whole ANC into an NP-like predicative complement of another clause, as indicated by the brackets.

A more unusual pattern can be illustrated by the following sequence (146), uttered by a male speaker when describing puberty seclusion:

(146) (maw\_male\_recl, 0213.688)

Nã=tsu wezanu. Pok, por- ezekvp nã -u me. IDEO.put.down, ANTI-COM- go.down.vi -NOM 3PRO PART, 3=like again por- 'ok-'og **-**e -tu zanu, ANTI-RED-take.off.vt-EPEN-NOM again, a'yt kyty zanu nã por- ymywaje -tu w =me, tsuuuu. ANTI-cool.down.vt-NOM 3coref=son POSP again 3PRO PART, IDEO.pour.water '(It is) like that again. He puts it (the liquid) down together with them (the herbs), he takes them (the herbs) out again, he<sub>i</sub> cools it (the liquid) down again for his<sub>i</sub> son.'

In the sequence three transitive action nominals functioning as predicates of independent clauses occur without any immediately preceding NP or clitic pronoun representing one of the term arguments. All three are marked by the 'antipassive' prefix *por-*, indicating that the unexpressed arguments – throughout the sequence – have the semantic role of the agent. As in (12), the use of the 'antipassive' construction may be motivated by the higher degree of animacy of the agent participant. In two of the three clauses a  $3^{rd}$  person pronoun appears behind the action nominal. Under regular conditions, i.e. with an obligatory A argument in front of the action nominal, it would represent the P

argument and is interpreted as such for pragmatic reasons,<sup>257</sup> even though it could be either, A or P, since both term arguments in Awetí are unmarked.

The defective construction in sequence (146), which is used by this speaker throughout his discourse, does not occur anywhere else in the corpus. Nevertheless, it may indicate a tendency in less careful speech (compared to narrative discourse) to leave the possessor in front of po(r)- unexpressed in a discourse environment where the agent participant referred to is known. A further observation which illustrates the in-between status of this type of ANC between verbal clause and NP is the fact that the second position particle *zanu* ('again') in the third ANC in (146) occurs behind the adjunct *wa'yt kyty* ('for his son') so that this PP component of the ANC forms a unit with the action nominal, while at the same time the object  $n\tilde{a}$  of the ANC is separated as it would be in a finite clause.

## **Combinatorial restrictions of ANCs**

One verbal feature which can be found in both types of ANC is the combinability of the action nominal with morphological aspect, as with the imperfective suffix -(z)oko in (85), with -(e)ju in (130) and (140) above and with the optative -tut in (148) below, as well as with reduplication, e.g. in (133) and (136).

Other verbal morphemes with which these forms may be combined are the valencychanging affixes which will be described in section 3.3.8.2.

An example for object incorporation is given in (147):

(147) (tal\_kamu\_kwat, 0774.008) *Nã=por- ãj- mo'ege-tu nã me, mu'jẽ.*3= ANTI-tooth-make.vt -NOM 3PRO PART, finished
'He<sub>i</sub> made his<sub>i</sub> tooth, finished it.'

(lit.: 'He tooth-made him.')

In (147) the possessor of the incorporated object within the ANC as a whole is the argument to which the semantic role of beneficiary or recipient is assigned. It is expressed

<sup>&</sup>lt;sup>257</sup> Cf. Du Bois (1987) and section 3.3.9.2. England (1983: 9, (18)(c)), however, states for the antipassive in the Mayan language Mam that in a similar construction with two 3<sup>rd</sup> person arguments the lexically represented NP corresponds to the ergative subject.

by a free pronoun  $n\tilde{a}$  following the action nominal, while the A argument is realized as a proclitic pronoun to the action nominal. The incorporated noun  $\tilde{a}j$  ('tooth') has the function of a P argument. In the Awetí corpus this construction with an 'antipassive' and an incorporated object is preferred when the object to the verb *mo'ege* is a directly possessible noun referring to a body-part.

Tense, which in Awetí verbs is not morphologically marked, is expressed syntactically in the verbal type of ANC by particles such as *tut* for future time in (105), repeated for convenience:

(105) (kal\_mene, 0184.869) *Kajpopap tut azo= ka'at -u", e'i ti tsãn a'yn.*five FUT lpl:incl=sleep.in.forest-NOM, 3say EVID 3plPRO PART
"We will sleep in the forest for five nights", they said."
(lit.: "Five will be our sleeping in the forest", they said.")

Other TAM particles which combine with finite verb forms can also occur with ANCs. This type of nominalization, unlike all other types with the exception of the gerund, does not permit a combination with suffixes of nominal tense.<sup>258</sup>

Negation in the verbal type of ANC is nominal but does not combine with the action nominal the same way as it combines with an ordinary non-derived noun where the suffix - e'ym is attached to the form. In action nominals the negative suffix is affixed to the verb root and followed by the nominalizing suffix -tu which phonologically assimilates to the bilabial coda of the preceding morpheme. An example is given in (148):

(148) (kal awakap1, 0668.116)

Nã=temoto -tur -e'ym-pu ti kitã me,
3= surrender.vi -OPT-NEG -NOM EVID DEM PART
Awakapipytang'e-ju -tu wo w= epe me.
PropN.call.vi -IMPF -NOM SUB 3coref= POSP PART
'He<sub>i</sub> did not want to surrender, when they were calling him<sub>i</sub> Awakapipytang.'

<sup>&</sup>lt;sup>258</sup> Cf. TempN in table 3.13.

In (148) the ANC *nãtemototure'ympu* ('his not wanting to surrender') containing the negation is the predicate of the matrix clause to which the following ANC – marked with the subordinator wo – is an adjunct clause.<sup>259</sup> Adjunct clauses which in Awetí are formed by an ANC of the clausal type described here and a locative postposition, analysed as a subordinator, are described in more detail in section 3.3.9.4.2.

Drude (2008: 86) categorizes the nominalizations which have been analysed as action nominals in this section as expressing the subjunctive mood, contrasting with the indicative expressed by finite verbal predicates, due to their frequent occurrence as predicates of main and – according to his analyses – especially of subordinate clauses. Although opting for this single analysis of the -(t)u forms, Drude (2008: 84) also mentions the existence of certain properties of nominalizations. The term 'circumstantial mood' was introduced by Rodrigues (1981) for similar constructions in Tupinambá consisting of verb forms suffixed by -i which can also be found in other TG-languages. These, however, seem to be considerably more restricted in use by a specific syntactic environment. Drude (2008: 85) states that the restriction observed for TG-languages exists as a tendency in Awetí, according to which -(t)u forms preferably co-occur with adverbial expressions at the beginning of the sentence. He concludes that this may be an indicator for a pragmatic difference to verbal predicates by thus making "the situation expressed by the verb less salient in comparison to other components of the sentence". As shown by many of the examples, action nominals occur in a variety of syntactic environments and only partially have adverbial expressions at the beginning of the sentence. It is, however, true that clauses beginning with an adverbial expression generally have an action nominal as a predicate. This may indicate a possible direction of development for this construction from a restricted use as prevalent in TG-languages to a more general one. In order to further pursue Drude's hypothesis, a quantitative corpus analysis would be appropriate which exceeds the scope of this grammatical sketch.

Another cross-linguistic observation with regard to action nominals in Tupian is that in some TG-languages they only occur with third person subjects (Jensen 1998: 526, Seki

<sup>&</sup>lt;sup>259</sup> Contrasting with this corpus example, Drude (forthcoming a: 16, footnote 24) states that negated forms of this type can only occur as complement clauses.

2000: 131). This, again, is not the case in Awetí where these forms can occur with clitic personal pronouns referring to all persons. Yet, there is a tendency for pronominal A arguments to occur primarily in the  $3^{rd}$  person.

According to Awetí corpus data action nominals are frequently used alternatively to ordinary verb forms, and the restrictions observed for TG-languages only exist as tendencies. Therefore, they will not be treated here as expressing a specific mood in current language use, even though this may at one time have been their function. Rather, ANCs of the 'clausal type' in Awetí seem to have assumed more verbal features than comparable structures in TG-languages and may thus occupy a position nearer to the verbal end on a continuum between noun and verb as postulated by Koptjevskaja-Tamm (2003).

Based on the fact that action nominals function as non-verbal predicates in non-verbal clauses it has been suggested for other languages, that these clauses in comparison to finite verbal clauses should be described as event-central thetic structures.<sup>260</sup> This line of research, proposed by Sasse (1987), will further be pursued in section 3.3.9.3, since there is evidence that ANCs, which in this section have been described as tending to develop into alternative structures to clauses with finite predicates without showing any functional difference, may originally have had a discourse function attributed to thetic statements. This hypothesis is relevant for a possible developmental process from ideophones via action nominals to verb roots which will be outlined in section 5.3.2.

#### 3.3.8.1.2 Object and result nominals

In addition to nominalizations formed by the suffixation of *-tu* frequently occurring as action nominals, the same process may also derive nouns from verbs which do not refer to an event but to the object or the result of an action. This cross-linguistic tendency of deriving nouns from verbs which are polysemous in expressing both a more abstract and a more concrete meaning, has also been observed by Koptjevskaja-Tamm (1993: 20), who distinguishes mode, act, result and object nominals with less abstract meanings, of which one or more may be existent in a language. An example for this process, which does not appear to be very productive in Awetí, most forms being fully lexicalized, is *ti'ingku* ('language, tongue, voice') as opposed to the formally identical action nominal in (149):

<sup>&</sup>lt;sup>260</sup> See e.g. Wegener (2008: 323f.) on non-verbal clauses in the Papuan language Savosavo.

(149) (kal tawozy2, 0099.122)

"Nã=ti'ingku-put utepe jatã ti- 'u me, 3= voice -NPST IRR TOP 1pl:incl- eat.vt PART, kaj= ti'ing -ku =wã tutepe a'vn."

1pl:incl- speak.vi -NOM =COMPL IRR PART

"If we ate what used to be its (the turtle's) voice, we would speak everything", (said the hawk to his comrades)."

(Context: In the narrative the blood of a big turtle, when eaten by a bird, turns into the bird's voice.)

The difference between the two nominalizations in this example is especially transparent due to their respective morphological restrictions since the first, the result nominal, is combined with a nominal tense suffix like an ordinary noun but unlike an action nominal, while the second, the action nominal, combines with an aspectual particle.

Another morphological difference between the action and the result usage of these nominalizations can be observed in (150)(a), with *toti'ingku* ('conversation') which, like *ti'ingku*, is derived from the verb root *ti'ing* ('to speak'):

(150) a. (kal\_mene, 0061.388)

Nanype ti **tsã=toti'ingku** ẽtup -eju -tu meeeee. There EVID 3pl= conversation listen.vt-IMPF -NOM PART 'There they were listening to their conversation (for a long time).' (lit.: 'There was the listening to their conversation.')

b. (kal\_angut2, 0310.125) *Tsã= to- ezo- ti'ing -eju -tu zanu ti morekwa-za.*3pl= REC-COM-speak.vi -IMPF -NOM again EVID chief-PL
'The chiefs started to talk again among each other.'

In (150)(a) the analysis of *tsãtoti'ingku* can only be that of an object NP to the predicate *etupejutu* ('listening'). A nominal predicate meaning 'they were talking to each other'

would have required an additional valency-increasing prefix *ezo*-, as in (150)(b). Otherwise the detransitivizing *to*- would not be able to combine with the intransitive verb root *ti'ing*.<sup>261</sup>

# 3.3.8.1.3 Nominalization of 'bearer of quality'

There are nominalizations of stative verbs formed with the suffix  $-(y)tu^{262}$  which refer to the bearer of a certain quality. They take the possessor clitics *t*-/*i*- which in other types of possessive constructions are only used by female speakers<sup>263</sup> or are preceded by a possessor NP. As pointed out by Drude (unpubl.: 12), they are restricted to the 3<sup>rd</sup> person. Two examples are given in (151) and (152):

(151) (kal\_kamakuaka6, 1310.526) *Ta'wat='ytoto i=pinim -ytu.*jaguar=INTENS 3=spot.st -NOMqual
'The real jaguar is (the) spotted (one).'

(152) (maw\_male-recl, 0532.717)

*Kiraj-kiraj -e'ym-ytu -zan (w)ezotsu kitã pira'yt 'u -zoko -tu wian ogywan.* RED- tasty.st-NEG -NOMqual-ATT only TOP fish eat.vt-IMPF -NOM still boy.in.reclusion 'The boy in (puberty) reclusion still only eats fish which is not tasty at all.'

(lit.: 'Only in the function of one which is not tasty at all is the fish the boy is still in the habit of eating.')

<sup>&</sup>lt;sup>261</sup> Cf. section 3.3.8.2.2.

<sup>&</sup>lt;sup>262</sup> The allomorph *-tu* is used after the aspectual suffixes *-zoko* and *-ju* (see section 3.3.8.3.1).

<sup>&</sup>lt;sup>263</sup> These clitics are formally identical to the person prefixes in stative verbs, but due to the fact that the nominalization also marks the difference between alienable and inalienable possession in predicatively used nouns, e.g. in (153), by the prefixation of *e*- to the root, the person markers need to be analysed as nominal clitic pronouns referring to the possessor. See also Drude (forthcoming a: 7) who suggests the existence of a nominalizing circumfix i/t-...-(y)tu.

This type of nominalization may be combined with nominal morphology and can also be found on nouns when functioning as predicates.  $^{264}$  This is shown in examples (153) to (155):

(153) (kal\_angut2, 1032.823)

T=e-'yzapwaj-ytu-put,t-atãzotsututti3= REL-feather.headdress-NOMqual-NPST,3-tight.stindeed FUT EVID'yzapwajjung-kua'yn.feather.headdressput.vt-NOMPART

'The one who had (had) a feather headdress, he will put the feather headdress tight indeed (lit.: the fastening of his feather headdress will be tight indeed)'

(154) (awu\_fishing, 0607.5)

T=a'yr - e'ym - ytu kitã me, an a'yt t-emiar-yka o = ut -aw a'yn. 3= child-NEG -NOM DEM PART, NEG EMOT 3-fish.st -NEG 3coref= come-GER PART 'That is one who doesn't have children, poor him doesn't have fish to come/expect'

(155) (awu\_fishing, 0611.946)

T=a'yr -ytu -za wan t-emiat watu o = ut -aw a'yn. 3= child-NOMqual-PL but 3-fish.st AUG 3coref= come.vt -GER PART 'But those who do have children have a lot of fish to come.' (lit.: 'But (of) those with children the coming of fish is a lot.')

As illustrated in (153) in opposition to (154) and (155), these forms also mark the distinction between alienable and inalienable possession by the presence or absence of the relational prefix *e*-. Another nominal feature is their combinability with suffixes of nominal tense, as illustrated in (153), a plural marker *-za* for human referents, as in (154), and the suffix of nominal negation which in (152) and (155) occurs before the nominalizing suffix.

As can be seen in (152), too, the nominalization, as any other NP, can receive a casemarker -(z)an, indicating in this case that the complement occurs as an attribute of the complement *pira'yt* ('fish') functioning as an 'object' – structurally a possessor – of the

<sup>&</sup>lt;sup>264</sup> Cf. section 3.3.4.1.

action nominal. A nominalization marked with the suffix *-ytu* can also function as a relative clause, as will be outlined in section 3.3.9.4.3.

## 3.3.8.1.4 Agentive nominalization

The suffix *-at* (with the allomorphs *-pat*  $\sim$  *-tat*  $\sim$  *-kat*) derives nouns from active verb stems which refer to the agent of the activity expressed by the verb:

(156) (kal\_makawaja, 1507.232) *Out a'yn, out ti 'ukakyt pytykaput a'yn.*o-ut a'yn, o-ut ti 'ukakyt pytyk-at-put a'yn
3-come PART, 3-come.vi EVID rooster grab.vt-NOMag-NPST PART
'He came, the former thief (lit.: grabber) of the rooster came (home).'

Although it can mostly be found in combinations with transitive verb stems, where – as shown in (156) – the 'object' must be marked by a noun or by a clitic pronoun in the possessor position of the nominal construction, there are also several examples with intransitives: <sup>265</sup>

(157) (kup\_autobiogr, 1318.337)

Nãkujtãtupejatne.Nãkujtãt=up-eju-atne.3PRODEM3=be.vi-IMPF-NOMPART'It's over there where he is.'(lit.: 'It is his stayer over there.')

(158) (ulawalu\_year, 0781.687)

Kujãakyjto-atkujãpuryzae-moreta-zan.womanDEM go.vi-NOMwomen.folksREL-inviter-ATT

'A woman is the one who goes as an inviter of the women folks.'

(lit.: 'It is a woman, the goer as an inviter of the women folks.')

<sup>&</sup>lt;sup>265</sup> In Kamaiurá (cf. Seki 2000: 121) and other TG languages (cf. Jensen 1998: 540) this kind of nominalization is only possible with transitive verbs.

# (159) (awu\_fishing, 0591.206)

*'Atu-are'ym* kitã ozokyty me, tumã, an o'atuka a'yn. 'Atu -at -e'ym kitã ozo= kyty me, tumã, an o- 'atu-ka a'yn. die.vi-NOMag-NEG TOP 1pl:excl=for PART, kind.of.fish NEG 3- die.vi-NEG PART 'The one who doesn't die (lit.: the non-dyer) for us is the pirarara, it doesn't die.'

The fact that in (158) and (159) there is no possessor ('subject') marked at all while in (157) a possible 'subject' marker resembles the third person prefix of stative verbs or rather the clitic pronoun of the female variety has to remain an open question at this stage of analysis. Possibly there is a connection between this phenomenon and the fact that in ordinary nouns, too, there is a distinction between nouns the referents of which are possessible and nouns with non-possessible referents.<sup>266</sup> As illustrated by the suffix *-eju* of imperfective aspect in (157), aspectual distinctions of the verb are maintained in these forms.

In addition, example (159) shows that an adjunct (*ozokyty* 'for us') can be integrated in the nominal construction (*'atuare'ym* 'the one who doesn't die') which in this respect syntactically resembles a clause. Nominal properties, apart from the possessor NPs or clitics, are suffixes of nominal tense, as *-put* in (156), and the nominal negation *-e'ym*, as in (158). With regard to nominal future, there is a certain difficulty to distinguish between this deverbal form and the so-called "attributive" case marking on nouns as described in sections 3.3.1.3 and 3.3.1.5. An example is given in (160):

<sup>(160) (</sup>kal\_mene, 0997.13)

Tsãpozỹ	tu		ti	nã	me(t)	, <b>o'a</b>		etsa	zan.	
tsã=po-	zỹ	-tu	ti	nã	met,	о=	'a	etse	-at	-an
3pl=ANT	I-put.on.vt	-NOM	EVID	3PRO	PART	, 3core	f=head <sup>267</sup>	fit	-NC	Mag-ATT
'They <sub>i</sub> put them on to fit on their <sub>i</sub> head.'										
(lit.: 'It was their <sub>i</sub> putting them on as fitters of their <sub>i</sub> heads.' or										

'It was their<sub>i</sub> putting them on, the ones that would fit their<sub>i</sub> heads.')

<sup>&</sup>lt;sup>266</sup> Cf. section 3.3.1.6.

<sup>&</sup>lt;sup>267</sup> The lexeme for 'head' in Awetí is 'aput.

The suffix *-at* can also be combined with stative verbs deriving nouns referring to entities characterized by states:

(161) (kal\_makawaja, 1392.566) *Ipukuare'ym* kitã 'ã.
I=puku -at -e'ym kitã 'ã.
3=long.st-NOMag-NEG DEM PART
'He is not a long one (i.e. one that survives for a long time), that one.'

This nominalization which at the current stage of analysis appears to have a similar if not identical function to the nominalization with *-ytu* outlined in the previous sub-section is not a very productive process.<sup>268</sup>

# 3.3.8.1.5 Circumstantial, instrumental and locative nominalization

The suffix -ap (with the allomorphs  $-kap \sim -pap \sim -tap$ ) may be combined with transitive as well as with intransitive active and stative verbs to form what for other Tupian languages has been termed a nominalization of 'circumstance' (cf. Jensen 1998: 540), also referring to an instrument or to a place. Like other deverbal nominalizations this form may be preceded either by a clitic pronoun (as in (162)) or by a noun phrase (as in (163)) which, depending on the verb stem, represent the subject of intransitives or a transitive object:

(162) (kal\_awytyza1, 0012.918)

Nan=etewian jatã a-mowka-zoko'enne'a'ẽ, [...]3=POSP stillTOP 1sg- tell.vt-IMPF2sgPRO PART PART PART,tsãtokỹjokwawutete.tsã=tokỹj-oko-ap-utete.3pl=fight.vi-IMPF-NOMcir-NPSTPOSP'About that I'm about to tell you, [...] about how they used to fight.'

<sup>&</sup>lt;sup>268</sup> Example (161) contradicts Drude's (forthcoming a: 7) analysis according to which the suffix *-at* only attaches to stative verbs when these are additionally combined with an aspectual suffix. Drude further states that in all other cases the suffix *-(y)tu* (or rather circumfix i-/t-...-(y)tu in his analysis) would occur in this position.

(lit.: About [...], about their continuous fighting.')

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(163) (kal awytyza1, 0818.788, 0823.285)
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Atit ne 'e, it=a'yza a-mowka-zoko, an a-mi'ing-yka a'yn ne 'e, 1sgPRO PART PART, 1sg=children 1sg-narrate -IMPF, NEG 1sg- tell.vt -NEG PART PART PART waraju patem -ap a'yn. savage fear.st -NOMinstr PART 'Me, (when) I'm telling stories to my children, I don't tell (this one), a thing (story) an indigenous person fears.'

When formed with a transitive verb stem, the A-argument instead of the P-argument can be directly marked on the 'possessum' by the 'antipassive' prefix po(r)-.<sup>269</sup> This is shown in (164):

(164) (kal\_kakaja, 0098.611)

[...] w= e- po- kyts -ap a'yn, kyryk kyryk 'yp ete. 3coref=REL-ANTI-cut.vt -NOMinstr PART, IDEO.tie tree.stem POSP 'He<sub>i</sub> tied his<sub>i</sub> saw (lit.: instrument he cuts something with) to a tree stem.'

This is a counterexample to Drude's claim that the 'antipassive' cannot occur with nominalizations which have a nominal reading. For Drude (forthcoming a: 16) the 'antipassive' prefix po(r)- is an indicator of the "verbal character" of the forms it occurs in.

As observed in the preceding subsection for agentive nominalizations, an alternative  $3^{rd}$  person clitic *t*- instead of  $n(\tilde{a})$ - can also occur with this type of nominalization:

(165) (kal awytyza2, 1547.461)

Tekyzap'yto tiwejzotem.t=e-kyzy-ap'yto tiwej-zotem.3=REL-wash.vt-NOMinstrsoEVID3-bring.out.vt'So they brought out something to wash them.'

<sup>&</sup>lt;sup>269</sup> Cf. 3.3.8.2.3.

In addition to the circumstantial and instrumental nominalizations given in the previous examples the same suffix can yield locative nouns.<sup>270</sup> Two examples are given in (166) and (167):

(166) (tal mamuti 2 8, 1730.907)

Piiiiiing,tykynã'atawutypekatu.piiiiiing,tykynã='at-ap-putypekatuIDEO.send.arrow,IDEO.look3= fall.vi-NOMloc-NPSTPOSPgood'He sent an arrow and looked well at the place where it had fallen.'

(167) (tal\_mamuti\_1\_8, 1093.846)

Tanumakalu pe	me, "Ito	me 'a,	, in	eme	n	tsoa	me	'a,
Tanumakalu pe	me, i- to	me 'a,	in	e=	men	tsoa	me	'a,
PropN POSP	PART, IMP-go.vi	PART PA	ART, ther	e 2sg=	=husbanc	1 POSP	PART	PART,
kajamũj epwajtawut tsoa me 'a".								
J J	1 5		1504 1	110	и.			
kaj= amũj	e= pwaj -tap	-put	tsoa		'a			

'To Tanumakalu (he said): "Go to where your husband is, (go) to where our grandfather sent you!""

Nominalizations formed with -ap can receive relational prefixes of alienable possession, as shown in (167). They can combine with the suffixes of nominal tense, as in (162), (166) and (167), but also retain verbal properties by combining with verbal aspect, as illustrated by -(z)oko in (162). Relative clauses with -ap will be presented in section 3.3.9.4.3.

# 3.3.8.1.6 Patient nominalization

The prefix  $mi^{-271}$  nominalizes transitive verb stems. An example is given in (168):

<sup>&</sup>lt;sup>270</sup> According to Booij (2007:222) there is a cross-linguistic tendency for a domain shift from instrument to location which is cognitive in nature. See also Comrie & Thompson (2007: 340).

(168) (mopot birth, 0373.489)

*O-to azo= up azo= e- mi- '\tilde{u}^{272} ikat -aw a'yn.* 3-go 1pl:excl=father 1pl:excl=REL-NOMpat-eat.vt find -GER PART 'Our father goes to find our food.'

(lit.: 'Our father goes to find ours that is eaten.')

This process has been described by Comrie & Thompson (2007: 341) as a specific type of 'objective nominalization', the result of which is a noun with a "passive meaning", its referent being a "thing/person that is "verbed"", i.e. the patient of an underlying verbal construction.

An argument for the nominal form of the construction is that it has (optional) possessive person marking, as in (168), or a possessor NP, as shown by *kat* ('spirit') in (169). These possessors refer to the agent of the event encoded by the verb, and since an action can be performed by different agents, the indirect possessive construction is used:

(169) (kal\_sham\_1, 1732.887) *Nãti kat emikỹjmut ne.*Nã=ti kat e- mi- kỹj -put ne.
3= after spirit REL-NOMpat-attack.vt-NPST PART
'After him there was someone who had been attacked by a spirit.'
(lit.: After him there was the spirit's attacked one.')

It may also combine with suffixes of nominal tense, which is illustrated by the suffix of nominal past *-put* in (169) and (170):

<sup>&</sup>lt;sup>271</sup> According to Drude (forthcoming a: 5) the patient nominalizer is nasal and has an allomorph  $em\tilde{i}$ . The *e*- here has been analysed as a relational prefix of nominal possession. Reasons are given below.

<sup>&</sup>lt;sup>272</sup> Drude (forthcoming a: 11, (12)) explains the nasalization of the vowel in the verbal root 'u ('to eat') by lexicalization of the derived form.

(170) (kal sham 1, 0729.649)

*O-pap pe a'yn*, *n=e- mi- moto-put i= kyty me*. 3-finish.vi tobacco PART, 3= REL-NOMpat- give.vt-NPST 1sg= to PART 'The tobacco that had been given to me by him was finished' (lit.: The tobacco was finished, his (thing) that had been given to me.')

It can further receive a suffix of nominal negation *-e'ym*, as shown in (171), and in constructions of alienable possession it has an obligatory relational prefix *e*-.<sup>273</sup> Like other nouns the construction formed with the prefix *mi*- occurs without a relational prefix *e*- if it refers to an entity which does not have a possessor, as is given by *mimi'inge'ym* ('something untold') in (171) and *mitã wo mikỹj* ('the one that is killed with a hook') in (172):

(171) (kal\_awytyza1, 0780.596)

*Mi- mi'ing -e'ym kitã it= e- mi- mi'ingk -eju e= kyty me 'a 'ẽ*. NOMpat-tell.vt -NEG DEM 1sg=REL-NOMpat-tell.vt -IMPF 2sg=POSP PART PART PART 'Nobody ever tells what I'm telling you.'

(lit.: 'Something which is not told is this, which is my telling to you.')

(172) (awu\_fishing, 0406.58)

Nan=ywo, mitã wo mi- kỹj kitã me -t, tuzuwi me.
3= with, hook with NOMpat-kill.vt DEM PART -ENUM, type.of.fish PART 'With this, (the one that is) killed with a hook is that one, the pintada.'

The relational prefix is also not inserted if the possessor is not identifiable. This is the case in (173) with regard to the demonstrative *kitsaza* ('those (somewhere) over there') as opposed to the subsequently introduced possessor NP *Tonoly* ('the Tonoly people'):

(173) (kal awytyza2, 1742.151)

Awytyza='ytoto ti kitãn a'yn, **kitsaza mi- kỹj** a'yn, PropN =INTENS EVID DEM PART, DEM.PL NOMpat-kill.vt PART,

<sup>&</sup>lt;sup>273</sup> Cf. section 3.3.1.6.

Tonolye- mi- kỹj a'yn.

PropN REL-NOMpat-kill.vt PART

'The real Awetí were those ones, (those) who were killed by those people there, who were killed by the Tonoly.'

Different from this analysis Rodrigues et al. (2006: 27) state that  $em\tilde{i}$ - (*emi*-) in Awetí is probably the result of a fusion between a 'mediador de posse' (relational prefix), indicating that the noun is possessible, and *mi*-. The original *mi*-, according to Rodrigues et al., is used when the deverbal noun is generic which they illustrate with the example *mi'ue'ym kitã* – 'this is no food'. As was outlined with regard to (168) above, the form *mi'ũ* ('food') with a nasalization of the vowel in '*u* ('eat') has probably lexicalized, so that the example chosen by Rodrigues et al. is not correct.

Patient nominalizations have several verbal features such as aspectual marking, shown in (171) and (174), and object incorporation, as illustrated in (175):

(174) (awu fishing, 0212.231)

*Tukyt 'u -at wazotsu ozo=e- mi- 'ywõ -zoko me 'a.* salt.plant eat.vt-NOMag only 1pl= REL-NOMpat-shoot.vt-IMPF PART PART 'The one (fish) that only eats the salt plant is one that is always shot by us.' (lit.: 'The only salt-plant-eater is our shot one.')

(175) (kal\_awytyza2, 1219.308)

*Kitã 'e, mi- njyt-kỹj -mut, nã ti kitã kitã tsu t=ekozoko-at ti me.* DEM PART, NOMpat-sister-kill.vt-NPST, 3PRO EVID TOP DEM like 3=be.vi-NOMag EVID PART 'That one, the one whose sister had been killed, he was someone who was like that.' (lit.: That one, the sister-killed one, he was someone who was like that.')

The nominalizations formed with *-ap* and *mi*- can function as NPs but also as modifiers of nouns, i.e. as relative clauses. This will be further outlined in section 3.3.9.4.3.

#### 3.3.8.1.7 The 'gerund'

A form which in Tupian tradition is called a 'gerund' is formed with the suffix *-aw* attached to the verb stem and receives the same possessive proclitics as other nominalized forms. It is a dependent form, i.e. it can only occur as an adjunct clause to another clause, sharing the subject with the main clause predicate. An example is given in (176):

#### (176) (kal\_azoamujza, 044)

Namuput w=epyk-awEnumaniato-tu,o-totsã=mo-pap-aw.after.that3coref-take.revenge.vi-GERNPropgo.vi-NOM 3-go.vi3pl=CAUS-finish.vi-GER'After that the Enumania went to take revenge, they went to finish them off.'

In the example the main clause predicates are the finite verb *oto* and the action nominal *totu*, forms of the motion verb *to* ('go'). Semantically not very complex or 'light' motion verbs like *to* ('go') or *ut* ('come') most typically occur in constructions with adjunct clauses encoded by a gerund.<sup>274</sup> The gerund forms in (176) are marked with a coreferential clitic pronoun *o* (*w* before vowels) in the case of the intransitive verb root *epyk* ('take revenge'), and in the case of the transitive stem *mopap* ('finish someone off') with a 3<sup>rd</sup> person possessor clitic *tsã* indicating the object. Both verbs in the gerund are semantically complex and provide the content information of the event(s) referred to by the construction.<sup>275</sup>

Drude states that the event referred to by a gerund form in most cases provides information on the purpose of the event expressed by the main clause predicate. An example where the gerund occupies this function is given in (177):

(177) (kal\_tawozy4, 1229.253)

In	tupejaza	l			mowkaw	tepe	a'yt	ti
in	t= up	-eju	-at	-za	mowka-aw	tepe	a'yt	ti
there	e 3= stay.vi	i -IMPF	-NOMa	g-PL	tell.vt -GER	FRUST	EMOT	EVID

<sup>&</sup>lt;sup>274</sup> Cf. Drude (forthcoming a: 19) and Drude (forthcoming c: 10, (11)). In the latter publication he lists a small set of 'light' verbs of motion, position and direction and their respective frequency in the Awetí corpus.

<sup>&</sup>lt;sup>275</sup> Cf. Drude (forthcoming c: 8).

kitãkitsazatotume.kitãkitsazato-tumeTOPDEM.PLgo.vi-NOMPART

'It was to tell the (other) ones who stayed there that those ones (over there) went without success.'

(lit.: 'It was to tell the ones staying there, the unsuccessful going of those ones over there.')

Another semantic function of the gerund clause given by Drude is the contribution of a manner component, as given in (178):

(178) (tal kakaja, 0751.523)

I= 'e- 'e -tu teneakyj e=mena'o-awwē.1sg=RED-say.vi-NOM without.a.reasonTOP2sg=husbandscold.vt-GERPART'I just talked without meaning it (when I was) scolding your husband.'

As further semantic contributions of gerund clauses Drude lists the indication of the direction of a motion event or the addition of an aspectual component to the event referred to by the main clause predicate.<sup>276</sup> He further describes clause structures with a gerund as similar to serial verbs in that they sometimes express two aspects of a unitary conceptual event.<sup>277</sup> In two recent studies Drude (forthcoming a/ c) draws a distinction between gerunds occurring as heads of adjunct clauses and "grammaticalized" gerund forms which he analyses as converbs in a monoclausal construction.<sup>278</sup> Evidence for this "grammaticalization" Drude (forthcoming a: 20) sees in the observation that in some cases the encoding of the respective verb as a finite form (including action nominals) or a gerund form may be inverted without changing the meaning of the proposition. He gives the following example of a 'minimal pair' from the Awetí corpus:

<sup>&</sup>lt;sup>276</sup> See Drude (forthcoming a: 20, (23)(c) and (d)) for examples.

<sup>&</sup>lt;sup>277</sup> Cf. Drude (2008).

<sup>&</sup>lt;sup>278</sup> See Drude (forthcoming c, 27ff.) for an outline of his argumentation which will not be presented here.

(179) a. (kam village, 0599.6)

*Namuput* **kyts -aw** 'yto tut kujãpuryza **to -tu** me. that cut.vt-GER then FUT women go.vi-NOM PART 'Then the women will go to cut them (the kernels of the fruit).'

b. (kam\_village, 0604.477)
W= e- majãku pywo tsã=po- kytse-tu o= to -aw nã me.
3coref=REL-basket into 3pl= ANTI-cut.vt-NOM 3coref=go.vi-GER 3PRO PART
'They go to cut them (the kernels) into their baskets.'

Drude (forthcoming a: 21) states that in their "grammaticalized" occurrences the gerund forms are "more closely connected to the finite verb form, sharing with it its aspect, polarity and other features".

A verbal feature of the gerund form is that it can be combined with aspectual suffixes, as illustrated by (180):<sup>279</sup>

(180) (tal\_kujakyt, 1216.242)
I= to -zoko-tu akyj karytu - 'jyt py -zokw-aw we.
3= go.vi-IMPF-NOM TOP flute -DIM play.vt-IMPF -GER PART
'He is going to play the little flute.'

On the other hand, and in the same way as action nominals formed with -tu, it combines with nominal negation. The only example from the corpus is given in (181):<sup>280</sup>

(181) (kup\_autobiogr, 1064.752)

*I*= temo'ete-tu wezotsu, pira'yt kyty **it=eko- eko -e'ym-p -aw** wẽ. 1sg=get.worse -NOM simply, fish for 1sg=RED- walk.vi-NEG-EPEN-GER PART 'I just got worse without going fishing.' (lit.: '... not walking for fish.')

<sup>&</sup>lt;sup>279</sup> See also the quantitative analysis in Drude (forthcoming c: 20).

<sup>&</sup>lt;sup>280</sup> Cf. Drude (forthcoming c: 21).

## 3.3.8.2 Valency-changing morphology

Valency-increasing as well as valency-decreasing processes can be observed in Awetí. The most important ones are summarized in table 3.14.

Affix	Valency-change	Process
то-	causative	transitivization
(e)zo-	comitative causative	transitivization
-ukat	causative	ditransitivization
te-	reflexive	detransitivization
to-	reciprocal	detransitivization
OBJ-	object incorporation	detransitivization
<i>po(r)-</i>	'antipassive'	

**Table 3.14: Valency-changing processes** 

There are two more valency-increasing suffixes - 'at and -ka used on stative verb roots to derive intransitive active and transitive verb stems. Since they do not occur in the examples chosen for this study, they will not be described here.<sup>281</sup>

## 3.3.8.2.1 Valency increase: Causatives

In Awetí there are three types of causative constructions increasing the valency by one.

#### Simple causative mo-

A simple causative prefix *mo*- is combined with intransitive active and more rarely with stative verb stems and transitivizes the respective form, i.e. the syntactic valency of the base verb is increased by one. A new participant, a causer, is introduced as a subject of the derived verb, and the former subject is demoted to object position. Its semantic role is that of a causee, the participant who is caused to do something.

In (182)(a) and (b) the intransitive active verb  $m\tilde{y}je$  ('wake up') is causativized. While (182)(a) shows a 3<sup>rd</sup> person finite form of the verb, in (182)(b) an utterance with a nominalized form and two overtly marked participants is given. One is marked as a 1<sup>st</sup>

<sup>&</sup>lt;sup>281</sup> See Drude (to appear: 27) for a brief description.

person object on the action nominal, the other as a free  $2^{nd}$  person singular pronoun 'en, indicating the subject:

(182) a. (kal\_makawaja, 1822.878)
Wej-mo- mỹje ti a'yn.
3- CAUS-wake.up.vi EVID PART
'He woke him up.'
(lit.: 'He made him wake up.')

b. (kal\_angut1, 1532.114) *I- tet -u ='jyt kitã me 'e, i= mo- mỹje -tu 'en a'yn.*1sg=sleep.vi-NOM=DIM TOP PART, PART 1sg=CAUS-wake.up.vi-NOM 2sgPRO PART
'I slept a little, you woke me up.'

In (121), repeated for convenience, with a nominalized form of the stative verb *ta'ok* ('angry'), both participants are explicitly given by noun phrases (*oywyza, nã*):

(121) (kal\_awakap1, 0123.05) *O*= ywy -za mo- ta'ok -u ti kitã nã me.
3coref=brother-PL CAUS-angry.st-NOM EVID TOP 3sgPRO PART
'(They say that) he<sub>i</sub> deceived his<sub>i</sub> brothers.'
(lit.: 'The deceiving of his own brothers was (what) he (did).')

In this example the verb has lexicalized and the meaning 'to deceive/ lie to someone' cannot be derived in a straightforward manner any more from its components ('cause someone' + '(be) angry').

# Comitative causative (e)zo-

There is a second type of valency-increasing process, by which a morpheme (e)zo-(with the allomorphs  $zo- \sim ezo- \sim z- \sim ez-$ ) is prefixed to an intransitive active verb stem to create a transitive verb. Within Tupian languages these causatives have been termed "comitative causatives" (cf. Jensen 1998, Galucio 2001). Jensen (1998:533) describes this process as indicating that the new A of the resulting transitive verb "performs an action which affects P, and also affects himself". Thus it differs from the simple causative, where the causer A is not directly affected by the activity expressed by the verb. Comitative causatives almost exclusively combine with verbs of locomotion and position. Due to this semantic restriction the process is less productive than the simple causative construction.

The comitative causative with its allomorphs *zo-* and *ezo-* is illustrated in examples (183) and (184). Action nominals are formed with the *ezo-* allomorph inserted between person prefix and verb stem, as in (183) and (184)(b), while in the verbal forms the *zo-* allomorph is used with the A prefixes:

(183) (kal awakap1, 0850.439)

Nã=por- ezo- to -zoko-tu ti nã me, wej-zo-to a'yn.
3= ANTI-COM-go.vi-IMPF-NOM EVID 3PRO PART, 3-COM-go.vi PART
'They were taking them away with them, they took them away.'

(184) a. (kal\_tawozy2, 0575.683) *Wej-zo-totem ti tsãn a'yn*.
3-COM-arrive.vi EVID 3plPRO PART
'They arrived together with him.'

b. (kal\_tawozy3, 0680.205)  $M\tilde{a} \ ti \ ts\tilde{a}=por-\ ezo-\ totem\ -pu\ n\tilde{a}.$ now EVID 3pl= ANTI-COM- arrive.vt-NOM 3PRO 'At this moment they arrived with it.'

The allomorph *ezo*- occurs with the P prefixes, shown in (185)(a) and (b):

(185) a. (kal\_kaminu, 1374.246) *Koj pira'yt. In kaj- ezo- to 'en.*there fish there to 1pl:incl- COM- go.vi 2sgPRO
'There is fish. (You) take us there!'

b. (tal\_kujakyt, 2813.872)

E = mepy-zan it=up-u wo, an utepe it- ezo- tem -yka 'en a'yt ne, ange! 2sg=child -ATT 1sg=be-NOM SUB, NEG IRR 1sg-COM-go.out -NEG 2sgPRO EMOT PART, mother 'If I were your daughter, you wouldn't have kicked me out, mother!'

(lit.: 'If I were in the role of your child, you would not have made me go outside with you, mother!')

The allomorph *z*- occurs before verb roots starting with  $/\epsilon/:^{282}$ 

(186) (kup autobiogr, 0508.957)

 $M\tilde{a}$  jatā wej- z- ekozoko tene n=et ne.

now DEM 3- COM- live.vi simply 3=name PART

'Now this one here lives just like that with his (grandfather's) name.'

# Causative of transitive verbs -ukat

The causative suffix *-ukat* (with the allomorphs *-tukat* ~ *-pukat* ~ *-kukat*) combines with transitive verbs or verbs transitivized by *mo*-. It occurs in front of any aspectual<sup>283</sup> and modal suffix or suffixes of verbal negation<sup>284</sup>. In this type of causative construction the causer is encoded as the subject A, while the causee, which would have been the subject of the corresponding non-causative construction, is demoted to the position of an oblique argument. This oblique argument, if overtly expressed, is marked by the postpositions *pe* or *kyty*. The primary object of the non-causative construction remains unchanged. The overt expression of the term argument which is lower in the person-animacy hierarchy is optional, too, so that the person-reference on the verb may be the only overt marking of any participant in the clause. In (187) all participants are expressed, the causer by a prefix *ti*- of subject-reference on the verb, the causee by a postpositional phrase *nãpe* ('to it') and the patient by a noun phrase *kaj'ok* ('our house'):

<sup>&</sup>lt;sup>282</sup> An example for the allomorph ez- can be found in (201) below.

<sup>&</sup>lt;sup>283</sup> See section 3.3.8.3.1 (11)(a).

<sup>&</sup>lt;sup>284</sup> See (187)(b) below.

(187) (kamukuaka4, 1625.632) Kaj = 'ok ti- 'u -tukat  $n\tilde{a} = pe^{285}$  me. 1pl:incl=house 1pl:incl-eat.vt-CAUS 3= POSP PART 'We let it (the snake) eat our house.' (lit.: 'We cause it to eat our house.')

In (94), repeated here, the A is expressed by a free  $2^{nd}$  person plural pronoun 'e'ipe and the P is marked by the prefix *kaj*- of object-reference on the verb, while the third participant, the causee, remains unexpressed and is introduced in the immediately following non-causative clause:

(94) (awakap1, 0058.355, 0068.7)

Kware e' i=topat -(t)u, kaj- kỹj -tukat eti 'e'ipe, [...] IMP.NEG 2pl=lose.way.vi-NOM 1pl:incl-kill.vt-CAUS or 2plPRO waraju eti kaj- kỹj. savage or 1pl:incl-kill.vt 'Don't lose your way, or you will make them (i.e. give them the opport

'Don't lose your way, or you will make them (i.e. give them the opportunity to) kill us, [...] or the savages will kill us'!'

Two ditransitive verbs in Awetí, *mi'ingkukat* ('show') and *mototukat* ('send'), have lexicalized from a combination of the causative suffix with the equally ditransitive verbs *mi'ing* ('tell') and *moto* ('give'). There is neither a valency-increase nor semantically a causative relation between the simplex and the complex forms, as illustrated by the pairs in (188) and (189):

(188) a. (tal mamuti 1 8, 1033.76)

I-mi'ing tene'e'ipekaj=amũjMawutini kytyme.1sg-tell.vt without.a.reason2plPRO1pl:incl=grandfatherPropNPOSPPARTTAR\*'You needn't have told our grandfather Mawutini about me.'

 $<sup>^{285}</sup>$  In the narrative, an identical clause, immediately preceding this one, is uttered with *nãkyty* instead of *nãpe*.

(lit.: You told me without any reason to our grandfather Mawutini.')

b. (tal\_mamuti\_3\_8, 1565.697) *T-uwut=watu ti 'y'wap*, 3-be.much.st =AUG EVID manioc.cake, (T) *an ti wej-mi'ingkukar -yka w=emiamujũ kyty a'yn*. NEG EVID 3- show.vt -NEG 3coref=grandson POSP PART A R

'It was a lot of manioc cake, (they say that) hei didn't show it to hisi grandsons.'

(189) a. (kal\_tawozy3, 0628.08)
Wan pira'yt e- moto nã=kyty me?
INTERR fish 2sg-give.vt 3= POSP PART T A R
'Did you give any fish to him?'

b. (kal tawozy4, 0514.238)

E=up	azoj-	mototukat	kitã tsu-at	<i>pytyk-aw.</i> <sup>286</sup>			
2sg=father	1pl:excl	-send.vt	DEM like-NOMag	g get.vt-GER			
CAUSEE	CAUSE	R					
'We sent your father to get that one (who is like that).'							

The verbs *mi'ing*, *mi'ingkukat* and *moto* are ditransitive according to the definition by Malchukov, Haspelmath & Comrie (2007: 2), in that they have an A argument, a recipient-like argument R and a theme argument T, as indicated in the additional glossing line. They belong to an 'indirective alignment' type<sup>287</sup> because the encoding of the R argument by a postpositional phrase is opposed to the encoding of A and P as unmarked terms.

<sup>&</sup>lt;sup>286</sup> Instead of the gerund subordinate clause a postpositional phrase *kitã tsuat kyty* ('for the one who is like that') is equally possible.

<sup>&</sup>lt;sup>287</sup> Cf. Malchukov, Haspelmath & Comrie (2007: 3/4).

For the verb *mototukat* ('send someone (somewhere)') by contrast, the assignment of semantic roles is different in that a causer and a causee are expressed by term arguments, while a goal can be overtly expressed by a postpositional phrase.

# 3.3.8.2.2 Valency decrease: reflexives, reciprocals and noun incorporation

There are three possibilities in Awetí to decrease the valency of a transitive verb.

# Reflexive marker te-

The reflexive prefix *te*- is inserted between the person prefix and the verb stem. By this process, two semantic roles, agent and patient, are assigned to the same participant with the grammatical relation of subject, leading to a detransitivization of the base verb. This can be illustrated by (190) in comparison to (189)(a) above:

(190) (kal\_awakap1, 0665.262)
An ti o-te- moto -ka a'yn.
NEG EVID 3-REFL-give.vt-NEG PART
'He did not surrender (to the enemies).'
(lit.: 'He did not give himself.')

As in Tupí-Guaranian languages<sup>288</sup>, causative verbs can be detransitivized by the reflexive prefix:

(191) (kup\_autobiogr, 1201.226)

*An a-* **te- mo-** kazã -ka, mã it= ekozoko -tu an ne, an ne. NEG 1sg- REFL-CAUS-work -NEG, now 1sg= live.vi -NOM NEG PART NEG PART 'I don't make myself work (any more), nowadays I live without doing anything (at all).'

The speaker of this utterance is a very old fragile person so that the combination in this specific case seems to indicate that work at his age is no more a matter of obligation but of willpower and self-discipline.

<sup>&</sup>lt;sup>288</sup> Cf. Jensen (1998: 534).

#### Reciprocal marker to-

A transitive verb may also be detransitivized by inserting a reciprocal prefix *to*- in the same position as the reflexive marker. This indicates that the subject refers to several entities which perform the activity expressed by the verb on each other. The relationship of these participants – depending on the semantics of the respective verb – may be symmetric or asymmetric. The process of detransitivization is shown by (192) and (193):

(192) (ulawalu\_year, 0162.184) *Tukyt 'yto ozoj- t- ekyj a'yn.*salt so 1pl:excl-EPEN-pull.vt PART
'So we collect/ pull out the salt (plant).'

```
(193) (kal makawaja, 1884.126)
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 $Ts\tilde{a} = to - ekyj - ekyj - e - zoko - tu ti kit\tilde{a} o = to - aw w\tilde{e}'\tilde{e}$ . 3pl= REC-RED- pull.vt-EPEN -IMPF-NOM EVID DEM 3coref= go.vi-GER PART PART 'They kept pulling each other while going.'

(lit.: 'Their<sub>i</sub> continuously pulling each other it was during their<sub>i</sub> going.')

In (192) the 1<sup>st</sup> person plural subject is marked by subject reference on the verb, while the object *tukyt* ('salt') is an NP. The main clause predicate in (193) is an action nominal so that a 3<sup>rd</sup> person plural subject can be marked by a clitic pronoun.<sup>289</sup> The plurality of the subject is further underlined by reduplication, a phenomenon frequently accompanying reciprocal marking.

In Awetí there are two possibilities to give transparency to two entities in a reciprocal relationship. Either both are referred to by a complex argument functioning as the subject of the clause (as in (194)(a)), or only one participant can be expressed by the subject argument, while the other is encoded in an oblique argument formed with the postposition ta ('with')<sup>290</sup> to which the semantic role of comitative is assigned (as in (194)(b)).:

<sup>&</sup>lt;sup>289</sup> There is no 3<sup>rd</sup> person plural in the verbal paradigm (cf. 3.3.4.1, table 3.5).

<sup>&</sup>lt;sup>290</sup> This postposition is unlike any other in taking a free pronoun instead of a clitic pronoun: \*e=ta but 'en ta '(together) with you'.

- (194) (Awajatu & Waranaku Awetí, October 2007)<sup>291</sup>
- a. Maria João-za o-to-ezup. PropN PropN-PL 3-REC-marry.vt
- b. Maria o-to-ezup João ta. PropN 3-REC-marry.vt PropN with 'Mary and John marry each other.'

According to Awetí consultants, (194)(b) is the preferred version. In (194)(a) the subsumption of both elements under one subject is indicated by the plural marker  $-za^{292}$ attached to the second element.

The following two examples with action nominals derived from  $tok\tilde{y}i$  ('fight' > REC to  $+ k\tilde{v}i$  'kill') show that combinations with the reciprocal marker may lexicalize into ordinary intransitive verb roots. Example (195), like the clause in (194)(b), contains an oblique argument formed with the postposition *ta* to introduce the second entity participating in the reciprocal relationship:

```
(195) (tal azoamujza, 008)<sup>293</sup>
Ts\tilde{a} = to - k\tilde{v}j - oko -tu kara'iwa
                                         ta nanype me
                                                               -t.
3pl= REC-kill.vt-IMPF-NOM non-Indian with there
                                                        PART -ENUM
'They were fighting with the non-Indians there.'
```

In (196) a reciprocal relationship is reinforced or rather introduced by a postpositional phrase *otope*, formed with a reciprocal marker which – attached to a 3<sup>rd</sup> person prefix of coreferentiality – is cliticised to a postposition:

<sup>&</sup>lt;sup>291</sup> The examples were elicited by using the Berlin – Utrecht Reciprocals Survey questionnaire, version 4.2, edited by Emkow (2007). <sup>292</sup> See 3.3.1.2.

<sup>&</sup>lt;sup>293</sup> The file tal azoamujza which has been maximally annotated by Sebastian Drude has a different reference system of counting individual sentences.

(196) (tal\_azoamujza, 073) O -to = pe wene ti  $ts\tilde{a} = tok\tilde{y}j - tu$ . 3coref -REC=POSP still EVID 3pl= fight.vi-NOM 'They still fought among themselves.'

In the Awetí corpus postpositional phrases of this type only occur with intransitive verbs which cannot be combined with a marker of reciprocity, e.g. the verb to ('go') in (110), repeated here, and up ('be') in (197), so that (196) must be analysed as a lexicalization.

(110) (ulawalu\_year, 1050.353)

*Ijãtiti* 'yto ta'i=to -tu o -to= kyty, ta'i= to- pytyk-eju -tu a'yn. after.that so 3pl= go.vi-NOM 3coref-REC=POSP, 3pl= REC-grab.vt-IMPF-NOM PART 'So after that they go towards each other, they start to fight with each other'

(197) (kal awytyza1, 0060.654)

*O* -to=ti ti kojype o- up -eju tsãn a'yn. 3coref-REC=POSP EVID far 3- be.vi-IMPF 3pIPRO PART 'They remained distant one from the other.'

Example (198) shows that comitative-causatives can be detransitivized by the reciprocal prefix immediately preceding the comitative prefix:

(198) (kal\_tawozy3, 0067.295) *O-to- ezo- to -zoko 'yto ti tsãn a'yn.*3- REC-COM-go.vi-IMPF so EVID 3plPRO PART
'So they were going together.'

Examples of this type have been checked and discussed with two Awetí speakers<sup>294</sup> who arrived at the conclusion that this combination may only be used if the agents

<sup>&</sup>lt;sup>294</sup> Awajatu and Waranaku Awetí (October 2007, personal communication).

subsumed under the grammatical relation of subject form a homogeneous group of some kind. In (198) it is a mother and her son, in (199) it is the inhabitants of one village:

(199) (ama\_dry\_season, 0366.856)  $Ts\tilde{a} = to - ezo - m\tilde{y}je -tu, ka'atu wo ts\tilde{a} = tige -tu.$  3pl = REC-COM-wake.up.vi -NOM, dusk POSP 3pl = sit.vi-NOM,  $N\tilde{a} = tsu ts\tilde{a} = to - ez - ekozoko -tu wian mote me.$  3 = like 3pl = REC-COM-live.vi -NOM still long.ago PART 'They woke up with one another, at dusk they sat (together). Like that they were living with one another in the old days.'

# **Object incorporation**

In Awetí a transitive verb may be detransitivized by inserting a noun between the person prefix and the verb stem which originally had the grammatical relation of an object. This is illustrated by (200) with the incorporated noun 'y ('water'):<sup>295</sup>

(200) (tal\_mamuti\_1\_8, 1296.768) *Kujã ti o- 'y- tatap zanu a'yn.*woman EVID 3- water-cross.over.vt again PART
'The woman crossed the river again.'

The object *mo'at* in (201) and (202) can be found more often in the Awetí corpus than other objects. Jensen (1998:536) therefore suggests considering the corresponding item in TG-languages to be one of two "generic morphemes" used to create intransitive verbs.

(201) (kal awakap1, 0935.772)

*Kitã tsu* o = tep -eju -tu *wo*, *an* o-*mo'a(t)*-*kỹj* -*yka* [*a'yn*]. DEM like 3coref=climb.vi-IMPF -NOM SUB NEG 3-person- kill.vt-NEG 'When he<sub>i</sub> was climbing up like that, he<sub>i</sub> didn't kill anybody.'

<sup>&</sup>lt;sup>295</sup> This is, strictly speaking, not a process of affixation but rather of compounding, except for the 'generic morphemes' identified by Jensen (1998: 536) (see below).

(202) (ama\_autobiogr, 0201.688) *Waraju o-mo'at-puka a'yn.*savage 3-person- expel.vt PART
'The savages expelled the people.'

A contrast to the incorporated object in (202) is given in (75), repeated for convenience, where an object pronoun  $ts\tilde{a}$  follows the hortative form of the transitive verb:

(75) (kal\_kamukuaka6, 1366.689) *Ti- puka tsã ne!*1pl.incl- expel.vt 3plPRO PART
'Let's expel them!'

A second generic morpheme identified by Jensen for TG-languages is the word for 'thing', in Awetí *kat*, which was also productive for creating the intransitive, now lexicalized verb stem *kar'u* ('to eat') as opposed to the transitive 'u ('to eat something').

# **3.3.8.2.3** Valency rearranging argument structure: Incorporation of possessible objects and 'antipassive' on action nominals

The argument structure can be rearranged by incorporating a possessible object in a finite verb or an action nominal and by inserting the 'antipassive' prefix *por*- in an action nominal.

# Incorporation of possessible objects

While in the examples given in the previous sub-section the incorporated nouns were non-possessible, the following examples with possessible nouns show that in these cases the valency of the transitive verb is not affected in quantitative terms.<sup>296</sup> In (203) a transitive person prefix is attached to the complex verb stem with an incorporated object *kang* ('bone'):

<sup>&</sup>lt;sup>296</sup> Cf. Jensen (1998: 535) who observes the same distinction in TG languages.

(203) (kal makawaja, 0908.907)

Torokywej-kang-tapa'yttijatãn ywãa'yn, torok.IDEO.break.through 3-bone -break.vtEMOT EVID DEMaboutPART, IDEO.break'He broke the leg about here.'

(lit.: 'He bone-broke it about here'.)

Similarly in (204), where the 'possessor' of the incorporated object *ty* ('liquid') is explicitly given by the object NP *mani'ok*:

(204) (mop\_manioc, 0171.847) *Ozoj- ty- 'ok mani'ok [nge]*.
1pl:excl-liquid-take.out.vt manioc PART
'We squeeze out the manioc.'

Since the nominalizing prefix *mi*- in (205) is only combinable with transitive verb stems, '*ok* ('rip off') in combination with *uwaj* ('tail') has also remained transitive:

(205) (kal\_angut2, 1292.286)
Nã ti kitã n=e- mi- uwaj-'ok nge -t.
3PRO EVID TOP 3= REL-NOMpat- tail- rip.off.vt PART -ENUM 'It was him, the one that was ripped off the tail(-feathers).'
(lit.: 'It was him, the tail-ripped one.')

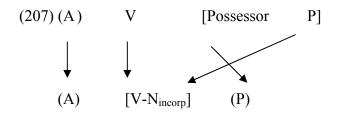
The inalienably possessible body-part noun  $\tilde{a}j$  ('tooth') in (147), repeated here for convenience, equally does not detransitivize the verb *mo'ege* ('make'):

(147) (tal\_kamu\_kwat1, 0774.008)
Nã=por- ãj- mo'ege-tu nã me, mu'jẽ.
3= ANTI-tooth-make.vt-NOM 3PRO PART, finished
'He made his tooth, finished it.'
(lit.: 'He tooth-made him.')

Incorporation of alienably-possessible objects functions accordingly by adding the relational prefix e-:<sup>297</sup>

(206) (tal\_mamuti\_2\_8, 1257.707)
Nã=por- e- 'inĩ- zỹ -tu ti nã me.
3= ANTI-REL-hammock-fasten.vt -NOM EVID 3PRO PART 'He fastened her hammock.'
(lit.: 'He hammock-fastened her.')

The process by which the argument structure is modified can be schematized as follows:



Prior to this type of object incorporation the clause would consist of a transitive verb, an optional subject NP and an object NP. Since the head of the object NP is a possessible noun, it further contains a possessor NP. By the valency-rearranging process the possessible noun is incorporated in the verb. The former possessor NP becomes the head of an optionally expressed object NP to which the role of a patient is assigned.

## 'Antipassive'

In addition to the valency-changing affixes on finite verbs there is an 'antipassive' prefix po(r)- in Awetí which can only be found on action nominals.<sup>298</sup> Drude (2008: 84) describes this prefix in Awetí as an 'antipassive' without any further explanation, while Monserrat (2002: 197) considers it to be a marker of ergativity and at the same time, tentatively, a generic prefix which detransitivizes the verb stem ("prefixo intransitivador

<sup>&</sup>lt;sup>297</sup> Cf. section 3.3.1.6.

<sup>&</sup>lt;sup>298</sup> Cf. section 3.3.8.1.1.

genérico"). However, that the verb stem is not detransitivized in this special kind of 'antipassive' construction, will be shown further down in this section.

A typical example for the Awetí 'antipassive', repeated from above, is (12):

(12) (kal\_awytyza1, 0787.586) *Kujtã t= e- tam -ut ywo wazotsu apaj po- mi'ing -ku nã 'ẽ*.
DEM 3= REL-village-NPST POSP only Dad ANTI-tell.vt -NOM 3PRO PART A ANTI-V<sub>N</sub> P
'There in that (their) old village (my) Dad told it only (once).'
(lit.: There in their old village Dad's telling of it was only once.')

The prefix po(r)- occurs with nominalized transitive verb stems where the clitic personal pronoun or an immediately preposed noun phrase would normally refer to the object of the verb. A reason for this ergative structure, i.e. the "P-orientation" of the transitive or "S-orientation" of the intransitive construction must be seen in its structural parallelism with and historical development from ordinary possessed NPs where, as stated by Doris Payne (1994: 336), a "single argument exists in a state of 'being in a relationship' to the possessed item", the possessor or action nominal which represents the head of the construction. In addition, the ergative pattern of the Awetí verb agreement system is reflected in this structure.

In (12) the action nominal *mi'ingku* ('telling') is the possessum and the 3<sup>rd</sup> person pronoun  $n\tilde{a}$ , following it, is the object which would be the possessor in a construction without an 'antipassive'. Du to the 'antipassive' po(r)- the argument *apaj* ('Dad'), referring to the agent, can occur in the possessor position. In Awetí there is further the possibility of a double possessive construction, as outlined in 3.3.1.6, in which a second possessor can be introduced to the front of the first possessor. In ANCs of the complement type<sup>299</sup> the A-P ordering of the two arguments is transparent, as shown in (132), which is repeated here for convenience:

<sup>&</sup>lt;sup>299</sup> Cf. section 3.3.8.1.1.

(132) (tal\_kakaja, 0674.330) At- atyka ='ytoto e= ty ij= a'o -tu me. 1sg-resent.vt=INTENS 2sg=mother 1sg= scold.vt -NOM PART A P V<sub>N</sub>

'I resent a lot that your mother scolded me.'

(lit.: 'I resent a lot your mother's scolding of me.')

In this example there is no conflict with the person-animacy hierarchy which is the organizing principle for person-marking on Awetí finite verbs, since the  $1^{st}$  person object is higher in ranking than the  $2^{nd}$  person subject. However, as soon as the order must be reversed, as shown in (135) from above with a  $2^{nd}$  person subject and a  $3^{rd}$  person object, the 'antipassive' needs to be prefixed and the argument referring to the patient is usually positioned to the right of the construction:

(135) (tal\_kujakyt, 2166.159)
"An a- kwakuw -yka", nã'e, "e=po- jopã- jopã -tu ĩ me."
NEG 1sg-like.vt -NEG, QUOT, 2sg=ANTI-RED- beat.vt-NOM 3sgPRO PART A ANTI-V<sub>N</sub> P
"I didn't like", she said, "your beating him up"."

At first, the possibility was checked whether the positioning to the right in an action nominal construction could be analysed as a demotion of the patient to an oblique argument, even though it remains unmarked like a term argument in an ordinary clause with a finite predicate.<sup>300</sup> The argument referring to the agent would thus be turned into an absolutive subject. This analysis, however, does not hold due to the existence of few examples like (208), where both term arguments – now in the reserved order – occur in front of the action nominal:

<sup>&</sup>lt;sup>300</sup> A similar antipassive construction in which an unmarked word order V-ERG-ABS is changed by positioning the ergative A function NP directly in front of the antipassive verb form, turning it into an absolutive S function NP, can be observed in the Mayan language Mam (cf. England 1988: 532, ex. (21)d. in comparison to (21)a.).

(208) (ti-a autobiogr, 0449.095)

 $I= to -tu, \quad pira'yt \ i= por-ezut -(t)u \ i= kyty.$   $3F= go.vi-NOM \ fish \qquad 3F= ANTI-bring.vt -NOM \ 1sg=POSP$  $P \qquad A \qquad ANTI-V_N$ 

'He went and brought fish for me.' (female speaker)

This clearly shows that the valency of the verb does not change but is merely rearranged.

In the Awetí corpus the prefix po(r)- very rarely occurs on ANCs with 1<sup>st</sup> or 2<sup>nd</sup> person marking, and only in one case, in (143), the action nominal is a main clause predicate:

(143) (kup\_autobiogr, 0802.339)
I= por- ezo-to -tu kitã nã me.
1sg=ANTI- COM-go.vi-NOM TOP 3PRO PART
'I took her away (with me).'
(lit.: 'It was my going away with her.')

In all other cases with  $1^{st}$  or  $2^{nd}$  person participants the ANC is either a complex nominal argument to a main clause predicate, as in (135) above, or a subordinate clause, as given in (209), where the locative postposition *wo* is analysed as a subordinator introducing an adjunct clause:<sup>301</sup>

(209) (kup\_autobiogr, 1159.328)

N=ok e-'yp='jyt i= por- ika -zoko-tu wo,
3=house REL-log=DIM 1sg=ANTI- search.vt-IMPF -NOM SUB,
i= topa -zoko-tu, i= pe -put a- tatap me ika 'ẽ.
1sg=get.lost.vi-IMPF-NOM, 1sg=path -NPST 1sg-cross.vt PART EPIST PART
'When I was looking for a little tree stem for his house, I started to get lost and didn't notice that I crossed my former path.'

Note that in ANCs in subordinate position the original position of two 'possessors' in front of the 'possessum' (the action nominal) is always maintained.

<sup>&</sup>lt;sup>301</sup> Cf. section 3.3.9.4.2.

The 'antipassive', as illustrated in (12) above, occurs mostly when both unmarked arguments are in the third person, i.e. on the same level in the person-animacy-hierarchy.

The following examples (210)(a) to (c) suggest that the insertion of this prefix here seems to be motivated by discourse-configurational considerations such as topicality or perspectivity. As pointed out by Foley (2007: 418), the subject, being more "agentive", has a higher prominence in argument structure and is more likely to be the topic of a pragmatically unmarked clause. Thus, a reversed order of arguments within the ANC would be the more natural structure.<sup>302</sup> The function of po(r)- can be neatly shown in its context by a sequence of clauses from a narrative which includes a minimal pair with and without the 'antipassive':

(210) a. (tal mamuti 3 8, 0230.000)

E=kyty zotsu tepe akyj e=tutyt po-mi'ing-ku w=emiamujũ a'yn ne, uja.2sg=to indeed FRUST TOP 2sg=uncle ANTI-promise.vt-NOM 3coref=grandchild PART PART DEM, A ANTI-V<sub>N</sub> P E=kyty zotsu tepe akyj e=tutyt po-mi'ing-ku w=emiamujũ a'yn ne, uja.

'It was to you indeed that your uncle, promised his, granddaughter (in vain), you see.'

b. (0238.113)

E=kyty	zotsu tepe	akyj	w=emiamujũ	mi'ing-ku	e=tutyt	a'yn.
2sg=to	indeed FRUST	ТОР	3coref=grandchild	promise.vt-NOM	2sg=uncle	PART
			Р	$V_N$	А	

'It was to you indeed that his, granddaughter was promised by your uncle, (in vain).'

c. (0242.549)

Uja an a'yn, an zanu mãpyte o-ur-yka
DEM NEG PART, NEG again directly/all 3-come.vi-NEG
uja e=njyt e= tsoa a'yn ne, uja.
DEM 2sg=sister 2sg= towards PART PART, VOC
'Not this one, she didn't come directly to you, this sister (i.e. wife) of yours, you know.'

<sup>&</sup>lt;sup>302</sup> According to observations by Queixalós & Gildea (2010: 14ff.) ANCs in several South American language families (including Tupian), after being reanalysed as ergative main clause constructions, tend to shift to agent control patterns.

Due to the insertion of po(r)-, the argument expressed by the NP in front of the action nominal in the first clause (210)(a) is the (agentive) subject, whereas in (b) without po(r)- it is the object. In both sentences the second NP follows the action nominal. The oblique argument *ekyty* ('to you') is in both sentences marked by a topicalizing particle as the (new) topic of the clause.<sup>303</sup> By reversing the order of arguments in (b) the attention of the interlocutor is turned towards the object as the more 'topical' argument, which can be confirmed by (210)(c) where the same protagonist, *wemiamujũ* ('his granddaughter'), now referred to as *uja* ('this one') and *uja enjyt* ('this wife of yours'), is the subject of the two following clauses which are unmarked for topicality, i.e. the subject referent is the topic. In Awetí verbal transitive predicates, by contrast, person-marking strictly follows the personanimacy hierarchy described in 3.3.4.1, so that in the 3<sup>rd</sup> person subject-marking is obligatory. Topicality, on the other hand, is expressed by a variant constituent order.<sup>304</sup>

The 'antipassive' prefix can also be attached to nominalizations with the suffix *-ap* when these function as subordinate predicates but also when used as nouns.<sup>305</sup> As shown by the following two examples (71) from above and (211), in these subordinate predicates the 'antipassive' is not predominantly used with  $3^{rd}$  person participants. In addition, the nominalized form is preferably combined with the suffix *-an* for nominal future:

(71) (tal kakaja, 0054.823)

I- kutap ='jyt etsan 'yto, a'yza,

IMPsg-cultivate.field.vi=DIM for.a.while so, EMOT,

*e- j- aty por-'u -ap -an jomem!* 

2sg-EPEN-wife ANTI-eat.vt-NOMinstr-NFUT manioc.cake

'Then just cultivate your field for a little while, man, so that your wife will have manioccake to eat!'

(211) (kal\_ta\_wat, 0734.366)

*I- to etsan kujtã 'u -aw wẽ,* IMP-go.vi for.a.while DEM eat.vt-GER PART,

<sup>&</sup>lt;sup>303</sup> Cf. section 3.3.7.2.2.

<sup>&</sup>lt;sup>304</sup> Cf. section 3.2.6.1.

<sup>&</sup>lt;sup>305</sup> Cf. example (163) in section 3.3.8.1.5.

i = po-tup -ap -an 'en e = kytire -tu e = (e-) mi'u ete me! 1sg=ANTI-see.vt-NOM-NFUT 2sgPRO 2sg= experienced.st-NOM 2sg=REL- food POSP PART 'Go and eat that one over there, so that I can see you(r) being experienced with (catching) your food!'

This combination of -ap and -an may be reinterpreted as a subordinator indicating purpose in adjunct clauses.<sup>306</sup>

#### 3.3.8.3 Reduplication

Another productive morphological process is reduplication which, due to the close relation between ideophones and reduplicated verbs, will be presented in more detail. It occurs in all open word classes in Awetí, but it is productive only in verbs and ideophones. In postpositions reduplication can also be observed.

This process is characterized by the fact that "the phonological form of an affix is determined in whole or in part by the phonological form of the base to which it attaches" (Wiltshire/ Marantz 2000: 557). Reduplication occurs in a wide variety of languages all over the world, where it plays a major or minor role in word formation. Cross-linguistically total and partial, exact and inexact reduplication have been observed. Some languages also exhibit a triplication of the base form. In exact total reduplication the reduplicative affix copies the whole base, in exact partial reduplication only part of it. In inexact reduplication part of the reduplicant is not determined by the base (Wiltshire/ Marantz 2000: 550). A reduplicative affix may be prefixing, suffixing or infixing. Reduplication has been ascribed an iconic function in that the repetition of phonological material commonly indicates repetition or intensity in the word's semantics. Therefore, in nouns it typically indicates plurality or distributivity and in verbs repetitive or intensive aspect.

The analysis is based on the reduplicative forms encountered in about 15.5 hours of transcribed data mostly from narrative texts recorded with different speakers<sup>307</sup>. Apart from very few identical forms in the same utterance which were considered only once, all occurrences of verb reduplication were taken into account for a quantitative analysis. An

<sup>&</sup>lt;sup>306</sup> Cf. section 3.3.9.4.2.

<sup>&</sup>lt;sup>307</sup> See Appendix IV for a full list of the forms and their respective data sources.

investigation of this small and – with regard to discourse genre – biased sample can only give a rough picture of some general tendencies and does not claim to be conclusive.

## 3.3.8.3.1 Verb reduplication

Together with ideophones, for which the process will be outlined in section 4.3, reduplication is most productive in active predicates where it may have the function of a TAM category, expressing an aspectual value and, in stative intransitive verbs, intensification.

In the sample there were 161 instances of verb reduplication altogether. Of these, 54 occurred in finite verb forms and 107 in nominalized forms. Details are summarized in tables 3.15 and 3.16:

Verb type	Finite forms	Nominalized form
Active intransitive <sup>308</sup>	18	64
Active transitive	29	38
Stative intransitive	7	5

Table 3.15: Distribution of verb reduplication in the sample

## **Table 3.16: Distribution of nominalized forms**

Action nominals	81
Agentive nominalization	4
Patient nominalization	6
Instrumental nominalization	8
Nominalization of bearer of quality	5
Gerund	3

To give a rough idea about the frequency of occurrence of reduplicated verb forms the verbal predicates (finite forms and action nominals) and reduplicated verb forms were

<sup>&</sup>lt;sup>308</sup> It was not always clear whether a verb should be counted as transitive or intransitive due to the fact that there are valency-changing devices in both directions which in some cases may have lexicalized and become part of the base form.

counted in the first ten minutes of two narrative sample texts. Considering that every ten minutes of transcript of a narrative text contains around 100 verbal predicates (92 in text A, 117 in text B), the occurrence of one reduplicated verb form among these in text A and nine in text B indicates that it is not a frequent phenomenon at all. Its frequency, in addition, is considerably lower than that of ideophones which are similar in structure and also serve an iconic function. Of these, 19 occur in the first ten minutes of text A and 40 in text B.

Reduplication of action nominals – as shown in table 3.16 is by far more frequent than reduplication of finite verb forms. The significance of this observation for the relation between ideophones and verbs will be further outlined in section 4.3.

Typologically, Aweti belongs to the languages with prefixing or initial reduplication. The copying direction is base-initial<sup>310</sup>, i.e. the material is copied from left-to-right. Reduplication in Awetí verbs shows a number of regular patterns. In order to make these more transparent, an extra glossing line, following the morphological glossing, is added to the examples. The different reduplicative patterns can be summarized as follows. If the last syllable of a verb stem ends in a consonant, the stem is either copied as a whole or – as a variant pattern – without the consonantal coda. A verb stem ending in a vowel always shows full reduplication. If the base consists of a verb root ending in  $/\epsilon$ , this final vowel is not copied. In some of the patterns lenition and fortification processes are involved. With regard to inflectional or derivational affixes attached to the verb root, the reduplicative patterns vary in that some of these morphemes are never part of the reduplicant and others, mostly valency-changing devices, can be reduplicated or not. A general rule seems to be that only one additional morpheme can be copied together with the verb in a complex form with several affixes. Templates showing the variant patterns of reduplication are listed in table 3.17.

<sup>&</sup>lt;sup>309</sup> These numbers could be obtained by annotating two ten minutes excerpts of kal\_awytyza1 (text A) and kal\_makawaja (text B) with GRAID (Haig & Schnell 2010). Verbal predicates were annotated as v:pred, ideophones – when functioning as predicates – as other:pred. It must be added that in the beginning of a narrative text more background information may be given, leading to atypical results with respect to the overall usage of iconic forms. Nevertheless, the considerable difference in quantity between ideophones and reduplicated verbs in the first ten minutes of both texts is a significant result.

<sup>&</sup>lt;sup> $^{310}$ </sup> Typologically, there is a tendency for the two features – prefixing and base-initial reduplication – to be coupled.

Table 3.17: Patterns of reduplication

Pattern	Variant
$RED(cv_{[]}cv)-V(cv_{[]}cvc)-EPEN$	RED <sub>[V]</sub> -[V]-EPEN
RED <sub>[V]</sub> -[V]	-
RED <sub>[CVC]</sub> -V[CVCV]	-
RED <sub>[CAUS-V]</sub> -[CAUS-V]-(EPEN) <sup>311</sup>	CAUS-RED <sub>[V]</sub> -[V]-(EPEN)
RED <sub>[COM-V]</sub> -[COM-V]-(EPEN)	-
RED <sub>[V-CAUS]</sub> -[V-CAUS]-EPEN	RED <sub>[V]</sub> -[V]-CAUS-EPEN
RED <sub>[REFL-V]</sub> -[REFL-V]-(EPEN)	REFL-RED <sub>[V]</sub> -[V]-(EPEN)
RED <sub>[REC-V]</sub> -[REC-V]-(EPEN)	REC-RED <sub>[V]</sub> -[V]-(EPEN)
RED <sub>[N-V]</sub> -[N-V]-(EPEN)	N-RED <sub>[V]</sub> -[V]-(EPEN)
RED <sub>[V-OPT]</sub> -[V-OPT]-EPEN	-

### Active verbs

As will be outlined in section 4.3, there is a strong link between ideophones and reduplication in active transitive and intransitive verbs. Therefore this process will be outlined here in more detail than other reduplicative processes in the language.

The description of the morphophonological patterns for reduplicated transitive and intransitive verbs is divided into two parts: First a number of regular patterns for morphologically simple forms will be outlined. In the second part the less consistent picture for reduplication in morphologically complex forms (i.e. including affixes) is presented. The descriptive part is followed by an illustration of the semantic functions.

In nearly all cases Awetí shows reduplication of a whole verb stem, independent of its respective number of syllables, whereby the base is always repeated just once. Examples are given in (212):<sup>312</sup>

<sup>&</sup>lt;sup>311</sup> Since the epenthetical element only occurs with verb stems not ending in a vowel, it is set into brackets in the template.

<sup>&</sup>lt;sup>312</sup> The underlined part in the examples is the base form.

(212) a. (kal\_kujakyt, 1371.946)  $n\tilde{a}=pytyk-u^{3/3}$  in *e- pyty-<u>pytyg</u>- e* 'you grab it repeatedly'<sup>314</sup> 2sg-RED-grab.vt-EPEN PERS-RED(cvcv)-V(cvcvc)-EPEN [ $\epsilon.pt._tt.pt.'tt.\gamma\epsilon$ ]

```
b. (tal mamuti 3 8, 0211.084)
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tepotitup-u in  $n\tilde{a}$ =tepotitu-<u>tepotituw</u>-e-tu '(s)he was very much disgusted.' 3= RED- be.disgusted.vi -EPEN-NOM

 $PERS=RED_{(CVCVCVCV)}-V_{(CVCVCVCVC)}-EPEN-NOM$ [nã.tɛ.pɔ.tſi.,tu.tɛ.pɔ.tſi.'tu.wɛ.tu]

Different reduplicative patterns can be distinguished for morphologically simple verbs, depending on whether the last syllable of the base form ends in a consonant or in a vowel. One of these patterns is reflected by the examples in (212): If a reduplicated verb root with more than one syllable ends in a closed syllable, the coda – consisting of a plosive or a nasal – is often not copied, i.e. only partial reduplication takes place. From this one can conclude that the reduplicant in reduplicated Awetí verb roots must be the first string.

There is variation in the pattern outlined in (212) in that nearly as many examples of full reduplication were encountered where the consonantal coda is reduplicated, too. Voiceless plosives at the end of the reduplicated form in these cases tend to have a voiced and lenited realization (/p/ > [w], /t/ > [d], /k/ > [y]) even if the following onset of the syllable is a consonant. Examples are (213)(a) where the final /k/ in the underlying form *ta'ok* ('be angry') has been lenited to [y] and (213)(b) where /p/ in *kwap* ('pass by') is realized as [w]:

<sup>&</sup>lt;sup>313</sup> In this section the citation form (cf. section 1.5.2) instead of the lexical root is given for the non-reduplicated verb in order to make the base fully transparent, e.g. a fortis consonant in the coda of the last syllable.

<sup>&</sup>lt;sup>314</sup> The translations given for the examples illustrating morphophonological processes may not correspond to the actual meaning contribution of the reduplication in its specific context which in this case is one of intensification in combination with a negative imperative.

(213) a. (kal\_awaniwani4, 0000.0)

*ta'ok-u* in *a- mo- ta'ok-<u>ta'og</u>-e* 1sg- CAUS-RED- angry.st-EPEN PERS-CAUS-RED<sub>[V]</sub>-[V]-EPEN [a.mo.ta. <sub>1</sub>?ογ.ta. '?ο.γε]

b. (kal\_awytyza2, 0763.33)

*kwap-u* in *o- kwap- <u>kwaw</u>- e* 'it passed by' 3- RED- pass.by.vi-EPEN PERS-RED<sub>[V]</sub>-[V]-EPEN [ɔ.,kwaw.'kwa.wε]

'I deceived you'<sup>315</sup>

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c. (kal_awakap2, 1492.688)
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temo'am-pu in  $n\tilde{a}$ =temo'am- temo'am- e-tu 'he was slowing down' 3= RED- come.to.standstill.vi-EPEN-NOM PERS=RED<sub>[V]</sub>-[V]-EPEN-NOM [nã.tɛ.mɔ.<sub>1</sub>?am. tɛ.mɔ.'?a.mɛ.tu]

As outlined in section 3.2.2, lenition of a plosive in Awetí word-internally only occurs before vowels – observable in the base forms in (212) and (213) to which an epenthetical *-e* is added – or at word boundaries when the following word begins with a vowel. There are, except for these cases of reduplicated roots in (213), no Awetí words in which two plosives follow each other at syllable boundaries. In such cases one of the consonants, usually the first one, is deleted.<sup>316</sup> Drude (unpubl. a: 9) on the other hand states that in careful speech the two consonants are also audible in other composites. This in fact explains the variation observed in this kind of reduplicants in which the consonantal coda is either copied or not. However, except for one case of variation with regard to the same verb root<sup>317</sup>, all other

<sup>&</sup>lt;sup>315</sup> The transitive stem *mota* 'ok seems to have lexicalized since semantically 'to deceive' does not immediately follow from a combination of a causative prefix and the stative verb stem *ta* 'ok ('to be angry').

<sup>&</sup>lt;sup>316</sup> See section 3.2.3 example (27).

<sup>&</sup>lt;sup>317</sup> The transitive stem pytyk ('to grab') is used by one speaker twice without a deletion of the first consonantal coda, while by another speaker (cf. (212)(a)) the first /k/ is deleted. In

lexical verbs in the sample which occur more than once are consistently used the same way by different speakers, either with or without the first consonantal coda.

Since phonologically similar verb bases (with the same consonantal coda of the first string in front of the same consonantal onset of the second string) do not show identical behavior in this respect, the variation seems to depend on some feature of the lexical verb rather than on any specific phonological environment triggering a drop of coda<sup>318</sup>. Examples are /k/ before /?/, dropped in (214) (a) but not in (b), and /p/ before /t/, dropped in (c) but not in (d)<sup>319</sup>:

(214) a. (tal_kakaja, 0369.325)	
<i>'ajpok-u</i> in <i>e= 'ajpo-<u>'ajpog</u>-e-zoko-tu</i>	'you returned again and again'
2sg=RED- return.vi-EPEN-IMPF-NOM	
PERS=RED <sub>(CVCV)</sub> -V <sub>(CVCVC)</sub> -EPEN	
[ɛ.ʔaj.ˌpɔ.ʔaj.ˈpɔ.ɣɛ.z̥ɔ.kɔ.tu]	

b. (kal\_tawozy3, 0805.852)  $n\tilde{a} = 'ok-u$  in 'ok- 'og-e-tu '(he) continuously took (it) off' RED-take.off.vt-EPEN-NOM RED<sub>[V]</sub>-[V]-EPEN-NOM [<sub>1</sub>?oy.'?o.yɛ.tu] c. (kal\_awytyza2, 0429.47)

 $n\tilde{a}$ =tup-u in kaj= totu-<u>to-</u> <u>tuw</u>-e-tu 'v 1pl:incl=RED-RECIP-see.vt-EPEN-NOM PERS=RED<sub>[REC-V]</sub>-[REC-C]-EPEN-NOM [kaj.to.\_tu. to.'tu.wɛ.tu]

'we were looking at one another'

the second case, however, it cannot be excluded that the form is formed analogously to the cognate form in Kamaiurá (*pyhy-pyhyk*, cf. Seki 2000:133), since this particular person at the time of the recording had continuously been living in a Kamaiurá-village for three decades and is a fluent speaker of this TG-language.

<sup>318</sup> The possibility of free variation induced by contact with other Tupian languages showing differing patterns of reduplication can also not be excluded.

<sup>319</sup> Examples (214)(c) and (d) are complex stems.

```
d. (ama_dry_seas, 0647.604)

n\tilde{a}=zap-u in ts\tilde{a}=tezap-\underline{te}-\underline{zaw}-e-tu 'they untied themselves'

3pl= RED- REFL-untie.vt-EPEN-NOM

PERS=RED<sub>[REFL-V]</sub>-[REFL-C]-EPEN-NOM

[tsã.tɛ.,zaw. tɛ.'za.wɛ.tu]
```

However, in monosyllabic verb roots consisting of a closed syllable (CVC), the consonantal coda is never dropped (e.g. (214)(b) and (217) below).

In syllables ending in a vowel or a semi-vowel (/j/ and /w/) the first string remains complete:

(215) a. (tal\_kakaja, 0679.596)  $n\tilde{a}=pwaj-tu$  in i=pwaj-pwaj-e-tu '(s)he expelled me' 1sg=RED- send.vt-EPEN-NOM PERS=RED<sub>[V]</sub>-[V]-EPEN-NOM [i.<sub>1</sub>p<sup>w</sup>aj.'p<sup>w</sup>a.jɛ.tu]

b.  $(tal_mamuti_3_8, 0164.997)$   $n\tilde{a}=tylym\tilde{u}-tu$  in  $n\tilde{a}=tylymu-tylym\tilde{u}-tu$  '(s)he spat out several times' 3= RED- spit.vi-NOM PERS=RED<sub>[V]</sub>-[V]-NOM [nã.t<sub>1</sub>.l<sub>1</sub>.mũ. t<sub>1</sub>.l<sub>1</sub>.'mũ.tu]

Excluded from this rule are di- or trisyllabic intransitive verb roots ending in  $\epsilon$ , such as *wyge* ('finish'), *loge* ('get out'), *toge* ('pierce'), *pore* ('jump') or *zymane* ('spin'), which differ from other roots in having the stress on the penultimate syllable.<sup>320</sup> In these forms the  $\epsilon$ / is deleted in the reduplicant. In addition, a devoicing and fortification of the consonant may occur, which, however, is subject to variation:

<sup>&</sup>lt;sup>320</sup> Cf. section 3.2.3.

(216) a. (kal\_makawaja, 0583.81) pore-tu in nã=pot- <u>pore</u>-tu 'he jumped up and down' 3=RED- jump.vi-NOM PERS=RED<sub>[CVC]</sub>-V[CVCV]-NOM [nã.,pot.'porɛtu]

```
b. (kal_mene, 0095.687)
loge-tu in o-log-<u>loge</u>
3-RED-get.out.vi
PERS=RED<sub>[CVC]</sub>-V[CVCV]-NOM
[5.,loχ. <sup>1</sup>lo.χε]
```

'various of them got out'

Thus, the reduplicants of some of these verb roots become formally identical to monosyllabic roots of the CVC-type (cf. '*at* ('fall') in (217)(c)) to which they may be historically related.<sup>321</sup>

In more complex forms of this type, either with three syllables in the simple form (e.g. *zymane* in (243) below) or in disyllabic forms extended by an affix, the consonantal coda may also be deleted in the reduplicant.

In accordance with a phonological rule of the language all base forms of reduplicated verbs which in the non-reduplicated form have a voiceless plosive in the coda show a process of lenition of this plosive (i.e. /p/ > /w/, /t/ > /r/, /k/ > /y/) in front of an additional  $/\epsilon/$ .<sup>322</sup> Examples are given in (212) and (213) above.

Likewise, an epenthetical  $|\varepsilon|$  occurs in the formation pattern of reduplicated action nominal constructions and with regard to the suffixation of the aspectual marker *-zoko* after verb roots ending in a plosive, a nasal consonant or a semi-vowel. The same applies to *-ju*,

<sup>321</sup> Drude (unpubl. a: 8) hypothesizes that the element  $\epsilon/$  was suffixed to a verb stem that originally ended in a fortis consonant which subsequently became lenited. For him,

however, there is no synchronic evidence for this kind of development (e.g. the existence of a verb stem *tik* in addition to *tige* 'to sit'). In Drude (forthcoming b: 12) the assumption of a morphological border before  $|\varepsilon|$  is considered the more convincing hypothesis than the idea that  $|\varepsilon|$  may be dropped for being in an unstressed syllable. See section 4.3 for an elaboration of this hypothesis.

<sup>&</sup>lt;sup>322</sup> Cf. section 3.2.2 example (16).

even though this aspectual suffix has got an allomorph *-eju* which, however, when attached to non-reduplicated active verb roots, leads to a 'fortification' of the immediately preceding consonant.<sup>323</sup>

These three patterns differ from those of the non-reduplicated forms. Examples are:

(217) a. (kal angut2, 1202.618; kal mene, 1423.649)

kaj=ekyj-tu	VS.	ekyj- <u>ekyj</u> -e-tu
1pl:incl=pull-NOM		RED-pull-EPEN-NOM
[ka.jɛ.ˈkɨj.tu]		[ɛ.ˌkɨ.jɛ.ˈkɨ.jɛ.tu]
'he pulls us'		'(he) pulled her (repeatedly)'

b. (kal kwaza, 0281.641; kal awytyza2, 1116.229)

ja'ang-ku	VS.	ja'an- <u>ja'ang</u> -e-tu
gather-NOM		RED-gather.vi-EPEN-NOM
[ja.'?aŋ.ku]		[ja. <sub>1</sub> ?aŋ.ja.'?aŋ.yɛ.tu]
'they gathered'		'they gathered'

c. (tal\_kujakyt, 1186.97; kal\_awytyza2, 0086.423)

$i = at^{324} - u$	VS.	tsã='at- <u>'ar</u> -e-tu
1sg=fall.vi-NOM		3pl=RED-fall.vi-EPEN-NOM
[i.'?a.tu]		[tsã. <sub>1</sub> ?ar.'?a.rɛ.tu]
'I fell'		'they fell upon them one after the other'

d. (kal kwaza, 2134.086; tal kakaja, 0379.472)

azo='ajpog-oko-tu	VS.	e='ajpo- <u>'ajpog</u> -e-zoko-tu
1pl:excl=return-IMPF-NOM		2sg=RED-return-EPEN-IMPF-NOM

 $<sup>^{323}</sup>$  Drude (to appear: 9) therefore assumes the existence of an abstract consonant, inhibiting the lenition of final stops, at the onset of the first syllable of the allomorph *-eju*. Cf. sections 3.2.3 and 3.3.4.2.

<sup>&</sup>lt;sup>324</sup> The inherently intransitive verb root '*at* ('to meet/ encounter') requires an oblique argument either marked by the postposition '*aparype* when encoding a patient, or *ype* when encoding a location. Without this argument the verb meaning is 'to fall'.

[a.z.ɔ.?aj.'pɔ.yɔ.kɔ.tu]	[ε.?aj.ˌpɔ.?aj.'pɔ.γε.z̥ɔ.kɔ.tu]
'we will return'	'you returned (habitually or regularly)'

e. (kal angut1, 0269.275; kal mene, 1519.659)

nã=tezuw-oko-tu	VS.	i=tezu- <u>tezuw</u> -e-zoko-tu
3=wait.vi-IMPF-NOM		1sg=RED-wait.vi-EPEN-IMPF-NOM
[nã.tɛ.ˈzu.wɔ.kɔ.tu]		[i. tɛ.,zu.tɛ.'zu.wɛ.zɔ.kɔ.tu]
'he kept waiting'		'I kept waiting and waiting'

f. (kal\_makawaja, 1762.214, 1769.241) *kaj-mota'ok-eju* vs. *kaj-mo-ta'ok-<u>ta'og</u>-e-ju<sup>325</sup>* 1pl:incl-lie.vt-IMPF 1pl:incl-CAUS-RED-be.angry.vi-EPEN-IMPF [kaj.mo.ta.?o.'ke.ju] [kaj.mo.ta.<sub>1</sub>?o.ta.'?o.γε.ju] '(you) continue lying to us' '(you) continuously lie to us again and again'

In (217)(a) to (c) three verb roots ending in a semi-vowel /j/, a nasal consonant /ŋ/ and a voiceless plosive /t/ are in the simple form nominalized by the suffixation of -tu and its allomorph -ku, adapted to the velar environment of the final consonant of the root. The reduplicated forms are nominalized with -tu, irrespective of the phonological environment of the final consonant of the verb, and receive an epenthetic / $\varepsilon$ /. (217)(d) and (e) show an equally divergent pattern for the combination of reduplicated forms with the imperfective suffix -(z)oko. While the simple form the allomorph -oko is attached to a lenited final consonant, the reduplicated form, equally lenited, can only be combined with the allomorph -zoko which is preceded by an / $\varepsilon$ /. Finally, (217)(f) shows the combination of a nonreduplicated verb stem ending in a voiceless plosive /k/ with the suffix -eju which does not trigger any lenition of the stem but in the case of lenis final consonants provokes a fortition. In addition, -eju changes the stress pattern of the word in receiving primary stress on its

<sup>&</sup>lt;sup>325</sup> The verb stem *mota* '*ok* ('to lie') has probably lexicalized since the meaning of the action it refers to cannot immediately be derived from a combination of its components (causative mo + ta '*ok* 'be angry' \*'to make someone be angry').

first syllable. The reduplicated form, on the other hand, goes through a process of lenition and does not carry stress on the penultimate syllable, so that the allomorph used in this form can only be -ju – normally used with vowel-final stems. This strongly suggests the existence of an  $/\varepsilon$ / attached to the right of a reduplicated verb stem which does neither belong to the root nor is it part of an allomorph of -tu (-u, -ku, -pu, but not \*-etu) or -zoko (-oko, but not \*-ezoko). A possible analysis of this phenomenon will be presented in section 4.3.

### Morphologically complex forms

As was observed for other languages, too (cf. Wiltshire & Marantz 2000:559), reduplication in Awetí verbs may reflect a phonological bracketing of a word which does not correspond to its morphological structure, i.e. the reduplicating affix may copy more than the root to which it is morphologically attached. The list in table 3.18 below shows affixes which may be involved in Awetí verb reduplication and those which are not. For most of the "reduplicatable" affixes variant forms were encountered in the corpus or elicited when checking the corpus examples with Awetí speakers in which the affix was not reduplicated. The only exceptions are *(e)zo-* and *- 'at*, the latter being a suffix which could not be found in the corpus but for which Drude (to appear: 27) gives an example.

A reduplicant may consist of a verb root combined with a variety of valency-changing affixes and with incorporated nouns, as listed in table 3.17.<sup>326</sup> These morphemes, mostly prefixed to the verb root, are occasionally but not consistently reduplicated. No rule could be identified to describe this process. A problem for a synchronic evaluation of such forms is the fact that in many cases affixes and even incorporated nouns together with a verb root may have lexicalized into a complex verb stem whereby its components are still morphologically transparent. Since there are several examples where specific additional morphemes attached to one and the same verb are consistently either part of the reduplicant or not, the lexical verb seems to play a decisive role in this context.

<sup>&</sup>lt;sup>326</sup> Cf. section 3.3.8.2.

reduplicatable		not reduplicated	
affix	function	affix	function
mo-	causative (vi)	PERS-	person prefixes
(e)zo-	comitative causative	-(e)ju	imperfective
-(t)ukat	causative (vt)	-(z)oko	imperfective
te-	reflexive	po(r)-	'antipassive'
to-	reciprocal	$(-(z)\tilde{a})$	(inchoative)
INCORP-	object incorporation	-ka	causative (st)
- 'at	perfective	-(y)ka	verbal negation
-tu(t)	optative	-at	agent nominalizer
		-ap	instr. nominalizer
		mi-	patient nominalizer
		-(p)ut	nominal past
		-(e) 'ym	nominal negation

Table 3.18: Affixes involved and not involved in reduplication

The causative affix *mo*- is reduplicated in eight out of ten verbs encountered in the corpus.<sup>327</sup> Examples are:

(218) a. (tal mamuti 4 8, 0512.575)

wej-mopor-mo- pore-ju

3- RED- CAUS-jump.vi-IMPF

 $PERS\text{-}RED_{[CAUS\text{-}(CVC)]}\text{-}[CAUS\text{-}V_{(CVCV)}]\text{-}IMPF$ 

[wɛj.mɔ.ˌpɔr. mɔ.ˈpɔ.rɛ.ju]

'she made him jump up and down'

b. (kal\_kamukuaka6, 0937.046)

wej-mowur-<u>mo</u>- <u>wure</u>

3- RED- CAUS-fly.vi

 $PERS\text{-}RED_{[CAUS\text{-}(CVC)]}\text{-}[CAUS\text{-}V_{(CVCV)}]$ 

<sup>&</sup>lt;sup>327</sup> These are: *mokure* (lexicalized), *mo-kwap*, *mo-loge*, *mo-pap*, *mo-pore*, *mo-toge*, *mo-wage* and *mo-wure*. Cf. section 3.3.8.2.1 for causatives.

[wɛj.mo.<sub>1</sub>wur. mo.<sup>1</sup>wu.rɛ]

'they made them fly'

c. (kal\_angut2, 0491.665)
nã=po- molo(g)-mo-loge-tu
3= ANTI-RED- CAUS-come.out.vi-NOM
PERS=SUBJ-RED<sub>[CAUS-(CVC)</sub>]-[CAUS-V<sub>(CVCV)</sub>]-NOM
[nã.pɔ.mɔ.<sub>1</sub>lɔ. mɔ.<sup>1</sup>lɔ.ɣɛ.tu]
'he reaps it out'

d. (kal\_kujamary1, 1010.039) *wej-mopap-<u>mo-paw-e</u>*3- RED- CAUS-finish.vi-EPEN
PERS-RED<sub>[CAUS-V]</sub>-[CAUS-V]-EPEN
[wɛj.mɔ.<sub>1</sub>pap.mɔ.<sup>1</sup>pa.we]
'she finished it all/ made it come to an end'

But in two verbs it is not (e.g. (219) and (213)(a) above):

(219) (kal\_makawaja, 0528.63) *wej-mo- kolo-<u>kolog</u>-yka*3- CAUS-RED-squash.vi-NEG
PERS-CAUS-RED<sub>(CVCV)</sub>-V<sub>(CVCVC)</sub>-NEG
[wεj.mɔ.kɔ.<sub>1</sub>lɔ.kɔ.'lɔ.γt.ka]
'he did not squash it'

A possible explanation for this irregular behavior would be to consider the fusion of *mo*- and an intransitive verb root as a fully lexicalized transitive verb stem in all those cases where the affix is reduplicated. This interpretation would make sense for *mokure* ('to

swallow') which does not have an intransitive counterpart *kure* in Awett<sup>328</sup>, but in the other cases *mo*- clearly has a causative function. Therefore the variation seems to depend on other factors, whereby – as the examples suggest – verb roots not ending in  $/\varepsilon$ / with more than one syllable may be candidates for reduplication without *mo*-. This hypothesis, however, could not yet be tested by elicitation. A third hypothesis is that the reduplication of the causative prefix is semantically motivated in that it occurs in all those instances where not only the activity but also the causation is repeated. This can be illustrated by (218)(b) in comparison to (219). In (218)(b) several people cause several pigeons to fly away, whereas in (219) one person walks over a delicate surface consisting of innumerous termites with a soft shell and does not squash one of them. However, (213)(a), where the meaning of transitive *mota'ok* ('to be angry') in combination with a causative<sup>329</sup>, cannot be as easily explained this way.

In the corpus-sample there are two instances of a comitative causative affix *(e)zo*-which are both reduplicated, e.g.:

(220) a. (tal\_mamuti\_4\_8, 0601.763) *wej-zopor-<u>zo- pore</u>*3- RED- COM-jump.vi
PERS-RED<sub>[COM-(CVC)]</sub>-[COM-V<sub>(CVCV)</sub>]
[wεj.z,o.,por.z,o.'po.rε]

'she made him jump up and down (with her).'

b. (kal\_tawozy4, 1004.554)  $ts\tilde{a}=por-ezopote-(e)\underline{zo-potem}-e-tu$ 3pl=ANTI-RED- COM-shout.vi-EPEN-NOM PERS=SUBJ-RED<sub>[COM-(CVCV)]</sub>-[COM-V<sub>(CVCVC)</sub>]-EPEN-NOM [tsã.po.rɛ̃.zõ.põ.tɛ̃.zõ.põ.tɛ.mɛ.tu]

'they got cheerful together'

<sup>&</sup>lt;sup>328</sup> In other Tupian languages *kut/kure* means 'to drink'. In Awetí there is an ideophone *kut* ('drink') but the inflected verb stem is 'y'u (lit. 'eat water').

<sup>&</sup>lt;sup>329</sup> Cf. footnote 338.

(lit. 'they shouted repeatedly together with them')

With regard to (220) (b) a variant form could be elicited with a younger consultant which shows that the coda is included in the reduplicant, thus confirming that the reduplication of a consonantal coda of the verb root is optional:<sup>330</sup>

(221) (Awajatu Awetí, October 2007) *tsã=por-ezopotem-<u>ezo-potem</u>-e-tu*3pl=ANTI-RED-REL-COM-shout-EPEN-NOM
PERS=SUBJ-RED<sub>[COM-V]</sub>-[COM-V]-EPEN-NOM

Two reduplicated forms with a causative suffix -(t)ukat could be encountered in the corpus, only one of them, as shown in (222)(a), being part of the reduplicant:

(222) a. (kal\_tawozy3, 0170.342) o = mo'at-'utukat-'u-tukar-e-zokotiwo 3coref=people-RED- eat.vt-CAUS-EPEN-IMPF SUB PERS=N-RED<sub>[V-CAUS]</sub>-[V-CAUS]-EPEN-IMPF SUB [5.m5.?ar.<sub>1</sub>?u.tu.'kar.<sub>1</sub>?u.tu.'ka.rɛ.zɔ.kɔ.tʃi.wɔ] 'because it<sub>i</sub> (regularly) caused it<sub>i</sub> to eat people'

b. (kal\_makawaja, 0573.906) *wej-t-uka-<u>ukã</u>-tukat*3-EPEN-RED-step.vt-CAUS
PERS-EPEN-RED<sub>[V]</sub>-[V]-CAUS
[wɛ̃ŋ.tũŋ.,kã.tũŋ.'kã.tu.kat]

'they asked him to step (on it) several times.'

<sup>&</sup>lt;sup>330</sup> Note that Drude (forthcoming b: 24, example (58)(d.)) lists a form corresponding to (217)(a) with a deviant pattern suggesting that *ezo*- is the allomorph consistently used with reduplicated forms.

Other valency-changing affixes are the reflexive marker *te*-, copied in (223)(a) but not in (b) and the reciprocal marker *to*-, reduplicated with the verb base *tup* ('see') in (224)(a) but not with '*awỹ* ('throw arrow') in (b).

(223) a. (kal\_kamukuaka6, 1426.876) *o-temo'eg-<u>te-mo'ege</u>*3-RED- REFL-make.vt
PERS-RED<sub>[REFL-V]</sub>-[REFL-V]
[ɔ.tɛ.mɔ.,?εɣ.tɛ.mɔ.'?ε.ɣɛ]
'it grew together/ joined itself together'

b. (tal\_mamuti\_2\_8, 0797.675) *o-te-* 'ati-<u>'atī</u>
3-REFL-RED-tie.vt
PERS-REFL-RED<sub>[V]</sub>-[V]
[ɔ.tε.?ã.,tʃĩ.?ã.'tʃĩ]

'he tied himself (i.e. he wrapped a wrist-strap several times around his arm)'

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(224) a. (kal_awytyza2, 0429.47)
kaj=totup-to-tuw-e-tu
lpl:incl=RED-REC-see.vt-EPEN-NOM
PERS=RED<sub>[REC-V]</sub>-[REC-V]-EPEN-NOM
[kaj.to.,tuw.to.'tu.wɛ.tu]
```

'we started to see each other'

(Context: By the light of daybreak the inhabitants of a village gradually manage to see each other.)

b. (kal\_awytyza2, 0802.977) kaj = to - awy - awy - tu1pl:incl=REC-RED- throw.arrow.vt-NOM PERS=REC-RED<sub>[V]</sub>-[V]-NOM [kaj.to.?a.,wł.?ã.'wł.tu] 'we throw arrows at each other'

The respective reduplicated form seems to have developed by convention. As suggested by examples (214)(c) and (d) above, a tendency for monosyllabic verb roots to include the affix into the reduplicant, may also play a role in the formation of a specific reduplicative pattern.<sup>331</sup> However, there are also instances of vowel-initial verb roots with  $\epsilon$ , as shown in (225)(a) and (b), where a reduplication of the reflexive prefix is obligatory in order to differentiate between a complex form and its transitive base form:

(225) a. (kal\_kwaza, 1625.36)  $n\tilde{a} = tekyj - te - (e)kyj - e - tu$ 3=RED-REFL-pull.vt-EPEN-NOM [nãtɛ\_kijtɛ'kijɛtu] 'he dragged himself along'

b. (kal\_mene, 1423.649) *waty ekyj-<u>ekyj</u>-e-tu* 3coref-wife RED-pull.vt-EPEN-NOM

[ɛ,kıjɛ'kıjɛtu]'he tried to pull his wife'

There are two forms in the corpus where an incorporated noun is included in the reduplicant:

(226) a. (kal\_awytyza2, 0664.989) *o-pepota-<u>pepo-tang</u>-e* 3-RED- wing- put.vt-EPEN PERS-RED<sub>[N-(CV)]</sub>-[N-V<sub>(CV</sub>]<sub>C)</sub>-EPEN [ɔ̃.pɛ̃.pɔ̃.<sub>1</sub>tãŋ.pɛ̃.pɔ̃.'tã.ŋɛ]

'he spread his (arms as if they were) wings'

<sup>&</sup>lt;sup>331</sup> See also Drude (forthcoming b: 22).

```
b. (kal_makawaja, 0466.852)
wej-kang 'ok-<u>kang- 'og-e</u>
3- RED- bone- take.off.vt-EPEN
PERS-RED<sub>[N-V]</sub>-[N-V]-EPEN
[wɛ̃ŋ.kãŋ.?ɔ.k ãŋ.?ɔ.yɛ]
'he took off the bones'
```

According to Awetí consultants *pepotang* is a lexicalized stem which can also be concluded from the fact that the meaning is not immediately transparent (*pepotang* 'to spread one's (arms as if they were) wings' instead of *pepo* 'wing' + *tang* 'to put'). The verb's valency has changed from transitive to intransitive. In (226) (b) the incorporated object belongs to the group of possessible nouns so that no valency decrease is involved.

Another example of noun-incorporation is (222)(a), repeated here, where the noun *mo'at* ('people') is not reduplicated while the causative suffix *-(t)ukat* is:

(222) a. (kal\_tawozy3, 0170.342) o = mo'at-'utukat-'u- tukar-e-zoko tiwo3coref=person-RED- eat.vt-CAUS-EPEN-IMPF SUB PERS=N-RED<sub>[V-CAUS]</sub>-[V-CAUS]-EPEN-IMPF SUB [omo?ar?utu\_kar?utu'karezokotfiwo] 'because it<sub>i</sub> (regularly) caused it<sub>i</sub> to eat people'

Based on this form two variant forms with different reduplicants could be elicited:

(227) a. (Jakumin Awetí, July 2007)<sup>332</sup> *o-mo'at-'u- <u>'u</u>- tukat*3-person- RED-eat.vt-CAUS
PERS-N-RED<sub>[V]</sub>-[V]-CAUS
'he asked someone to/made someone eat and eat people.'

<sup>&</sup>lt;sup>332</sup> Elicitation by Sebastian Drude, based on a questionnaire by Sabine Reiter.

b. (Jakumin Awetí, July 2007)

o-mo'at'u-<u>mo'at-'u</u>-tukat

3-RED- person-eat.vt-CAUS

PERS-RED<sub>[N-V]</sub>-[N-V]-CAUS

'he asked to/ made someone eat people and eat people'

However, according to another consultant the following form – including the incorporation as well as the causative suffix – does not exist:

(228) (Awajatu Awetí, October 2007)
\*o-mo'at'utukat-<u>mo'at-'u-tuka</u>r-e
3- RED- person-eat.vt-CAUS-EPEN
\*PERS-RED<sub>[N-V-CAUS]</sub>-[N-V-CAUS]-EPEN
'he regularly made someone eat people and eat people'

From this example one may conclude that only one affix, if at all, is reduplicated together with the verb. However, even though no counterexample could be found in the corpus, it must be added that one single example is not enough evidence to formulate a rule.

Each of the three existent forms has a different nuance in meaning. While (222)(a) emphasizes that the causation of the event occurred several times, (227)(a) stresses the activity of eating and (227)(b) of eating people. The following form which occurs later in the same narrative corroborates the observation that the reduplication includes only material which makes an important semantic contribution. In this case, probably due to assimilative processes in a similar phonological environment, not even the verb root '*u* is part of the reduplicant which consists only of the causative suffix, thus underlining that the whole construction refers to the participant with the semantic role of the causer:

(229) (kal\_tawozy4, 1164.633) eup 'utukatukataput e=up'u-tukat-(t)ukat-at-put2sg=fathereat.vt-RED-CAUS-NOMag-DEVN $V-RED_{[CAUS]}-[CAUS]-NOM^{333}$  $[\epsilon.'up.?u.tu._ka.tu.'ka.ta.put]$ 'the one who made it eat your father'

One may hypothesize from this observation that the criterion for morphemes to be reduplicated together with the verb root seems to be their semantic effect on it and not their position with respect to the root or other morphosyntactic considerations. Thus, in (222)(a) and (229) the causer of the event and in (227) above the repetitive character of an activity is highlighted by the respective reduplicant but in terms of derivation the causative suffix -(t)ukat is closer to the root 'u of the construction than mo'at, since it does not change its morphological status of a (di)transitive verb<sup>334</sup>. The incorporated noun, in turn, detransitivizes the whole form. This can be schematized as follows:

(230) [o-[mo'at- [ ['u] vt -tukat ] vt ] vi ] 3intr person eat cause

One example was encountered in the corpus, where the last syllable of a verb stem is not reduplicated:

(231) (kal\_kujamary1, 1154.276) mopjazã in mopja-<u>mopja</u>zã-tu RED- invite.vt-NOM RED<sub>(CVCV)</sub>-V<sub>(CVCVCV)</sub>-NOM<sup>335</sup>  $[_1$ mo. p<sup>j</sup>a .'mo.p<sup>j</sup>a.zãn.tu]<sup>336</sup>

<sup>&</sup>lt;sup>333</sup> Since this irregular pattern without a verb in the reduplicant is the result of an assimilative process it will not be considered as a specific pattern type.

<sup>&</sup>lt;sup>334</sup> Syntactically the 3<sup>rd</sup> person prefix *wej*- in a form like *wej*-'*u*-tukat would agree with the causer and not with the agent (causee) as in *wej*-'*u*, and semantically the causer is introduced as a new participant.

<sup>&</sup>lt;sup>335</sup> Taking into account the formation process of this complex verb, an alternative and more regular reduplicative pattern would be: RED<sub>[CAUS-V]</sub>-[CAUS-V]-INCH.

'(s)he invited them one after another'

An explanation for this particular reduplication pattern can be found when considering the verb stem *mopiazã* as morphologically complex. The element  $-z\tilde{a}$ , by which the state-of-affairs expressed by stative intransitive verbs changes from 'totally stative' to 'inchoative-stative',<sup>337</sup> seems to have fused with the verb and lexicalized into a complex stem at some stage. In the corpus various other lexical verbs with the final syllable  $-z\tilde{a}$  and an allomorph  $-\tilde{a}$  after vowels were encountered or elicited which all have this semantic component of 'change of state' in common, and at least for some of them a formation process is still transparent<sup>338</sup>, as shown in section 3.3.4.2.1.

The transitive form *mopjazã* ('invite') could thus be derived from the stative verb *pja* ('be large in size/ spatial extension'), turned into an active verb by what used to be a derivational suffix  $-z\tilde{a}$  ('to become larger in size) and transitivized by the causative *mo*-. The meaning 'to invite' of *mopjazã*, however, is not immediately transparent when combining the meanings of its morphological components.<sup>339</sup> Although the suffix  $-z\tilde{a}$  must have fused with the verb root at an earlier stage, the prefix *mo*- was given preference in the reduplication pattern. This shows once again that historical processes of verb formation or degree of lexicalization of a form do not play a role in the reduplicative process. However, in the case of  $-z\tilde{a}$ , which synchronically resembles a non-productive aspect marker rather than a derivational affix, the reduplicative pattern thus equals that of other verbs with the productively used imperfective aspect suffixes -(e)ju (e.g. (212)(c) and (217)(f)) and -(z)oko (e.g. (214)(a) and (217)(d)) which never occur in the reduplicant.

The modal suffix  $-tut^{340}$  is reduplicated in (232):

<sup>&</sup>lt;sup>336</sup> Note that the nasalization does not spread from right to left in this form. An explanation cannot be given at this stage of analysis.

<sup>&</sup>lt;sup>337</sup> It may be due to this semantic effect of an aspectual morpheme that in nominalized forms of intransitive active verbs  $-z\tilde{a}$  – as observed by Drude (forthcoming b: 18) – is mutually exclusive with the aspectual suffixes -(z)oko and -(e)ju.

<sup>&</sup>lt;sup>338</sup> See also Drude (forthcoming b: 13/14) who illustrates with elicited data that the reduplication pattern with regard to these stems is consistent.

<sup>&</sup>lt;sup>339</sup> In addition, the verb  $pjaz\tilde{a}$  synchronically does not seem to exist.

<sup>&</sup>lt;sup>340</sup> Cf. section 3.3.4.2.1.

(232) (ama autobiogr, 0294.059)

Apyawa-za wene ozo= $k\tilde{y}jtut-k\tilde{y}j-tur$ -e-zoko-tujawarawyzy-za.Kamaiurá-PL still1pl:excl=RED- kill.vt-OPT-EPEN-IMPF-NOMYawalapiti-PLPERS=RED<sub>[V-OPT]</sub>-[V-OPT]-EPEN-IMPF-NOMYawalapiti-PL

'The Kamaiurá and the Yawalapiti always wanted to kill us.'

Since this is the only example encountered in corpus, nothing can be said about the consistency of this reduplicative pattern. It is possible that the verb root  $k\tilde{y}j$  and the suffix in this specific case have lexicalized into a complex stem  $k\tilde{y}jtut$  ('to threaten/ want to kill'). Drude (forthcoming b: 27) identifies two more suffixes deriving active verb stems from stative roots one of which (-'at) is included in the reduplicant and the other (-ka) is not.<sup>341</sup>

Another affix which is not reduplicated is the 'antipassive' prefix po(r)- on action nominals<sup>342</sup> (e.g. (218)(c) and (220)(b)).

Reduplication can also be found in agentive, instrumental and patient nominalizations<sup>343</sup> where this derivational process is relatively productive:

(233) a. (tal\_mamuti\_4\_8, 0423.247)  $i = mom\tilde{y}j$ -<u>mo</u>- <u>m\tilde{y}je</u>-zokw-at 1sg=RED- CAUS-wake.up.vi-IMPF-NOMag PERS=RED<sub>[CAUS-(CVC)]</sub>-[CAUS-V<sub>(CVCV)</sub>]-IMPF-NOMag 'the ones that are about to wake me up'

b. (kal\_awakap2)
nãkytsekyts(e)aput<sup>344</sup>
nã=kytse-kytse-at-put
3= RED-cut.vt-NOMag-DEV
PERS=RED<sub>[V]</sub>-[V]-NOMag
'his liberator'

(lit: 'the one that had cut him free')

<sup>&</sup>lt;sup>341</sup> See Drude (to appear: 27, examples (65) and (66)).

<sup>&</sup>lt;sup>342</sup> Cf. section 3.3.8.2.3.

<sup>&</sup>lt;sup>343</sup> Cf. sections 3.3.8.1.4 to 3.3.8.1.6.

<sup>&</sup>lt;sup>344</sup> Speakers vary in either pronouncing the final  $\epsilon$ / in the base form or not.

c. (old\_villages, 0062.4) *tsã 'ok 'ogawut*tsã='ok-<u>'ok</u>-ap-put
3pl=RED-take.off.vt-NOMinstr-DEV
PERS=RED<sub>[V]</sub>-[V]-NOMinstr
'their photographs'
(lit.: 'something which was taken off them.')

d. (kal\_awytyza1, 0798.615) *mi- mi'i-<u>mi'ing</u>-e'ym* NOMpat-RED-tell.vt-NEG NOMpat-RED<sub>(CVCV)</sub>-V<sub>(CVCVC)</sub>-NEG 'that which is never told'

The reduplication patterns are identical to those of other active verbs. Nominalizers (*-at*, *-ap*, *mi-*) and nominal suffixes (*-(p)ut*, *-e'ym*) are not reduplicated.

# Semantic contributions<sup>345</sup>

With regard to the semantic contribution of the verb reduplication it can be observed that in the corpus sample the meaning is equally distributed between indicating a repetitive activity, as shown in (231), and the repetition of an activity in (232), whereby the respective contribution interacts with the lexical meaning of the verb. While  $z\tilde{y}$  ('to tie around') is a repetitive activity in itself, '*ajpok* ('to return') refers to an activity in its totality:

```
(234) (kal_kamukuaka2, 2203.046)

Pyw pyw pyw pyw, n\tilde{a}=tezy-\underline{te-z\tilde{y}}-tu me, w=etyta

IDEO.tie, 3=RED-REFL-tie.vt-NOM PART, 3coref=part.of.knee

z\tilde{y}-tu n\tilde{a} me.

tie-NOM 3PRO PART
```

'Pyw pyw pyw pyw, he tied it around himself, hei tied it around part of hisi knee.'

<sup>&</sup>lt;sup>345</sup> See also Drude (forthcoming b: 4) who lists six semantic effects of verb reduplication, including the three major functions for active verbs illustrated here.

(235) (tal\_kakaja, 0369.325)

"Me'ym it $\tilde{a} = 'ajpo-\underline{'ajpog}$ -e-zoko-tu  $n\tilde{a}=tym$ -paw a'yza?", never TOP 2sg=RED-return-EPEN-IMPF-NOM 3=plant.vt-GER EMOT,  $ts\tilde{a}='e$ -tu ti me. 3pl=say.vi-NOM EVID PART

"How come that you never returned again and again to plant on it?", they asked.'

Example (236) illustrates that this repetition of an activity may also trigger a modal connotation, comparable in function to the frustrative particle *tepe*.<sup>346</sup>

(236) (tal\_kujakyt, 0600.656)

Ato	wian	takany	t 'awỹ'awãw	<i>'a</i> .
a-to	wian	takanyt	ʻawỹ- <u>ʻawỹ-</u> aw	ʻa.
1sg-go	for.a.while	parrot	RED-shoot.with.arrow.vt-GER	PART
'I will go (for a while) and try to shoot parrots.'				

Apart from these, there are several instances, where the reduplication indicates plurality of a participant (agent or patient), many of these, however, overlapping with those of a repetition of the activity. Rose (2005) in this context adopts a terminology developed by Cusic (1981), who distinguishes event-internal from event-external verbal plurality, whereby the first refers to repetitive activities, i.e. repeated movements belonging to one activity, and the second to repeated occurrences either with the same or with multiple participants. Event-external verbal plurality thus includes what is called "distributive plurality", the distribution of the units of action over multiple occasions and/or over various participants. This is exemplified by the reduplication of two intransitive verbs in (237) and (238):

(237) (kal\_awakap2, 1057.948)

O=u'wyp ete me, mu'jë o-wyg-<u>wyge</u> tsãn a'yn. 3coref=arrow POSP PART, already 3-RED-finish.vi 3plPRO PART 'Their<sub>i</sub> arrows, they<sub>i</sub> had already finished them off.'

<sup>&</sup>lt;sup>346</sup> Cf. section 3.3.4.2.2.

(lit.: 'With their<sub>i</sub> arrows they<sub>i</sub> had already terminated.')

(238) (kal\_angut2, 0848.183) W=e-iniku w=e-iniku kyty  $ts\tilde{a}=to-to-tu$ . 3coref=REL-camp 3coref=REL-camp POSP 3pl=RED-go-NOM 'Each one<sub>i</sub> went into their<sub>i</sub> camp.'

In (237) the reduplicated form refers to more than one participant involved in a process and in (238) to an activity performed by different agents in different directions which is further emphasized by a repetition of the oblique argument indicating diverse goals.<sup>347</sup> In both cases the plurality of the subject is explicitly marked – in (237) by a free pronoun, in (238) by a clitic pronoun – which, however, need not be the case to trigger this interpretation, as can be illustrated by (241) below.

With transitive verb stems plurality of the patient may be indicated as in (239) and (240):

(239) (kal\_tawozy5, 0947.127)
Jatã kara'yput 'u-<u>'u</u>-tu tut nã tut an tut nã me 'a.
DEM bird RED-eat.vt-NOM FUT 3PRO FUT NEG FUT 3PRO PART PART 'This one will (not) eat other birds, never.'

(240) (mopot\_birth, 0116.003) *Ozoj-'u-<u>'u</u> wan pira'yt a'yn*.
1pl:excl-RED-eat.vt but fish PART
'But we start to eat a little bit of fish.'

<sup>&</sup>lt;sup>347</sup> According to Drude (forthcoming b: 4) the semantic effect of "different directions" frequently occurs with motion verbs.

In (240), although formed with the same verb '*u* ('to eat') as in (239), an additional meaning component of "eating little quantities" or "starting to eat little by little" is involved which can only be explained by world knowledge given by a specific context.<sup>348</sup>

Another example of reduplication indicating that several patients are involved is given in (241). At the same time, according to an Awetí consultant, the reduplication emphasizes that the activity was performed consecutively:

(241) (kal kujamary1, 1154.276)

Koj ti $n\tilde{a}$ =to-tuo=to'otar'ypamopja-mopjazã-tuti $n\tilde{a}$ me.who EVID3=go-NOM3coref=friendRED-invite.vt-NOMEVID3PROPART'Who else was her friend went (there), she invited them one after another.'

One example was found where the reduplication must be interpreted as intensification, since the utterance in the narrative is directed towards one single addressee:

(242) (kal\_kamukuaka4, 0853.995)

*Kware* e=tem-tem-e-zoko-tu e=to-to-zokw-aw oteny wo

NEG.IMP 2sg-RED-go.out.vi-EPEN-IMPF-NOM 2sg=RED-go.vi-IMPF-GER door POSP

*ej=atuw-okw-aw jatã.* 

2sg=bathe.vi-IMPF-GER DEM

'You mustn't (ever) get outside the house to go and have a bath, you know.'

There are two different functions – depending on the verb meaning – indicated by reduplication on a deverbal noun, one being plurality of the entity involved in an activity (as in (233)(a)) or – only with transitive verbs – an activity performed more than once (as in (233)(c) and (d)) or a repetitive activity by which the entity is characterized (as in (233)(b)).

There is a clear relation between verbal reduplication and the two aspect markers in Awetí. As outlined and summarized in table 3.8 in section 3.3.4.2.1, the two aspect markers when applied to non-reduplicated verbs only differ slightly from each other. The aspect marker -(e)ju can have a progressive reading with a broader variety of verbs indicating

<sup>&</sup>lt;sup>348</sup> Drude (forthcoming b: 23) made the same observation for the intransitive *kar'u* ('to eat') and therefore assumes lexicalization.

processual as well as gradually terminative states-of-affairs, whereas -(z)oko often tends to have a habitual reading. In the examples, where one aspectual marker or the other is added to a reduplicated form, a clear difference can be observed with regard to the lexical aspect of the verb.

The suffix -(e)ju in eight out of nine instances<sup>349</sup> accompanies reduplicated verbs expressing a repetitive, mostly ongoing activity (i.e. a processual state-of-affairs):

(243) (kal\_kwaza, 0251.828)
Nã='yp wypywo ti o-zyma-<u>zymane-ju</u> a'yn
3=tree POSP PART 3-RED-walk.around.vi-EPEN-IMPF PART
'They were walking around his tree.'

(244) (kal\_kwaza, 2076.763)
N=e'en-<u>e'en</u>-e-ju-tu ti me we we we we, pok o-majõ.
3=RED-vomit.vi-EPEN-IMPF-NOM EVID PART IDEO.vomit, IDEO.put.to.ground 3-die.vi
'He continued vomiting, fell to the ground and died.'

The suffix -(z)oko, occurring 26 times altogether, is used where the reduplication refers to the repetition of an activity (13 instances<sup>350</sup>), often with a habitual reading but also to ongoing mental states and vocal activities (13 instances<sup>351</sup>). Examples for the repetition of an activity are (235) and (242) above, both with verbs indicating motion, as well as (245):

<sup>350</sup> These are: '*ajpok* ('to return'), *atap* ('to cross sth.'), *a'o* ('to scold'), *jupã* ('to beat someone'), *ka'at* ('to sleep in the forest'), *mopyp* ('to follow'), *motoge* ('to click e.g. one's fingers'), *po'at* ('to make'), *te'a'aka* ('to knock on sth.'), *tĩwure* ('emanate steam'), *toge* ('to pierce'), *to'awỹ* ('to throw arrows/ fight'), '*apyratap* ('to step over sth.').

<sup>&</sup>lt;sup>349</sup> The respective verb stems are *e'en* ('to vomit'), *kyzy* ('to wash') *mopore* ('make someone jump'), *mota'ok* ('to deceive'), *pywatan* ('to flap wings'), *tepizyp* ('clean oneself'), *tetã* ('to relax'), *zymane* ('to walk in a circle'). A possible counterexample is *wygwyge* ('to become an adolescent') which, however, – when compared to its 'base' form *wyge* ('to become an adult') – appears to be a lexicalized stem.

<sup>&</sup>lt;sup>351</sup> These are: *a'o* ('to scold'), *ikat* ('to strive'), *kÿjtut* ('to menace'), *mokyre* ('to insist'), *mota'ok* ('to deceive'), *potem* ('to shout with joy'), *tepotitup* ('feel disgust'), *tetã* ('to disrespect'), *tezoat* ('to have confidence'), *tezup* ('to wait'), *typka* ('to tease'), 'utukat ('to make someone eat'), *wã'up* ('to suspect').

(245) (tal awytyza2, 0195.443)

 $I-typ \quad watu \quad ts\tilde{a}=ka'at-u \qquad a'yn,$ 

3-row.st INTENS 3pl=sleep.in.forest-NOM PART,

o=to-zokw-aw  $o=ka'at-\underline{ka'ar}-e-zokw-aw$  a'yn.

3coref=go.vi-IMPF-GER 3coref=RED-sleep.in.forest-EPEN-IMPF-GER PART

'Their sleeping in the forest was many days (lit: a big row), walking and repeatedly sleeping in the forest.'

An example for an ongoing mental state is (246):

(246) (tal\_mamuti\_3\_8, 1025.661) "E=tepotitu-tepotituw-e-zoko-tu a'yn it=ete a'yn ne uja", 2sg=RED-be.disgusted.vi-EPEN-IMPF-NOM PART 1sg=POSP PART PART DEM,  $n\tilde{a}='e$ -tu a'yn. 3=say.vi-NOM PART ""You will always be disgusted by me, you see", she said.'

The aspect suffixes which in the Awetí corpus occur in reduplicated forms are combined with active verbs expressing different states-of-affairs. They can mark a progressive, a 'prestadial phase' or a habitual aspect<sup>352</sup>. The latter, which in Awetí is marked by -(z)oko rather than by -(e)ju, according to Sasse (1991:40) is possible with any state-of-affairs.

The following sentence with a reduplicated form followed by a non-reduplicated form of the same verb suffixed by -(z)oko illustrates the difference in function:

(247) (tal\_mamuti\_5\_8, 0534.615)

"Ozo=a'o-<u>a'o</u>-tu wene 'en, ozo=a'o-zoko-tu wene a'ang 'en 1pl:excl=RED-scold.vt-NOM even 2sgPRO, 1pl:excl-scold-IMPF-NOM even EVID 2sgPRO *jatã*", nã'e. DEM, QUOT

"You even scolded us several times, you always even scolded us, you see", he said."

<sup>&</sup>lt;sup>352</sup> Cf. table 3.8 in section 3.3.4.2.1.

While the reduplicated form indicates a repetition of the activity as well as plurality of the participants, the form with the aspectual marker expresses a habitual occurrence of the activity which also implies the repetition.

Although the corpus data suggest that specific lexical verbs seem to prefer one aspectual marker over the other, Awetí consultants confirmed that both suffixes may be attached to most of the verbs.<sup>353</sup> There are, however, also instances where this is not possible:

(248) (old villages, 0391.76)

Nanype itã atit a'yt zanu me it=eko-<u>eko</u>-tu kitã me, There TOP 1sgPRO EMOT also PART 1sg=RED-walk.vi-NOM DEM PART, *jatã-tsu i-teta me 'ẽ*. DEM-like 1sg-tall.st PART PART 'There I also started to walk, I was tall like this.'

Example (248) would, according to Awetí consultants, "sound awkward" with any of the two aspectual suffixes. A possible explanation can be the fact that there is an intransitive root *ekozoko* ('to live') for which a combination of *eko* ('to walk') with the aspectual suffix may have been the source. Another instance is the intransitive active verb *kytire* ('to be cunning') which in its reduplicated form may combine with *-zoko* but not with *-ju*.

The only example of a verb-pair so far encountered in the corpus is the transitive verb *mota'ok* ('to deceive') in (249) which derives from a fusion of *ta'ok* ('to be angry') with the causative prefix *mo*-:

(249) a. (kal\_makawaja, 1769.241)

"Kaj=mo-ta'ok-<u>ta'og</u>-e-ju-(tu) weti 'en ne jatã", 1pl:incl=CAUS-RED-be.angry.st-EPEN-IMPF-NOM must.not 2sgPRO PART DEM,  $ts\tilde{a}='etu$  ti  $n\tilde{a}=pe$  a'yn. 3pl=say-NOM EVID 3=POSP PART

"Stop deceiving us, fellow", they said to him."

<sup>&</sup>lt;sup>353</sup> Interview with Awajatu and Waranaku Awetí in October 2007.

b. (kal\_sham1, 2079.729) *A-mo-ta'ok-<u>ta'og</u>-e-zoko* a'ang a'yt jatsaza me.
1sg-CAUS-RED-be.angry.st-EPEN-IMPF EVID EMOT these.people PART
'I went on repeatedly deceiving these people.'

# Stative verbs

The corpus provides only a few examples of the reduplication of stative intransitive verbs<sup>354</sup> but the existence of this part of reduplication could be confirmed by elicitation. In stative verbs, too, the root is copied as a whole:

b. (kai\_awytyzaz, 0008.112) pykyt-u in i-pykyt-<u>pykyt</u> 'he was well camouflaged' 3-RED-be.disguised.st [i.pt.,kit. pt.'kit]

While in (250)(b) the plosive in the coda of the reduplicant remains voiceless, it is voiced and lenited in (251):

(251) (kal\_tawozy3, 0245.53, 0297.311) *uwut-u* in *t-uwur-<u>uwut</u>* 1)'he is more or less tall', 2)'he is getting tall'
3-RED-tall.st
[tu.,wu.ru.'wut]

Unlike in the reduplication pattern of active verbs there is no  $\epsilon$ / added to the base form if the verb root ends in a consonant. This observation corroborates a hypothesis about the

<sup>&</sup>lt;sup>354</sup> See table 3.15.

historical development of this element in active verbs from a complex verb form consisting of an ideophone as its uninflected part and an auxiliary.<sup>355</sup>

Neither a person prefix<sup>356</sup>, nor an aspectual or a negative suffix (cf. (256)) is reduplicated together with the verb root.

### Semantic contribution

Reduplication of stative intransitive verbs can either indicate that the intensity of the state referred to decreases or increases. The criteria for one or the other interpretation are not clear. In most instances of reduplication of stative intransitive verbs the semantic contribution is one of attenuation or diminished intensity, as in (252), (253) and in (257) below<sup>357</sup>:

## (252) (kal\_tawozy4, 0607.883)

T-atykym-(t)atykymwene,uuuupoooooooo-temwatutia'yn.3-RED-dark.ststillsound.of.monster3-come.outmonsterEVIDPART'When it was still a little bit dark,uuupoooooo the monster came out.'

(253) (Awajatu & Waranaku Awetí, October 2007)

- a. *i-patem-<u>patem</u>* 'I'm not much afraid' 1sg-RED-afraid.st
- b. *taza t-ang-<u>ang</u>
   'The fire (only) lit a little bit'
   fire 3-RED-light.up.st*

The meaning of reduplication in (254)(a) and (b), by contrast, is an intensification of the quality or state expressed by the stative verb:

<sup>&</sup>lt;sup>355</sup> See section 4.3. and chapter 5.

<sup>&</sup>lt;sup>356</sup> An exception is (249) below for which, however, *tatykymatykym* was given as a variant form. The form as given in (252) and as encountered in the sound file, suggests a left-to-right reduplication.

<sup>&</sup>lt;sup>357</sup> Due to observations like these in other languages the suggestion of an iconic function of reduplication is not uncontested (cf. Wiltshire/ Marantz 2000: 561).

(254) a. (kal\_tawozy3, 0805.852)
N=y-put 'ok-'og-e-tu ti nã me, an ti
3=liquid-DEV RED-take.out.vt-EPEN-NOM EVID 3PRO PART, NEG EVID *i-kiraj-kiraj-yka a'yn*.
3-RED-tasty.st-NEG PART
'She went on taking out its broth; (the food) was not tasty at all.'

b. (kal awytyza2, 0688.112)

*Tsãn=eta 'ypy watu ti, ooooo, i-pykyt-<u>pykyt</u> watu a'yt ti* 3pl=eye beginning big PART, EXCL, 3-RED-disguised.st INTENS EMOT EVID 'The area around their eyes was big, they were well camouflaged.'

In three of the four instances of reduplicated stative verbs this meaning is reinforced by an intensifier (*katu* 'well' or *watu* 'much') as in (254)(b).

Some instances of reduplication based on stative verbs have lexicalized since there is no obvious relation between their meaning and that of the base form, as in (255)(b) compared to (255)(a). While the simple form means 'dangerous', the reduplicated form has the meaning 'disgusting':

(255) a. (kal\_kamukuaka4, 0087.063)
An 'ytoto i-katu-ka, i-tezak 'ytoto nã, jãtã.
NEG very 3-good-NEG, 3-dangerous.st very 3PRO, DEM 'It is not good at all, it is very dangerous, you see.'

b. (tal\_kaminu, 1538.415)
E=njy-za i-tezaktezak a'yn.
2sg=sister-PL 3-disgusting.st PART
'Your sisters are disgusting.'

Reduplicated forms of stative verbs can also be found in nominalizations based on these verb types, in which the entity referred to is the bearer of a quality expressed by the verb:<sup>358</sup>

(256) (kal\_tawozy2,

Uuu pok, o-to ti o-tige-zoko tene 'jyt ti kitã,
IDEO.fly IDEO.land, 3-go.vi EVID 3-sit.down.vi-IMPF simply little EVID DEM,
t-uwur-uwur-e'ym-ytu 'ytoto, zotsu 'jyt ne.
3-RED-big.st-NEG-NOM really, indeed little PART
'He flew up and landed, he simply went and sat down (again) the little one, one who really was not big at all, little indeed.'

Reduplicated forms of stative verbs may occur in combination with aspectual suffixes:

(257) a. (ti\_a\_autobiogr, 0133.321) *T=aty-aty -zoko-tu ti me.*3= RED-pain.st-IMPF-NOM EVID PART
'She started to feel a strong pain.'

b. (mopot\_birth, 0150.032)

"Ange, ozo= aty- aty- ju- tu uja me, t= aty- aty -ju-tu uja me " $\tilde{e}$ ", Mummy lpl:excl=RED-pain.st-IMPF-NOM PART PART, lsg=RED- pain.st-IMPF-NOM PART PART, i= "e-tu a "yn.

1sg=say-NOM PART

"Mummy, we start to feel a lot of pain, I start to feel a lot of pain", I said."

As predicted in table 3.8 in section 3.3.4.2.1 the combination of *-zoko* and *-ju* with a stative verb describes the entering phase of the state. The function of the reduplication here, again, is to intensify the state referred to by the verb.

<sup>&</sup>lt;sup>358</sup> Cf. section 3.3.8.1.3.

#### **3.3.8.3.2** Reduplication in other word classes

#### Nouns

Reduplication in nouns is marginal. There are simple nouns, especially in the semantic fields of flora and fauna (e.g. *oly-oly* 'kind of puma', *kuju-kuju* 'butterfly', *wiriri* 'kind of plant') which show reduplicative patterns – most often full reduplication of a disyllabic base. These items, however, do not have any corresponding non-reduplicated forms. There is a further type of reduplication of nouns which indicates plurality of the entity. It differs from repetition, which may have the same function, by the fact that an obligatory possessive pronoun is not reduplicated:

(258) (kal\_tawozy4, 1414.042) O-totsu-to=tsu  $n\tilde{a}$ ='apo'a-'apo'a a'yt ti a'yn. 3coref-RED-REC=like 3= RED- ball EMOT EVID PART 'The (two) balls were identical.'

#### **Postpositions**

Reduplication also occurs in postpositional phrases containing the reciprocal affix *-to*. Here the reduplication pattern is 3coref-RED-RECIP=POSP, the reduplicated segment consisting of the reciprocal marker and the postposition. An example is *o-totsu-to-tsu* ('identical', lit.: 'like each other') in (258). The clitic pronoun, which attaches to the postposition to form a postpositional phrase, is not reduplicated. The same applies to the negative suffix *-e'ym*, as in (259):

(259) (kal\_angut1, 0774.815) *O- topywo-to= pywo-e'ym ti kitã.*3coref-RED- RECIP=inside- NEG EVID DEM
'It is not mixed' (lit.: 'They are not inside each other')

In these postpositions which are used in combination with certain lexical verbs to express reciprocity, reduplication emphasizes the plurality of participant inherent to reciprocal constructions.

### **3.3.9 Sentence Structure**

#### 3.3.9.1 Types of clauses

There are two types of clauses in Awetí, those headed by verbs and those headed by non-verbal predicates. Clauses with verbal predicates have been presented in section 3.3.4.1 and their constituent order will be further described in section 3.3.9.2.

There are attributive, equative and locative non-verbal clauses in Awetí. The predicates of attributive clauses are formed by the only adjectives, *watu* ('big') and '*jyt* ('small'). An example is given in (260):

(260) (kal\_makawaja, 0039.086)
Mã 'ypolu'a wezotsu 'jyt ti a'yn
here lagoon only small EVID PART
'They say that here the lagoon was only small.'

The predicates of equative clauses are formed by pronouns, nouns and nominalizations. An example with a demonstrative pronoun is (261):

(261) (kal\_makawaja, 0036.873)
Nã='ypy kitã me 'ã.
3=beginning DEM PART PART
'Its beginning was that one there.'

In (262) the non-verbal predicate is the proper noun Jamyra:

(262) (kal\_makawaja, 0071.143)

Tsãnetamut a'yt kitã Jamyra me. itã, A**pyagwaza** etamut Tsãn= etam -put a'yt itã, Apyagwa-za -put kitã Jamyra etam me. 3pl= REL-village-NPST EMOT TOP, Kamayurá-PL REL-village-NPST TOP PropN PART 'Their village, the Kamaiura's village was (the village) Jamyra.'

The largest group of equative non-verbal predicates are the action nominal constructions, i.e. the nominalizations formed with the suffix *-tu* which have been presented in section 3.3.8.1.1 and which in current language use are considered to be equivalent in function to finite verbs. This is largely confirmed by Queixalós & Gildea (2010: 15), who state that in several South-American families (including Cariban and Tupian) these "ergatively-organized nominalizations become the nucleus of a main clause predicate", by passing through a process of reanalysis. Examples (145) and (104) are repeated from above:

(145) (tal\_kakaja, 0111.016)

Ka'awatu tup-utinã.forestsee.vt-NOMEVID3PRO'(They say that) he saw a forest.'(lit.: 'Seeing of a forest was his.')

(104) (tal\_mamuti\_2\_8, 0411.81)

Mokõj  $n\tilde{a} = to$  -tu a'yn, momozotsu  $n\tilde{a} = at$  -(t)u 'y wo me. two 3= go.vi-NOM PART, one 3= fall.vi -NOM water POSP PART 'Two went away, one fell into the water.'

(lit.: Two (was) their going away, one (was) her falling into the water.')

In addition, as was observed by Drude (forthcoming a: 12, 13), nominalizations formed with *-at*, *-ap* and *mi*- also occur much more often as predicates in non-verbal clauses than as subjects, objects or complements of postpositions.<sup>359</sup> An example with an instrumental nominalization (*tupiarap* 'instrument to perform witchcraft') is repeated in (13), one with a patient nominalization (*mi'ywõ* 'one that is shot') in (174):

(13) (tal mamuti 3 8, 0447.964)

"Kari'aw uja e= tutyt e= tupiar -ap peti'a'azỹ wo me", why DEM 2sg=uncle 2sg= witchcraft.st-NOMinstr pequi.thorn with PART,  $n\tilde{a}='e$  -tu ti me. 3= say-NOM EVID PART

<sup>&</sup>lt;sup>359</sup> Cf. sections 3.3.8.1.4 to 3.3.8.1.6.

"Why did you perform witchcraft on your uncle with the thorn of the pequi-fruit?", she asked.'

(lit.: "Why was it your instrument to perform witchcraft on your uncle with the thorn of the pequi-fruit", she asked.")

(174) (awu\_fishing, 0212.231)

*Tukyt 'u -at wazotsu ozo= e- mi- 'ywõ -zoko me 'a.* salt.plant eat.vt-NOMag only 1pl:excl= REL-NOMpat-shoot.vt-IMPF PART PART 'The one (fish) that only eats the salt plant is one that is always shot by us.' (lit.: 'The only salt-plant-eater is our shot one.')

Locative clauses are formed from postpositional phrases, as illustrated in (263):

(263) (kal\_makawaja, 0511.906)
'Ywy'a jatãmut ete a'yn.
termite this.region POSP PART
'There are termites in this region.'

A non-verbal clause may minimally consist of a noun, a TAM and a clause-final particle, as *'en tut ne* ('you will (be)') in (264), or a noun with verbal morphology and a final particle, given in (49) where *an 'ukakyryka* ('(there are) no roosters') represents the predicate in a negative existential construction:

(264) (tal\_mamuti\_2\_8, 0174.438)

**'En tut ne,** uja, an tut e- majõ -ka, i = 'ywo tut e = kozoko -tu a'yn. 2PRO FUT PART DEM, NEG FUT 2sg-die.vi -NEG, 1sg=POSP FUT 2sg=live.vi -NOM PART 'You will be (i.e. survive), you see, you will not die, you will live with me.'

(49) (kal makawaja, 0176.449)

*Mote wian an 'ukakyr-yka a'yn*. long.time still NEG rooster -NEG PART 'For a long time there had not been any rooster(s).' In addition, a possessive relationship may be expressed between noun referents, as shown in (265). This type of non-verbal clause structure has been described as "predicative possession":<sup>360</sup>

(265) (kal kwaza, 0255.753)

U'wyp pukut, mãpyte ti **tsãn=u'wyw-an** a'yn. arrow long.st, all.people EVID 3pl= arrow -ATT PART '(There were) spears (long arrows), they all (had them) as their arrows.' (lit.: 'Long arrows, all people (had them) as their arrows.')

In (265) the 'possessor' NP *mãpyte* ('all people') functions as the subject while the 'possessed' NP *u'wyp pukut* ('long arrows'), which is focussed, occurring in preclausal position, functions as the predicate. A further complement is given by *tsãnu'wywan*.

### 3.3.9.2 Order of constituents

Payne (1992: 4) distinguishes two types of ordering principles for constituents in a clause, a syntactic and a cognitive-pragmatic one whereby the languages of the world are either exclusively sensitive to one or the other or to both to differing degrees.

According to Gabas (2006:149) the default constituent order in Tupian languages is SOV. For emphasis or contrast subjects or objects may be fronted. Jensen (1998:556) registers five different patterns (SOV, SVO, OSV, OVS, VSO) of basic constituent order for different languages of the Tupí-Guaranian branch to which Awetí is closely related.<sup>361</sup>

In Awetí clauses with a verbal predicate the position of S, O and finite V relative to each other is not totally fixed although certain patterns can be observed to occur more frequently than others. This variant constituent order is on the one hand determined by grammatical factors, i.e. personal reference marking on the verb, on the other by pragmatic

<sup>&</sup>lt;sup>360</sup> Cf. Stassen (2001: 957).

<sup>&</sup>lt;sup>361</sup> In a recent analysis by Tonhauser and Colijn (2010) the basic word order claims made for many TG-languages but especially for Paraguayan Guaraní could be relativized by pointing out several constraints imposed by grammatical function or discourse status of the respective argument.

factors. The respective contribution of these factors and their interaction will be explored in this section, starting with examples from natural discourse for the different patterns in intransitive and transitive clauses.<sup>362</sup> With regard to the latter, a quantitative analysis, based on connected discourse from the Awetí DOBES corpus, was made by using the search function of the ELAN programme. In order to account for the different proportions of specific ordering patterns in the data, this analysis is followed by observations on the use of verbal prefixes, free pronouns and lexical arguments. As another factor, the discourse context is taken into consideration. The section is concluded with observations on main and subordinate clauses predicated by action nominals and other non-verbal forms. Here the constituent order – due to the specific morphosyntactic properties of the nominal predicate<sup>363</sup> – is more rigid.

In intransitive clauses there is a clear tendency in the corpus for subject NPs, if not omitted, to occur behind the verb:

(266) (tal\_kaminu, 0796.565) *O-pap ti tukyt a'yn.*3-finish.vi EVID salt PART
V S
'Salt was used up.'

However, there are also instances where they are preposed to it:

(267) (kal\_kamukuaka5, 0359.962)
Okytãj -mut o-pap me.
wall.of.house -NPST 3-finish PART
S V

'What used to be the walls of the house (were) finished off.'

<sup>&</sup>lt;sup>362</sup> Oblique arguments, which are expressed by postpositional phrases and occur at the periphery of the sentence, are not taken into account in this section.

<sup>&</sup>lt;sup>363</sup> Cf. section 3.3.8.1.

The usage of one ordering or the other seems to depend on discourse-pragmatic decisions. In (266) the event, referred to by the verb in the first position of the clause, is central, whereas in (267) this applies to the entity referred to by *okytãjmut* ('the former walls of the house'). While in (266) the event, the finishing of salt, is significant for the following passages of the text which describe the production of more salt, the entity referred to by the intransitive subject in (267) is used to feed a voracious monster which in the following passages is fed with other objects and finally the inhabitants of a village.

For clauses with a transitive verb as a predicate all possible combinations of constituent order (SVO, SOV, OVS, OSV, VSO, VOS) could be observed, as shown in tables III.1 and III.2 in Appendix III. The tables list – separately for narrative and non-narrative texts<sup>364</sup> – all clauses from the annotated Awetí corpus<sup>365</sup> with a 3<sup>rd</sup> person transitive verbal predicate prefixed by *wej*-. These are the only clauses which – for reasons given below – may have two arguments, lexical or pronominal, overtly expressed without being pragmatically marked.

Awetí connected discourse clearly obeys the 'soft' constraints formulated by Du Bois (1987: 819, 823) for Preferred Argument Structure. Du Bois states that cross-linguistically only very rarely both argument positions are filled with a lexical NP and that the one position of a lexical argument is almost exclusively that of the object. Evidence for the first constraint is given in both tables: the overall proportion of clauses with two overtly realized 3<sup>rd</sup> person arguments is low, whereby there is no significant difference between narrative (8,9% including pronominal NPs, 5,4% excluding them) and non-narrative texts (9,4% with and 3,9% without pronouns). The individual occurrences listed by the ELAN search function<sup>366</sup> also revealed that in those cases where one of the arguments was expressed by a

<sup>&</sup>lt;sup>364</sup> A possible influence of the respective discourse genre on the ordering of constituents was pointed out by Quakenbush (1992). He found out for the Austronesian language Agutaynen that different discourse genres showed variant patterns of constituent order to different proportions.

<sup>&</sup>lt;sup>365</sup> See table 2 in Appendix I for details.

<sup>&</sup>lt;sup>366</sup> The outline of the analysis in ELAN was as follows: Two different search domains for multiple eaf-files were created for narrative and non-narrative texts. After that, all annotations with *wej* as a regular expression were searched for, and each occurrence was then checked in the respective file for the number of overtly realized arguments, both pronominal and nominal. All clauses with two arguments were counted and classified according to their order of constituency.

pronoun this was – with few exceptions – the subject, as predicted by Du Bois' second constraint.

In both genres, judging by their frequency of occurrence,<sup>367</sup> OVS is the preferred constituent order in connected discourse<sup>368</sup>. An example from a narrative text is given in (268):

(268) (tal\_mamuti\_2\_8, 0053.878) O = pe -put wej-ato'i Tanumakalu a'yn. 3coref= path -NPST 3- hide.vt PropN PART O V S 'Tanumakalu, hid her, former path.'

For non-narrative texts all occurrences of this pattern include a pronominal argument, which is the subject rather than the object as in (269):

(269) (ama\_rain\_seas, 0777.682)
Nã=tsu-at wej-wa -ju tsãn a'yn.
3= like-NOMinstr 3- exchange.vt-IMPF 3plPRO PART
O V S

'They exchange things which are alike (of the same value).'

The second pattern for narrative texts in terms of frequency in connected discourse is SVO. An example is (270):

(270) (kal\_awytyza1, 0071.613)
Awytyza wej-zezup Enumania, n=e- kujã a'yn ne.
PropN 3- marry.vt PropN 3= REL-woman PART PART
S V O

'The Awetí had married an Enumania, a (their) woman.'

<sup>&</sup>lt;sup>367</sup> Frequency of occurrence is one criterion established by Hawkins (1983: 13) to determine a "basic" order when two competing patterns can be found.

<sup>&</sup>lt;sup>368</sup> Monserrat (1975: 4, footnote 1), without giving any evidence for her claim, also assumed a basic OVS pattern for Awetí.

In non-narrative texts the SVO pattern also occurs:

```
(272) (ary_fem_recl, 0256.491)
Myrã wej-pẽte'ok pira'yt, ujã.
old.man 3- divide.vt fish DEM
S V O
```

'The old man divides the fish, you see.'

This pattern, which in narrative texts is the most frequent when two lexical arguments are overtly realized, is also most often used by speakers for elicited, not contextually embedded clauses:

- (273) (Awajatu & Waranaku Awetí, October 2007)
- (a) Maria wejjupã João a'yn.'Maria beats/ beat João.'
- (b) João wejkwakup Maria a'yn.'João likes/ liked Maria.'

In such clauses subject and object referents are both newly introduced, and the same seems to apply to the examples from connected discourse.

SOV, a second pattern occurring in isolated elicited sentences, can also be found in narrative and non-narrative texts, as illustrated by (274) and (275) respectively:

(274) (tal mamuti 1 8, 0117.769)

"Koj e= 'yzapat kuty wej-' og -oko, waraju ika."
someone 2sg=bow string 3- rip.off-IMPF, savage EPIST
S O V

"Someone is ripping off your bow-string, a savage, it seems."

(275) (ama\_dry\_seas, 0277.079)
Nanywo t=ewuti'yrytuza w= e- kaminu'a-za wej-mo- mỹje a'yn.
for.this.reason 3=family 3coref= REL-boy -PL 3- CAUS-wake.up.vi PART
S O V

'For this reason families wake up their boys.'

In non-narrative texts from the Awetí corpus this is the most frequent pattern for two lexical arguments.

An example for OSV which only occurs in narrative texts is (276):

(276) (tal\_mamuti\_1\_8, 1364.476) *Kujã kat wej'u a'yn.* woman beast 3- eat.vt PART O S V

'The woman, the beast ate.'

For VSO examples for narrative texts as well as for an autobiographical text<sup>369</sup> with two nominal arguments could be found:

(277) (kal\_tawozy4, 1709.787) *Kyryry lok, wej-mo- loge A'jym w= e- tupi'ã -put a'yn.* IDEO.turn IDEO.get.out, 3- CAUS-get.out.vi PropN 3coref=REL-vocal.cord-NPST PART V S O

'Kyryry lok, the A'jym-bird<sub>i</sub> took out what used to be its<sub>i</sub> vocal cords.'

(278) (ti\_a\_autobiogr, 0024.384)
Wej-zezup apaj ange a'yn ne.
3- marry.vt father.VOC mother.VOC PART PART
V S O

<sup>&</sup>lt;sup>369</sup> Autobiographical texts tend to be structured more loosely than the narratives of the established discourse genre, the events ordered on a time-axis but not in closely related sequences as in a narrative plot. Therefore the three autobiographical texts have been classified here as 'non-narrative'.

'Dad married Mum.'

A VOS pattern is illustrated by (279):

(279) (kal\_tawozy4, 1168.839)
"Wej-'u a'yt e= up kat ne, [...]", nã='e -tu ti nã=pe a'yn.
3- eat.vt EMOT 2sg=father beast PART, 3= say-NOM EVID 3= POSP PART
V O S
"The beast ate your father, [...]", he said to him.'

For non-narrative texts this pattern is confirmed only once with a 3<sup>rd</sup> person plural pronominal subject.

As outlined in section 3.3.4.1, in Awetí the core argument higher in the person-animacy hierarchy determines the personal reference marking on the verb. In addition, 3<sup>rd</sup> person core arguments may be left unexpressed when they are retrievable from the context. A clause may minimally consist of a predicate:

(280) (mopot\_birth, 0596.423) *Pok.* Azoj-moto.
IDEO.give 1pl:excl-give.vt
'Pok. We give (it to him).'

1<sup>st</sup> or 2<sup>nd</sup> person arguments which are marked on the verb are mostly omitted and would only be given for emphasis as in the reply of the female speaker in (281), contrasting with a similar clause uttered by the male speaker:

(281) (tal\_kujakyt, 0887.014)

*"Koj mẽpyt jatã? An a- kwawaw-yka 'en".*who child.of.woman DEM.M NEG 1sg-know.vt -NEG 2sgPRO. *"Mhm", nã'e, "ito a- kwawap 'en a'yn ne."*Yes, QUOT, 1sgFPRO 1sg-know.vt 2sgPRO PART PART
'Male: "Whose child are you? I don't know you."

Female: "Yes", she said, "(but) I know you".'

Example (281) further illustrates that a  $2^{nd}$  person referent of the core argument which is not marked on the verb – the pronoun *'en*, is always expressed in the clause. If the second core argument is a  $3^{rd}$  person argument, it may remain implicit. In (281), where this argument has the semantic role of a theme, it is given by the preceding context. The same applies to a third (oblique) argument, the beneficiary, which would otherwise be expressed by a PP. A  $3^{rd}$  person plural pronoun, representing the subject and – less frequently – the object, may be explicitly given due to the fact that plurality cannot be marked by  $3^{rd}$  person prefixes:

(282) (kal awytyza2, 0918.945)

"*Ti-*  $k\tilde{y}j = w\tilde{a}$  kitä tsä me. O-pap a'yt tsän a'yn." 1pl:incl-kill.vt=COMPL TOP 3plPRO PART 3-finish.vi EMOT 3plPRO PART ""We killed them all. They (the poor ones) finished.""

The majority of 3<sup>rd</sup> person pronouns registered by parentheses in tables IV.1 and IV.2 are of this type. The tables further show that pronouns do not occur in verb-final clauses (SOV, OSV) and are most frequent (for subjects) in the OVS pattern. There are altogether four clauses with pronouns listed for the SVO pattern. In both 'narrative' occurrences they represent the object, i.e. follow the verb, and in the two non-narrative clauses, where pronouns are in subject position, they belong to the class of demonstrative pronouns. For the patterns VSO and VOS all pronouns except one represent the subject of the clause. Haig & Schnell (2009: 3) regard this general tendency observed by Du Bois (1987), of preferentially filling the object position of a transitive clause by a lexical NP and leaving the subject position empty or filled with a pronoun, as "the manner in which new referents are typically introduced into discourse: they generally enter via [...] the O function".

Also with regard to lexical arguments discourse-configurationality rather than syntactic configurationality seems to determine the relative flexibility of constituent order in Awetí. Two discourse functions seem to play a prominent role. One of them has to do with referent recoverability, which also determines the use of pronouns and lexical NPs, the other is that

of directing attention, which is also relevant for the usage of topicalizing particles. Further quantitative as well as in-depth studies of the discourse context along the line proposed by different contributors to the volume edited by Payne (1992) are needed in order to establish a sound theory for the variation of Awetí constituent order in clauses with verbal predicates.

Since a considerable number of Awetí main clauses as well as subordinate clauses have an action nominal as a predicate, this section concludes with some remarks regarding the invariant constituent order in clauses with these non-finite (nominalized) predicates.

For intransitive action nominals functioning as predicates the default order is SV, since – as outlined in section 3.3.1.6 and section 3.3.8.1.1 – either a clitic pronoun or a full NP must be positioned immediately in front of the predicate, corresponding in structure to nonderived possessive NPs. This is illustrated in (108), repeated for convenience:

(108) (tal\_mamuti\_2\_8, 1534.855) *Itsumaryt to -tu ti tsã='ytang nge.* PropN go.vi-NOM EVID 3pl= in.front.of PART S V 'Itsumaryt went in front of them.'

The same applies to the order in sentences with transitive nominalized predicates where, however, the clitic pronoun or NP normally represents the object. If the subject is realized at all in such sentences, the usual constituent order is OV, with S either following, as exemplified by (283), or preceeding, as in (132), repeated here:

(283) (tal mamuti 3 8, 0238.113)

 $E = kyty zotsu tepe \quad akyj \quad w = emiamuj\tilde{u} \quad mi'ing \quad -ku \quad e = tutyt \quad a'yn.$   $2sg = to \quad indeed \ FRUST \ TOP \quad 3coref = grandchild \quad promise.vt-NOM \ 2sg = uncle \quad PART$   $O \qquad V \qquad S$ 

'It was to you indeed that his, granddaughter was promised by your uncle, (in vain).'

(132) (tal\_kakaja, 0674.330)
At- atyka ='ytoto e= ty ij= a'o -tu me.
1sg-resent.vt=INTENS 2sg=mother 1sg= scold.vt -NOM PART
S O V

'I resent a lot that your mother scolded me.'

(lit.: 'I resent a lot your mother's scolding of me.')

The order in (132), however, does not occur very frequently. It usually requires that the referent of the object is higher in the person-animacy hierarchy than the referent of the subject.

In those cases where the order is reversed by the 'antipassive' prefix po(r)-, the order is SVO, as in (284):

```
(284) (tal_mamuti_3_8, 0230.000)
E= kyty zotsu tepe akyj e= tutyt po- mi'ing -ku
2sg= to indeed FRUST TOP 2sg= uncle ANTI- promise.vt-NOM S V
w= emiamujũ a'yn ne, uja.
3coref= grandchild PART PART DEM O
```

'It was to you indeed that your uncle, promised his, granddaughter (in vain), you see.'

The two patterns (OVS and SVO) in (283) and (284) also seem to be most frequent in Awetí clauses with verbal predicates,<sup>370</sup> thus corresponding to the observation made by Koptjevskaja-Tamm (2003: 724) that "action nominals take arguments more or less like the corresponding (finite) verbs". Based on her cross-linguistic study of action nominals she could establish a universal according to which there is no difference in head-dependent word order between action nominal constructions and non-derived NPs. At the same time there is the tendency in many languages for heads and dependents of clauses and NPs to follow the same linear order (Koptjevskaja-Tamm 2003: 748).

<sup>&</sup>lt;sup>370</sup> Cf. tables IV.1 and IV.2.

### 3.3.9.3 Coordination

In Awetí discourse most predicates are main clause predicates which occur either in their verbal or in the nominalized form derived with the suffix -(t)u (action nominal). Awetí does not have any conjunctions linking main clauses. Parallel constructions with a clause containing an action nominal which is repeated by a clause with a verbal form or vice versa are very frequent in narrative discourse.<sup>371</sup> Two examples are given in (285) and (286). In (285) we find three parallel clauses of a different structure: a non-verbal clause with the adverb *kype* ('here') as a predicate, a non-verbal clause with an ANC formed from the copula verb *up* ('be', 'remain', 'stay'), and a copula clause:

(285) (kal\_makawaja, 1:14.798)
Jamyra kype a'yn ne 'ẽ, koj a'yt n=up -eju -tu a'yn.
PropN here PART PART, PART somewhere.here EMOT 3= be.vi -IMPF -NOM PART
Koj o- up -eju a'yn.
Somewhere.here 3- be.vi-IMPF PART
'Jamyra was here, it was somewhere here. It was somewhere here.'

In (286) the first clause is an intransitive verbal clause and the second one a non-verbal clause with an ANC as a predicate:

```
(286) (kal tawozy4, 0009.514)
```

**O-ut** 'yto ti  $n\tilde{a}=kyty a'yn$ , n=ut -(t)u 'yto ti  $n\tilde{a}=kyty me$ . 3-come.vi so EVID 3= for PART,3= come.vi-NOM so EVID 3=for PART 'So he came to fetch him, so he came to fetch him.' (lit.: 'So he came for him, so his coming (was) for him.')

At the current stage of analysis no difference between one construction and the other could be discovered. Drude (2008: 85) assumes that "if there is a difference in meaning, it is rather subtle and belongs to pragmatics. Possibly the use of the -(t)u-forms makes the situation expressed by the verb less salient in comparison to other components of the

<sup>&</sup>lt;sup>371</sup> This was also observed by Drude (forthcoming a: 16).

sentence". Drude (forthcoming a: 14) observes that this kind of alternation of a verbal clause and a clause with a nominal predicate can also occur with agentive nominalizations. His example from the Awetí corpus is reproduced in (287):

(287) (ama\_dry\_seas, 0576.382)

 $N\tilde{a}$ =tsu wezanu, o- to= tsu ti **tan -tat**. O- to= tsu wene o-tan tsãn a'yn. 3= like again 3coref-REC=like EVID run.vi-NOMag 3coref-REC=like still 3-run.vi they PART '(It was) again like this, they ran (lit.: runners) one like the other (side by side). Side by side they ran for a while.'

This structure, however, is rare in comparison to the one illustrated in (285) and (286).

Cross-linguistically it has been observed that a variation in the structuring of clauses is a discourse strategy to distinguish between thetic and categorical statements. According to Sasse (1987: 512) the term 'thetic' has been used in philosophy for a specific type of logical statement, which constitutes a 'simple judgement', by merely asserting an event, state or situation. This is distinguished from the term 'categorical', used for a 'double judgement', assumed to consist "of two successive acts: naming an entity and making a statement about it" (Sasse 1987: 512). This philosophical distinction was transferred to clause structures in linguistics in assuming that clauses with a topic-comment structure which make a predication are categorical, while in thetic clauses the existence of an entity is asserted but not predicated. 'Predication' in this sense is "a relation holding between an element denoting an entity and an element used to say something about that entity" (1987: 556). According to Sasse (1987: 518), the thetic/ categorical distinction, encoded in sentence structure, reflects two different ways to look at a state-of-affairs. These viewpoints are part of a 'communication perspective', a term referring to the general shape of a stateof-affairs conveyed by a speaker when forming a sentence. Sasse states that in different languages a variety of strategies are used by which syntactic structures specific for thetic utterances are formed. One of these strategies is the nominalization of verbs which encodes a state-of-affairs in its entirety, leaving the different parts of it unanalysed. A thetic statement may further be 'entity-central' or 'event-central', either stating the existence of an entity or of an event (Sasse 1987: 526). When a statement is 'event-central' the elements

denoting the participants of an event are structurally subordinate to the element denoting the event. This can be related to the structure of ANCs in Awetí where participant-denoting elements occur in 'possessor' position, i.e. as determiners to the head-noun referring to the event. They are more often than not realized as proclitic pronouns, and can even remain unexpressed in an impersonal structure which – for not bearing any reference to a participant – is thetic by definition. Most ANCs form one syntactic and phonological unit by occupying a single clause position and by the adaptation of clitic pronouns to the verb stems they are attached to.

In discourse categorical and thetic statements interact in presenting information as narrative, i.e. to continue the main string of discourse, or as background material, embedding the main event. Sasse observes that discourse characters are often introduced via thetic statements and points out that this establishment of the referentiality of entities is part of the background information and usually followed by a categorical statement relating the introduced entity to a state-of-affairs. In general thetic statements are used if the information content conveyed is sudden or unexpected in not having been mentioned before. More research into Awetí discourse structure is needed, but the short sequence presented in (288) can tentatively be analysed as a double change of perspective, achieved through a change from a categorical to an event-central thetic and back to a categorical statement:

(288) (tal\_mamuti\_2\_8, 0240.304)

O-to tia'yn. Tirik tirik tirik tirik tirik tirik. $N\tilde{a}$ =to-tutime.3-go.vi EVID PART IDEO.walk.on.dry.leaves3= go.vi-NOM EVID PARTO-totin=yteta'yn, omowo 'yto me.

3-go.vi EVID 3= older.sister PART, alone so PART

'She went away. It was walking through the thicket. It was her going away. So their older sister went away by herself.'

(lit.: [...] Their older sister went away. It was alone then.')

While in the first clause with a finite verbal predicate the existence of an entity ("she"), encoded by the subject-marking *o*- on the verb form, is stated and a predication ("went away") is made about it, the second clause consisting of an ideophone must be classified as

an event-central thetic statement ('walking on dry leaves'). In the third clause the ANC *nãtotu* ('her going away) represents the predicate of an existential clause. Due to the nominalized structure, the subject participant, realized as a possessor, is subordinate and the whole clause, similar to the previous one, states the simple existence of an event. The following fourth clause again changes the perspective from an event to an entity about which a predication is made. Here the entity is encoded by *nytet* ('their older sister') and the predication is *(o)to (omowo)* ('walked away by herself').

The cross-linguistic observations on thetic statements and this short tentative analysis do not thoroughly explain the current usage of main clause action nominals in Awetí. However, they relate these forms to ideophones, which also present the information as an unanalysable whole and are therefore clearly event-centred.

Another point of departure for further studies could be the analysis presented in section 6.1.2 for a "form of emphasis" in Kayabi which is formally identical with the so-called 'circumstantial' form in other Tupí-Guaranian languages. The circumstantial, which historically corresponds to the -(t)u form in Awetí, is described as having in most languages an emphasizing discourse-pragmatic function, while in Kayabi an identically-formed verb root refers to activities which elsewhere are typically encoded by ideophones.

## **3.3.9.4 Subordination**

There are different types of subordinate clauses in Awetí: relative clauses, complement clauses and adjunct clauses. All of these contain predicates consisting of different non-verbal forms, a criterion for Drude (2008: 87) to classify the nominalized *-tu* form and a form which in Tupian tradition is known as a 'gerund'<sup>372</sup> as indicating non-indicative mood. This idea, for which there is not much synchronic evidence, will not be further pursued here. Instead, the discourse-pragmatic function of such nominalized forms is emphasized which has been outlined in the previous section. Subordinate clauses in Awetí clearly convey background information to the event referred to in the main clause, embedding it locally, temporally or situationally, and this is listed by Sasse (1987: 566) as one of the typical domains of thetic expressions across languages. In the case of relative clauses consisting of an agent or a patient nominalization, the existence of an entity is

<sup>&</sup>lt;sup>372</sup> Cf. Rodrigues (1953).

stated to which the property of being involved in an event is attributed (Sasse 1987: 527). Thus, contrasting with event-central action nominals to which participants are linked in possessor phrases, the thetic statement expressed in these agent or patient nominalizations is entity-central.

#### 3.3.9.4.1 Complement clauses

As already discussed in section 3.3.8.1.1, there are complement clauses in Awetí, formed with action nominals derived by the *-tu* nominalization, which function as subjects, objects or – together with postpositions – as oblique arguments of a matrix verb, occurring in the same positions as other NPs. Complement-taking predicates are semantically restricted. According to Payne (1997: 314) verbs of utterance and cognition are typical matrix verbs for this type of complement. Typical verbs in Awetí are *kwawap* ('to know'), *kwakup* ('to want/ like'), *atyka* ('to resent').

### 3.3.9.4.2 Adjunct clauses

Various types of adjunct clauses, i.e. clauses which – unlike complement clauses – are not subcategorized by the verb, can be formed whereby the postpositions introducing the nominalized clauses (*ti*, *tiwo*, *wo*, *ywo*) are referred to here as subordinators.

Conditional, temporal and causal subordination can be marked by two subordinators, (y)wo and ti, which are attached to the nominalized predicate of the subordinate clause. Examples are (24), repeated here, for conditional and (289) and (290) for temporal subordination:

(24) (tal\_kujakyt, 1524.142)
It= eta tsu n=up -(p)u wo tut a- pytyk nãn a'yn ne.
1sg=eye like 3= be.vi-NOM SUB FUT 1sg- grab.vt 3PRO PART PART
'If it (the child) has eyes like mine, I will accept it.'

### (289) (awu fishing, 1253.919)

*Ozo= e- jomem -e'ym ywo kitã me, an ozo- kar'u -ka.* 1pl:excl=REL-manioc.pancake-NEG.st SUB DEM PART, NEG 1pl:excl-eat.vi -NEG 'If we don't have manioc pancake, it is (like) this, we don't eat.' ('If there is not our manioc pancake, it is this, we do not eat.')

(290) (tal kujakyt, 1801.955)

Mu'jẽ ti kitã 'ukakyt ti'ing -ku ti, 'ywy'apelang ut -(t)u ti me, already EVID TOP rooster speak.vi-NOM SUB red.of.sky come.vi-NOM SUB PART, o-ut ti a'yn.
3-come.vi EVID PART
'When the rooster had already crowed and the sun had risen, he came.'

That the postposition *wo* may be a subordinator for temporal, spatial, conditional, circumstantial and other types of subordination was already observed by Monserrat: "[...] o subordinador *-wo* [...] engloba subordinações temporais, espaciais, condicionais, circunstanciais, etc." (Monserrat 1975: 6).<sup>373</sup>

Another subordinator which indicates temporal subordination is *tiwo*, as shown in (291). In this case the event expressed by the subordinate clause occurs prior to the event referred to by the main clause predicate:

(291) (awu\_fishing, 0823.42)
Nã=wyge tiwo me, w= e- taza-put a'yt ti
3= finish.vi(-NOM) SUB PART, 3coref=REL-fire -NPST EMOT EVID
wej-moep n=apyta pe.
3- extinguish.vt 3= seat POSP
'After they finished, they<sub>i</sub> extinguished their<sub>i</sub> fire in the rear (of the canoe).'

Example (292) illustrates causal subordination with the subordinator (y)wo:

<sup>&</sup>lt;sup>373</sup> "[...] the subordinator *-wo* encompasses temporal, spatial, conditional, circumstantial and other subordinations" [my translation].

(292) (tal\_mamuti\_1\_8, 1101.357)

Jatã tsu i= jupa-jupã -tu wo kaj= amũj, DEM like 1sg=RED- beat.vt-NOM SUB 1pl:incl=grandfather, nã=tsu-at ywo itã jatã [an] a- zoto -ka 'en a'yn ne. 3=like-NOMag POSP TOP DEM NEG 1sg- take.vt-NEG 2sgPRO PART PART 'Because of our grandfather's beating me up like that, because of (it like) that it is that I won't take you.'

At the same time it can be observed that part of the ANC, the oblique argument *kajamũj* ('our grandfather') referring to the agent, must follow the subordinator *wo* which, being a postposition, attaches to the head-noun of the construction.

In the preceding examples all main clause predicates are finite verbs, but – as shown in (293) – the main clause predicate can also be another action nominal:

(293) (tal\_awytyza2, 1464.582)

*Kitsaza mo- pap tiwo me, tsãn=og -ut apy -tu a'yn ne.* DEM.PL CAUS-finish.vi(-NOM) SUB PART, 3pl= house -NPST burn.vt-NOM PART PART 'After they finished off these people, they burnt their houses.'

Also gerund forms as second elements in a nominalized subordinate clause can occur in front of the subordinator:

(294) (kal\_kamukuaka4, 0602.77)

Tsãpapu	wezo	jtsaw			tiwo,	otem	a'yn.	
Tsã=pap	-pu	о=	ezo-	etse	-aw	tiwo,	o-tem	a'yn.
3pl= finish.vi-NOM 3coref=COM-get.inside.vi-GER SUB, 3-go.outside.vi PART								
'After they had finished getting inside with him, he went outside.'								

Analysed as a subordinator, the attributive case suffix *-an* attached to an action nominal formed with the suffix *-ap* introduces adjunct clauses indicating purpose:<sup>374</sup>

<sup>&</sup>lt;sup>374</sup> Drude's (forthcoming a: 5, footnote 5) objection to this analysis is that the nominalizer - ap in combination with the case suffix -(z)an would yield a form -awan instead of -apan,

(295) (kal angut1, 0142.283)

E = ut - (t)u tut a'yn, kaj = to -ap -an muzak kỹj -t -aw angut ta.2sg=come-NOM FUT PART, 1pl:incl=go.vi-NOM-ATTking.hawk kill.vt-EPEN-GER soul with 'You will come so that we can go and kill the king hawk together with the soul (of the person)'

Drude further lists a 'posterior mood' suffix *-e'yman*, in the terminology used here a nominalized adjunct clause introduced by the attributive case suffix *-an*, for which the only example in the corpus, also cited by Drude (forthcoming a: 26, (31)), is (296):

(296) (ti a autobiogr, 0848.418)

Ta'ia'yr <b>e'yman</b>		omajõ a'yn.					
ta'i=a'yt-e' ym-(ap)	-an	omajõ	a'yn.				
3pl=child-NEG.st-(NOMcirc)-ATT 3-die.vi PART							
'They died before having children.'							
(lit.: 'Being in the situation of not having children they died.')							

With regard to example (296) it must be added that the nominal negation in this case does not – as analysed by Drude – belong to the "suffix" but is a component of the stative verb stem *a'yre'ym* ('not have children') which is derived from a nominal. It is hypothesized and indicated by the glossing that the original nominalization was a nominalization of circumstance *ta'ia'yre'ymap* ('their not having children'), since *-ap* can be combined with stative verbs.<sup>375</sup> In this case the example would be another illustration of an adjunct clause indicating purpose.

because of a lenition of the final /p/ in this environment. However, he could elicit a corresponding nominalization with *-am* formed from stative verbs which shows no fortis *-ampan* but lenis *-aman* when combined with *-an*. For this reason certain irregularities in the paradigm will not be taken as indicators for a verbal analysis of the form as was done by Drude and will be discussed further down.

<sup>&</sup>lt;sup>375</sup> The other possibility would be to assume the omission of the suffix *-ytu* after the stative verb stem. However, there are examples in the corpus with a nominal negation, followed by *-ytu* and *-zan* (cf. section 3.2.2., example (11)).

Note that in this example and in (289) with a negation preceding the subordinators as well as in the examples with the subordinator *tiwo* the action nominals lack the nominalizer *-tu*. This poses a problem to the analysis which could not successfully be resolved due to the fact that no information on language change can be obtained for Awetí. With regard to (289) and (296) it can be hypothesized that the nominal negation has triggered a loss of the nominalizer. For *tiwo* in (293) and (294) it must be added that this is the only subordinator for which there is no corresponding postposition in the language.

Drude (forthcoming a) offers a different analysis for all these forms which have been presented as adjunct clauses here. His analysis may partially have been motivated by the irregularities just mentioned above. According to Drude the subordinators and - if existent - nominalizing suffixes are not further analysable "mood suffixes", even though he admits for the more transparent forms the possibility that they have developed from the nominalizing suffix -tu and a postposition or - according to Drude's analysis - a locative suffix: "The conditional mood is marked by the suffix *-tuwo* (- $^{\circ}uwo^{376}$  after consonants), which by itself could be the combination of the subjunctive mood marker  $-tu/-u^{\circ}$  and the locative suffix -wo. This is indeed a plausible origin of this affix, but synchronously it is to rather be regarded as a single mood suffix [...]" (Drude forthcoming a: 24). The "mood suffixes", according to Drude (forthcoming a: 23), are attached to finite verb forms which differ from other finite verbs in that they take nominal instead of verbal prefixes. This suggests a nominal origin of these forms which, however, in current language use do not have a referential function so that he concludes that they cannot be nouns. He further points out that "verbal moods" have the same meanings as subordinators: "[...] we argue that these forms are better analysed as truly verbal, that is, as grammatical moods which carry the meaning which corresponds to that of subordinating conjunctions such as *that, in order* to, while, when, after etc." (cf. Drude forthcoming a: 26).

Since it is typologically not unusual that adjunct clauses are introduced by the same words as other adjuncts to form pre- or postpositional phrases, the nominalizations in my analysis are treated as NPs and not as verbs with nominal prefixes as suggested by Drude.

<sup>&</sup>lt;sup>376</sup> Drude uses the symbol  $/^{\circ}/$  to represent an abstract phoneme which does not have a phonetic realization after vowels and which after consonants is a voiceless plosive adapting in place of articulation to the preceding consonant (cf. Drude forthcoming a: 5/6).

The verbal features of such nominalizations, as was outlined in section 3.3.8.1 and summarized in table 3.13, are due to their status as deverbal nouns which refer to actions.

A different type of adjunct clause is formed with the gerund, as was outlined in section 3.3.8.1.7.

#### 3.3.9.4.3 Relative clauses

Nominalizations with *-ap* and *-mi* can be used to modify nouns in the main clause. In this function they can be regarded as specific types of ANCs which form subordinate relative clauses. In Awetí different elements – subjects, objects, oblique arguments and possessors – can be relativized. There are no relative pronouns. The relative clause usually follows the head noun.

Example (297), with a circumstantial nominalization *tepawut* ('which had climbed up') derived from an intransitive verb, illustrates subject relativization. Since the subject is the relativized function, it cannot occur in possessor position on the nominalized form:

(297) (kal kamukuaka6, 0005.007)

Kitã	mõj	watu	tepav	vut		an	wan ar	ni'ingyka	a'yn.
kitã	mõj	watu	tep	-ap	-put	an	wan a-	mi'ing -yka	a'yn
DEM	snake	big	climb.	vi-NOMcirc	-NPST	Г NEC	G but 1sg	-tell.vt -NEG	PART
'(Of) that big snake that went up, however, I won't tell any more.'									
(lit.: '(Of) that big snake's former climbing, however, I won't tell any more.')									

In (298) the relativized function is again the subject, but in this case the relative clause is formed from the transitive verb  $k\tilde{y}i$  ('kill'):

(298) (kal\_awytyza1, 0402.12)

*E'i=pap -(p)u aut jatã waraju e'i=kỹj -t -ap ete me?* 2pl= end.vi -NOM EVID DEM savage 2pl= kill.vt-EPEN-NOMcirc POSP PART 'Is it possible that you (all) died by savages who killed you?' (lit.: 'I wonder whether it is your ending by the savages' killing of you.') The constituent containing the subordinate clause is a PP [*waraju* [*e'ikỹjtap*] *ete*], forming an adjunct to the main clause predicate which consists of the intransitive action nominal *e'ipapu* ('your ending'). The subordinate clause, modifying the head-noun *waraju* ('savage'), is a nominalization formed with *-ap*.

The same type of nominalization can express the object referring to the patient as the relativized function in clauses where a 1<sup>st</sup> or 2<sup>nd</sup> person subject, ranking higher in the person animacy hierarchy, is marked on the nominalized form by means of an 'antipassive' prefix po(r)-. This is illustrated by (299) with a 1<sup>st</sup> person subject marked on the nominalized subordinate predicate which is a modifier of the noun *eu'wyp* ('your arrow'), constituting the subject in a non-verbal matrix clause:

(299) (tal\_kujakyt, 0850.97)

Eu'wypipomologawutmã a'yn ne.e= u'wyp i= po- mologe -ap-utmã a'yn ne.2sg= arrow1sg= ANTI- pull.out.vt -NOMcirc-NPST here PART PART'Here is your arrow which I pulled out.'

In (300) the grammatical relation assigned to the head noun within the modifying clause is that of an object. Here the nominalization functioning as a relative clause is formed with *mi*-. The relative clause has the  $3^{rd}$  person subject *atuza* ('our grandparents'). The 'relational prefix' *e*- of indirect possession is inserted<sup>377</sup>:

(300) (awu\_fishing, 1022.276)
Jatãn ete pira'yt atu-za e- mi- 'ũ -zoko-put.
DEM POSP fish grandfather-PL REL-NOMpat-eat.vt-IMPF-NPST.
'Around here was the fish which our grandparents used to eat.'

Example (301) compared to (299) illustrates that the choice between a relativization with -ap and one with mi- is not related to considerations regarding the respective position

<sup>&</sup>lt;sup>377</sup> Cf. section 3.3.8.1.6.

of subject and object on the person-animacy hierarchy. In (301) the relative clause with a 1<sup>st</sup> person subject is expressed by a patient nominalization:

(301) (kal\_tawozy2, 1556.398) *Kat tut jatã it= e- mi- ezoto nã=kyty me?*thing FUT DEM 1sg=REL-NOMpat- bring.vt 3= POSP PART
'What will it be that I (will) bring (to) him?'

The example illustrates that a subordinate relative clause may additionally contain an oblique argument, like the PP  $n\tilde{a}kyty$  ('to him') expressing the beneficiary. It can further be observed that the same nominalization with *mi*- does not only indicate object relativization but can – if an object is incorporated – also relativize the possessor, as in (302):

(302) (kal\_awytyza2, 1219.308)

*Kitã 'e, mi- njyt-kỹj -mut, nã ti kitã kitã tsu t=ekozoko-at ti me.* DEM PART, NOMpat-sister-kill.vt-NPST, 3PRO EVID TOP DEM like 3=be.vi-NOMag EVID PART 'That one, the one whose sister had been killed, he was someone who was like that.' (lit.: That one, the sister-killed one, he was someone who was like that.')

Headless relative clauses can further be formed from agentive nominalizations with the suffix *-at*. In (303) the subject of the intransitive clause *ko kyty toaput* ('who had gone to the field') is relativized:

(303) (kal awakap2, 0942.466)

Kitã kujã a'yn ne, ko kyty toaput ne, kitã kujã a'yn ne, ko kyty to -at -put ne, DEM woman PART PART field POSP go.vi-NOMag-NPST PART, o'ajpok outaw a'yn. o-'ajpok o= ut -aw a'yn. 3-return.vi 3coref= come.vi -GER PART

'That woman, the one who had gone to the field, was coming back.'

(lit.: (It was that woman. (It was) the one who had gone to the field. She returned coming (back).'

A second example for this type of relative clause, formed from a transitive verb, is given in (304):

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(304) (kal awkap2, 1468.208)
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Mã tinãkytsekytseapututume.mã tinã=kytse- kytse -at-putut-tumehere EVID 3= RED- cut.vt-NOMag-NPST come.vi -NOM PART'Here came the one who had freed him (lit.: ... cut him loose.')

All relative clauses formed with the *-at* nominalization which were encountered in the Awetí corpus are headless, and only the subject can be relativized, but more analyses with elicited data will be necessary in order to clearly distinguish this type from the relativization strategy with *-ap* illustrated by the examples (297) to (299).

## 3.3.10 Negation

In Awetí there are various types of negation. The most common strategy of clausal negation, i.e. negation of the entire proposition, is expressed by a negative construction with two elements, a clitic and an affix, which is used in declarative sentences. The particle  $an^{378}$  is preposed to a finite verb which is suffixed by -(y)ka, as shown in (305) and (306):

(305) (kal\_kwaza, 0322.012)
An ti w= e- 'inî wej-'apar -yka.
NEG EVID 3coref=REL-hammock 3- roll.up.vt-NEG
'He didn't roll up his hammock'

(306) (kal\_azoamujza, 071) *An 'yto ti tokỹj-tu ete i-'ywy -ka 'yto tsãn a'yn.*NEG so EVID fight-NOM POSP 3-worry.st-NEG so 3plPRO PART

<sup>&</sup>lt;sup>378</sup> Or *amian* as a combination of an + wian ('still, for a while') = 'not yet'.

'So they didn't worry (any more) about fighting.'

The two elements may also be combined with NPs or PPs when functioning as predicates, as illustrated in (49) and (307) respectively:

(49) (kal\_makawaja, 0176.449) *Mote wian an 'ukakyr-yka a'yn.*long.ago still NEG rooster -NEG PART
'In the past there were no roosters.'

(307) (tal\_kamu\_kwat1, 0676.092)

Nanywo ti jatã taty a'yt-'jyt **an** jatãn ete -**ka** me. For.this reason EVID DEM moon child-DIM NEG DEM POSP-NEG PART 'For this reason the little star (lit.: child of the moon) is not at this place any more.'

The first element *an* is analysed as a clitic particle because – as can be illustrated by the examples –other elements, e.g. second position particles, noun phrases or postpositional phrases, may intervene between *an* and the form suffixed with -(y)ka.

If a nominal predicate consists of a complex noun phrase, the negative suffix may also be attached to a modifier and narrow down the scope of the negation to this element:

(308) (kal\_awytyza1, 0316.752)
An ti momozotsu -ka mo'at a'yn
NE7 EVID one -NEG person PART
'There was not a single person (left).'

In interrogative sentences an interrogative adverb *kari'aw* ('why') occurs in the place of the particle *an*, as shown in (100), repeated here:

(100) (tal\_kakaja, 0607.555)
Kari'aw e'i-to -ka ozo= ewizako?
why 2pl-go.vi-NEG 1pl:excl=behind

'Why didn't you go after us?'

Another strategy is the negation with the clitic *katsu*, occurring at the beginning of the clause, which is followed by a finite verb form. This construction indicates a strong negation of a future event, i.e. the form *katsu* encodes negation as well as future tense:

(309) (tal\_kaminu, 1517.432) *Katsu a- to e='ywo me.*NEG.FUT 1sg-go.vi 2sg=POSP PART
'Under no circumstances will I go with you.'

A further strategy of clausal negation is the negation of imperatives, described in section 3.3.4.2.2. An example is given in (94) which is repeated for convenience: <sup>379</sup>

(94) (awakap1, 0058.355)

*Kware* e'i=topat -(t)u, kaj- kỹj-tukat eti 'e'ipe. IMP.NEG 2pl=lose.way-NOM 1pl:incl-kill-CAUS or 2plPRO 'Don't lose your way, or else you will make them kill us!'

There is a combinatorial restriction with regard to this particle in that it can only occur with an action nominal as a predicate.<sup>380</sup> Example (94) further shows that a clause with this type of negation is very often coordinated with a second clause containing the second position particle *(w)eti* ('or', 'if not') and a finite verbal predicate. This second clause expresses an event which will happen if the warning of the first clause is not adhered to. Clauses with the particle *(w)eti* may also occur in other combinations indicating conditions, with imperative clauses, (negative) future predicates or with another clause containing *(w)eti*, as in (310), which clearly demonstrates that the particle by itself has a negative meaning component:

<sup>&</sup>lt;sup>379</sup> This construction was already mentioned by Monserrat (1975: 8) as semantically having the effect of negative imperatives although not occurring with predicates in the imperative mood.

<sup>&</sup>lt;sup>380</sup> See also Drude (2008: 87ff.) for a different analysis according to which *kware* combines with a predicate in the "subjunctive mood".

(310) (tal kujakyt, 1378.13)

"I='yt upap eti e- pytyk, e- ty'azã weti",  $n\tilde{a}='e$  -tu ti me. 1sg=sperm place must.not 2sg- grab.vt 2sg-become.pregnant or, 3= say-NOM EVID PART "You mustn't touch the vessel of my sperm, or else you will become pregnant", he said."

For the negation of arguments and adjuncts the suffix *-e'ym* is used. The suffix negates word stems, mostly of nouns, and nominalizations, including action nominals in dependent clauses. In (311) and (312) the negated constituents are noun phrases in non-verbal clauses:

(311) (kal\_makawaja, 0145.089)

Nere'ym kitã 'ukakyt, arukakyt 'ytoto net a'yn. n=et -e'ym kitã 'ukakyt, arukakyt 'ytoto n=et a'yn. 3=name-NEG DEM rooster, rooster real 3=name PART '''Its name is not that, ukakyt (rooster), arukakyt is its real name.'

(312) (kal kamukuaka6)

"Tery	tupur <b>e'yn</b>	n		jatã	itepuza	mow	urat		ika'a",	nã'e.
T=et	-ytu	-put	-e'ym	jatã	it= epuza	mo-	wur	-at	ika'a,	nã'e.
3=nam	e -NOMqu	al-NPS	T-NEG	DEM	1sg=bird	CAUS	S-fly.v	i-NOMag	EPIST,	QUOT
"I think someone unknown made my birds fly away", he said."										
(lit.: "I think not somebody who had a name was the one who made my bird(s) fly away",										
he sai	d.')									

The negated constituents in (313) and (314) are action nominal constructions, in (313) in the function of a non-verbal predicate in a matrix clause, in (314) as an adjunct clause:

(313) (kal\_awakap1, 0668.116)
Nã=temoto -tur -e'ym-pu ti kitã me.
3= surrender.vi -OPT-NEG -NOM EVID DEM PART
'He did not want to surrender.'
(lit.: 'His not wanting to surrender was that one.')

### (314) (kal\_kamukuaka5, 0258.682)

Azouwe'ym ywo tut kitã me tut a'yn. otezap watu azo= -e'vm-(pu) (y)wo tut kitã o-tea'yn up me zap watu tut SUB FUT DEM PART, 3-REFL-untie.vt monster FUT PART 1pl:incl=stay.vi-NOM 'If we don't stay (there any more), the monster (a giant snake) will untie itself.' (lit.: 'If (it will be) our not staying, the monster will untie itself.')

In (315) a similar nominalization as in (313) clearly shows that the scope of the negation only extends to the word the negative suffix attaches to, in this case the predication  $ma'\tilde{a}pe$  ('to have a canoe'):

(315) (kal kwaza, 0444.789)

 $T=e-ma'\tilde{a}pe -(e)'ym-ytu -pu -za ti in ka'alole wo$  3= REL-have.canoe.st -NEG -NOMqual-NPST-PL EVID there bush POSP o-to o= te-mim -paw[...]. 3-go.vi 3coref= REFL-hide.vt-GER'Those who didn't have a canoe went there into the bushes to hide [...].'

The same applies to other nominalizations derived from stative verbs, as illustrated by (316) and (317):

(316) (kal makawaja, 1388.227)

Nã=tsu kitã nã me, 'ukakyt pytyk -(k)u. I=puku -ar -e'ym kitã 'ã. 3= like TOP 3PRO PART rooster grab.vt-NOM 3=long.st -NOMag-NEG DEM PART 'That's how it was, the robbery of the rooster. That one (the rooster) is not a long one (i.e. one who survives for a long time).'

(317) (mopot\_birth, 0627.269)
I= puku -e'ym-ytu akyj tsu-at ne.
3= long.st-NEG -NOMqual DEM like-NOMag PART
'One (story) that isn't long, like that one'

While in (315) a noun referring to the bearer of a quality is negated, the negation in (317) only applies to the quality by which an entity is characterized.

The marker of nominal negation can also be found attached to elements of other word classes. As illustrated in 3.3.7.1, it can be suffixed to postpositions, and – as illustrated in (318) and (319) – certain adverbs seem to have lexicalized from a combination with the negative suffix *-e'ym*. The equivalent positive adverbs do not seem to exist:

(318) (kal\_makawaja, 1165.546)

 $N\tilde{a}=por-ezo-wage$  -tu nã, kopere'ym w=e-tam tup -(p)u nã. 3= ANTI-COM-turn.around.vi -NOM 3PRO not.far 3coref=REL-village see.vt-NOM 3PRO 'He<sub>i</sub> turned around with it and saw his<sub>i</sub> village not far away.'

(319) (kal tawozy4, 0825.485)

Me'yma'ytti'yto kitãme,not.much.timeEMOTEVID soDEMPART,wywo-tezewe=katua'yttia'yn.IDEO.turn.around3-turn.vi=INTENSEMOTEVID'Then, after a short while, it turned around well (i.e. into the right direction).'

### 4 Ideophones in Awetí

In this chapter ideophones in Awetí will be described on various levels: on the phonetic-phonological, the morphological, syntactic, semantic and pragmatic level. The levels of description cannot always be clearly separated from each other due to the non-arbitrary form of ideophones so that there are various interfaces between semantics and one of the other levels: phonology and semantics (i.e. phonosemantics), morphology and semantics (e.g. reduplication or repetition, expressing the aspect contour of a depicted event), syntax and semantics (e.g. syntactically independent ideophones having the function of adding a manner component to the finite verbal predicate of an adjacent clause) as well as pragmatics and semantics (e.g. prosodically marked features and gesture expressing meaning components).<sup>392</sup> Therefore some features of ideophones will be discussed on various levels with an emphasis on different aspects.

### 4.1 Types and distribution of Awetí ideophones

As outlined in the introductory chapter one, there are two different types of ideophones in Awetí, which are primarily distinguishable according to semantic criteria. A first type consists of highly conventionalized ideophones depicting activities. From this first type a second type of onomatopoeic, less conventionalized ideophones depicting sound events emitted by humans or animals is distinguished. Although many authors (e.g. McGregor 2002, Güldemann 2008) exclude the second type from their discussion of ideophones for being clearly sound-symbolic in an onomatopoeic sense<sup>393</sup> and formally variable, they are integrated in this study due to the fact that on most levels of analysis they show an identical behavior to the other type. The two types of ideophones differ from each other with regard to their correlations with gesture, which in section 4.6 will be outlined only for the conventionalized first type which shows a more consistent pattern. In the discussion of

<sup>&</sup>lt;sup>392</sup> This observation was also made with regard to ideophones in Turkish: "Wie so vieles im Bereich der Ideophonie, sind jedoch auch die pragmatische und semantische Ebene hier ineinander verwoben [...]" ("As many other features in ideophones, the pragmatic and the semantic level are here interwoven [...]" [my translation]")(Jendraschek 2002: 61/62, footnote 49).

<sup>&</sup>lt;sup>393</sup> Cf. Hinton et al.'s (1994) classification described in section 2.1, where these belong to the category of "imitative sound symbolism".

different possible historical scenarios involving ideophones, too, the second type is not taken into consideration since it often consists of more spontaneous ad-hoc creations.

## 4.2 Phonological properties and performative aspects

In this section ideophones are analysed with regard to their phonological properties and syllable structure. In addition, prosodic features, by which they can be perceived to be different from other elements of discourse, are presented. The semantic contributions of these features to the utterance were given by the native speakers who participated in the transcription and translation of the data. Although these features are based on perception, they are made transparent by means of acoustic measures, i.e. visualized in sound charts.

# 4.2.1 Phoneme inventory

The phoneme inventory of ideophones is not unusual for the language in general, with few exceptions which mostly concern ideophones imitating sounds uttered by humans or animals.

All oral vowel phonemes of the language occur in ideophones, but the vowel  $\epsilon$ / is very rare.<sup>394</sup> In the DoBeS corpus, apart from several sound symbolic instances of ideophones belonging to group II, it only occurs once in an ideophone of group I:

(1)(tal\_mamuti\_2\_8, 0722.036)*pek* [pɛk] 'saliva falling onto (water) surface'

A probably related disyllabic ideophone *perek* is given by Awetí consultants to transcribe a sound uttered by a narrator to depict small fish jumping up and down in the water:

(2)(kal\_makawaja, 1898.026)

Perektum tumwa(tu?)pira'yt pot- pore -tu(a'yn).IDEO.jump.upIDEO.fall.into.watermuchfishRED-jump.vi-NOM

<sup>&</sup>lt;sup>394</sup> This seems to correspond to Langdon's observation with regard to the genetically related language Guaraní, spoken in Paraguay. In her table of "noise words" Langdon lists only one item with the vowel /e/ (cf. Langdon 1994: table 7.2).

'A lot of fish was jumping up and down.'

All consonants of the phonemic system of the language can be found in ideophones, with the exception of  $/\gamma$  which in other words, too, only occurs in a few verb roots and their derivations.

The phoneme /h/ occurs word initially only with some loanwords and with ideophones of type II:

(3)a. (tal\_mamuti\_1\_8, 1661.311)

['hu'hu'hu] 'humming of bees' b. (tal\_mamuti\_3\_8, 0483.000) ['hau'hau] 'sound of a jaguar' c. (kal\_sham\_myth1, 0603.995) ['h $\tilde{\epsilon}$ 'h $\tilde{\epsilon}$ ] 'crying with pain' d. (kal\_ta\_wat, 0318.587) ['hak 'hak] 'gasping'

Word internally it occurs in ideophones of the same type more often than in other words:<sup>395</sup>

(4)a. (tal\_mamuti\_3\_8, 0423.069) [tɔ'hɔ̃ tɔ'hɔ̃ tɔ'hɔ̃] 'coughing' b. (tal\_mamuti\_4\_8, 0096.387) [?i'hi ?i'hi ?i'hi] 'crying'

The liquid /l/, a phoneme which according to Drude (2006: 39) is rarely found in related Tupí-Guaranian languages<sup>396</sup>, occurs in ideophones of both types in initial and medial

<sup>&</sup>lt;sup>395</sup> Cf. section 3.2.1.

<sup>&</sup>lt;sup>396</sup> But see e.g. the Awetí cognates with the Tupí-Guaranian language Emerillon, where /l/ seems to be a phoneme frequently occurring in ideophones (cf. section 5.1 and Rose 2003: 575). While this phoneme is realized as [l] in ideophones, its preferential phonetic realization in other Emerillon words is a flap [r] (cf. Rose 2003: 644).

position, as in (5)(a) and (5)(b) for ideophones of group I and in (5)(c) for an ideophone of group II:

(5)a. (kal\_tawozy5, 0153.901)
['lɔk] 'getting out of a hole'
b. (kal\_ta\_wat, 0255.747)
[pi'lak pi'lak] 'plucking out feathers'
c. (tal\_kujakyt, 0617.059)
[ku'la ku'la ku'la] 'sound of parrots'

Ideophones with this phoneme are rare, as are other words in the language, where /l/ mostly occurs in proper names and in a few other lexical items (including several loanwords), of which some are relatively frequent in speech.

In the corpus, there are several instances of the labiodental fricative /f/, which only occurs in these few ideophones and therefore has not been included in the Awetí phonemic system.<sup>397</sup> It occurs at the onset of a syllable in monosyllabic ideophones, and in one case forms an affricate with a preceding /p/. However, in each of these instances the ideophone is a clear imitation of a sound which occurs either when air is released, as in (6)(a) and (b), or when a quickly moving object produces an audible draught, as in (6)(c):

(6)a. (tal\_mamuti\_1\_8, 1567.236)

[fu:] 'exhaling smoke'
b. (tal\_kakaja, 1161.664)
[pfu pfu pfu] 'liquid bubbling'
c. (kal\_kamukwaka4, 0558.276)
[f: f: f: ft:] 'running very quickly'

<sup>&</sup>lt;sup>397</sup> Rose made the same observation for the TG-language Emerillon, where an apparently cognate form *fu* ('to blow', cf. (6)(a)) is the only item within a small inventory of 35 "independent" ideophones with a labiodental fricative which is normally absent in the language: "Seul le phonème /f/, normalement absent de l'inventaire consonantique de l'émérillon, a été repéré dans l'idéophone fu "souffle"." (2003: 675).

Therefore, these ideophones are considered as instances of imitative sound symbolism in the sense described by Hinton et al. (1994: 3/4).<sup>398</sup> Other unusual sequences of phonemes are equally rare and are also most often found in onomatopoeic ideophones. Further examples are listed in (7):

(7)a. (kal\_sham\_myth\_1) (0788.397)

*tjok tjok tjok (e'iju)* ['t<sup>j</sup>ok't<sup>j</sup>ok't<sup>j</sup>ok]

'it (an object used in witchcraft) was going tjok tjok'

b. (kal\_kwaza) (0543.767), (kal\_tawozy4, 0967.83)

*pxyw*<sup>399</sup> ['p<sup>s</sup><sub>10</sub>] 'shooting an arrow that does not hit its target' 'not succeeding to turn over'

c. (kal\_sham1, 1027.577)

*xyw xyw* ['x<sub>1</sub>∪ 'x<sub>1</sub>∪] 'sound of spirit moving around'

d. (kal\_sham\_myth\_1) (760.35)

 $he'hee\tilde{e}(e'i)$  [ $h\epsilon$ ? $h\tilde{\epsilon}$ :] 'he cleared his throat ("'he'hee $\tilde{e}$ ", he said')

The palatalization of /t/ before  $/2^{400}$  in (7)(a) is an unknown process in Awetí phonology, and the pharyngealized voiceless bilabial plosive in (7)(b) seems to be an altogether inexistent combination. Likewise, the velar fricative /x/ in (7)(c) is not a phoneme of the Awetí language, while (7)(d), where a consonant [?] in the coda of the first syllable is followed by a consonant [h] in the onset of the second, is another instance of sound symbolism. The glottal stop in the coda of a syllable is also not possible.

## 4.2.2 Phonological processes

There is a strong tendency for vowel harmony in ideophones consisting of more than one syllable:

<sup>&</sup>lt;sup>398</sup> Cf. section 2.1.

<sup>&</sup>lt;sup>399</sup> This is a variant of the standardized ideophone pyw ('to turn', in this context: 'to turn into a different direction'). The standard form was given by Awetí consultants during transcription. See also example (31).

<sup>&</sup>lt;sup>400</sup> As was shown in 3.1.2 (18), palatalization of /t/ occurs regularly before /i/.

(8)a. (kal\_awakap1, 0344.125)
parang /paraŋ/ [<sup>m</sup>ba'raŋ] 'hitting with a club'
b. (kal\_makawaja, 0891.693)
piririk /piririk/ [piri'rik] 'grabbing an animate moving object'
c. (kal\_kamukuaka5, 0604.09)
kyryk /kirik/ [ki'rik] 'climbing up/down', 'tying around'<sup>401</sup>
d. (kal\_kwaza, 1619.611)
torok /torok/ [to'rok] 'breaking something wooden'
e. (kal\_kamukuaka4, 0902.314)
kuzuk /kuzuk/ [ku'zuk] 'entering', 'inserting'

Ideophones starting with a plosive can be pronounced with a voiceless, a voiced, a prenasalized or a nasal variant, independent of the phonological environment. This can be illustrated by the sentences in (9), each with the ideophone *poo* ('to surface'). While in (9)(a) the ideophone is pronounced ['po:] with a fortis plosive, in (9)(b) the pronunciation is ['bo:], and in (9)(c) the plosive is prenasalized to [<sup>m</sup>b]. The fact that the particle *a'yn* in (9)(a) and (b) ends in a nasal consonant and the particle *me* in an oral vowel does not affect the pronunciation of the ideophone. Rather, the individual ways of pronouncing the ideophone seem to be related to the size of the entity coming up from under the water: a voiceless plosive for a woman, a voiced plosive for a big vessel and a prenasalized voiced plosive (combined with an expressive lengthening of the vowel) for a monster.

(9)a. (tal\_mamuti\_1\_8, 1598.321)
Me'ym zotsu ti o-'apo'atem a'yn, poo, 'y pyterype.
short.while indeed POSP 3- arrive.vi PART, IDEO.surface, river POSP
'After a short while indeed she came up, poo, in the middle of the river.'

 $<sup>^{401}</sup>$  The ideophone and its variants depict various activities which involve friction (cf. table 4.3 in section 4.3).

b. (kal\_kaminu, 0834.199)
Wej-zezut ti a'yn, poo
3-bring.vt EVID PART, IDEO.surface
'She brought them (up from under the water), poo.'

c. (kal\_tawozy2, 0683.047)

Mu'jẽ tikitã otẽtap 'ok -utsu-atywo me,already EVID TOP dooropen.vt-NOM like-NOMag SUB PART,pooo-temwatu tia'yn.

IDEO.surface 3-come.out.vi big EVID PART

'When it was already time to open the doors (in the morning), poo, the big one came out (of the water).'

For the ideophone *torok* with the general meaning 'to manipulate something wooden' the variants [tɔ'rok], [dɔ'rok] and [nɔ'rok] could be found:

(10) a. (kal\_awaniwani4, 0843.25)
N=apyta tsoa tok tok tok torok-y.
3= stem towards IDEO.cut.wood IDEO.break-INTENS
'They cut it (the trunk) through at its upper end.'

b. (tal\_mamuti\_1\_8, 1574.226)

Nã=te- pytyk -u tapai'yp 'op ete.

3= REFL-grab.vt-NOM buriti.tree leaf POSP

Torok-y o-te- 'ok ti a'yn.

IDEO.break-INTENS 3-REFL-break.vt EVID PART

'She clung to the leaves of the buriti tree. Torok, (suddenly) it (part of a tree) broke off (under her weight).'

c. (kal\_kamukuaka6, 1281.068)

N=etse-tu,noroktsok-ynã=tsuwezanun=etawokatu [a'yn].3= enter -NOMIDEO.release.arrowIDEO.hit-INTENS3= like again3=eyePOSPright

'He went inside and norok tsoky (someone sent an arrow and hit him) again like this (as had happened to another person) right in the eye.'

d. (tal\_mamuti\_1\_8, 1570.911)

Nã=te- pytyk -u ti tapaj'yp op ete. Norok, o-te- 'ok ti a'yn.
3= REFL-grab.vt-NOM EVID buriti.tree leaf POSP. IDEO.break, 3- REFL-break EVID PART
'She secured herself on a buriti leaf. Norok, it broke.'

In contrast to other word classes<sup>402</sup> there is no regressive assimilation of nasalization in the few examples of disyllabic ideophones with a nasal vowel in the second syllable. All of them belong to group II, which – because of their tendency towards sound imitation – may be more affected by deviations from standards:

(11)(tal\_mamuti\_3\_8, 0423.069)  $toh\tilde{o} toh\tilde{o}^{403}$  [tɔ'hɔ̃ tɔ'hɔ̃] 'coughing'

In one case the nasality of the following word is assimilated by the consonantal coda of the ideophone *pok* ('to put down, give, sit'):

(12) (mopot\_birth, 0532.588)

Pokmotang ywome,w-ekoa'yn.[poŋmotaŋy twomɛ:wɛkoa?tn]IDEO.givemedicinePOSPPART, 3-walk.viPART'When themedicine is given (to him), he walks (again).'

However, this does not seem to be a regular process. Moreover, most ideophones are - like the examples in (7) - completely disconnected from the phonological structure of the

<sup>&</sup>lt;sup>402</sup> Cf. 3.2.2, example (11).

<sup>&</sup>lt;sup>403</sup> There is a non-nasalized variant of this ideophone in the corpus which, according to the consultant Awajatu Awetí, is the Kamaiurá correspondent of it.

sentences they are embedded in. Evidence for this is given by the fact that final plosives are not lenited when followed by words starting with a vowel, as in (13): <sup>404</sup>

(13) (tal\_mamuti\_4\_8, 0626.679) *O-majõ ti nã=tak a'yn.* Tuk o-kuje.
3-die.vi EVID 3=grandmother PART IDEO.fall.down 3-fall.vi
[ɔmã'nõ t∫i nã'taɣ a?ɨn 'tuk ɔ'kujɛ]
'Their grandmother died. Tuk, she fell down.'

In (13) there are two sequences where a vowel follows a velar plosive /k/ across word boundaries. While in the first case, between the words *nãtak* and *a'yn*, the plosive – according to the phonological rule<sup>405</sup> – is lenited to a fricative [ $\gamma$ ], it remains fortis between the ideophone *tuk* and the following finite verb *okuje*, as indicated by bold letters in the phonetic transcription.

# 4.2.3 Syllable structure

Most of the ideophones of group I, which are basically mono- or disyllabic, display two syllable structures:  $C_1VC_2$  for the monosyllabic and  $C_1V_1.C_2V_2C_3$  for the disyllabic ones. Examples for monosyllabic ideophones are:

(14)a.(kal\_kwaza, 0655.749)

/pok/ ['pok] 'putting (down)'
b. (kal\_awytyza1, 1686.656)
/put/ ['pu:t] 'getting out of sth.'
c. (tal\_mamuti\_1\_8, 0088.517)
/tiw/ ['t∫iw] 'tearing sth.apart'

Disyllabic ideophones are given in (15):

<sup>&</sup>lt;sup>404</sup> Further evidence is given by the examples showing the prosodically marked structure of ideophones in section 4.2.3.

<sup>&</sup>lt;sup>405</sup> Cf. section 3.2.2, (16).

(15)a.(kal\_makawaja, 0517.835)
/kulik/ [ku.'lik] 'crushing sth.'
b. (awu\_fishing, 0389.806)
/putok/ [pu.'tok] 'shooting with an arrow'
c. (tal\_mamuti\_2\_8, 0519.846)
/tirik/[tʃi.'rik] 'walking on dry leaves (in the thicket)'

These syllable structures correspond to those of lexical roots in the language,<sup>406</sup> more specifically to those of verb roots. This is illustrated by the monosyllabic verb roots in (16) and the disyllabic ones in (17):

(16)a./juŋ/ ['juŋ]	as in <i>ajung</i> 'I put (sth.)
b./tak/ ['tak]	as in otak 'he cries'
c. /tɛm/ ['tɛm]	as in otem 'he goes out'

(17)a./ja?aŋ/ [ja.'?aŋ] as in *oja'ang* 'they gather',
b./pitik/ [pi.'tik] as in *apytyk* 'I grab sth.'
c./tɛmim/ [tɛ̃.'mim] as in *atemim* 'I hide'.

Less frequently, monosyllabic ideophones with a C<sub>1</sub>V<sub>1</sub>-structure can be observed:

(18)a.(kal\_kaminu, 0834.199)
/pɔ/ ['pɔ:] 'surfacing (from underwater)'
b. (tal\_mamuti\_2\_8) (0620.891)
/tsu/ ['tsu:] 'pouring water'
c. (kal\_kwaza) (1587.814)
/tu/ ['tu:] 'falling'

<sup>&</sup>lt;sup>406</sup> Cf. section 3.2.3.

As indicated in the phonetic transcription, these ideophones with a CV structure usually have vowel lengthening. In general, vowel length is not distinctive in Awetí. In ideophones there are no minimal pairs either, but monosyllabic ones of this type may contrast with reduplicated ones, as (18)(c) opposed to (19):

(19)(tal\_mamuti\_4\_8, 0702.889), (kal\_mene, 1319.381) /tutututututututu/['tutututututututu] 'running'

While the extra-long vowels in (18) can be regarded as the norm in monosyllabic ideophones with a vocal coda, a distinction must be drawn between these occurrences and variably expressive vowel lengthening in ideophones with different structures and in other elements.<sup>407</sup> Compare the usage of the ideophone *wyw* with the general meaning 'to bend, to turn' in (20)(a), where [w<sub>1</sub>:u] depicts the pulling of a bowstring in order to send an arrow over a long distance, to its usage in (20)(b), [w<sub>1</sub>u] without lengthening describes how a small piece of coconut (tukumã) fibre, metaphorically denoted as *ky'ym* ('iron'), is bent to become a fishing hook:

(20) a.(kal\_kwaza, 1770.972)

Wyyywpiiiingwej-mo-pwajtia'yn.IDEO.bendIDEO.arrow.fly.off 3-CAUS-send.vt EVIDPART'Pulling the bowstring and releasing the arrow (to fly a long distance), he made it (the bow)send it (the arrow).'

b. (awu\_fishing, 0166.343) *Ky'ym, ky'ym mo- wywe -tu tene wyw.*iron iron CAUS-bend.vi-NOM simply IDEO.bend
'He simply bent iron, wyw.'

The expressive prolongation of vowels is an iconic means of signifying an extension in space or time, a phenomenon which has also been mentioned by Childs (1994: 185) as a

<sup>&</sup>lt;sup>407</sup> Such a distinction between "expressive lengthening" and a standard "extra-length" is also drawn by Childs for African languages (1994: 186).

general feature of African ideophones.<sup>408</sup> This is explicitly confirmed in a metacommentary by Jakumin Awetí when translating the following passage in (21) from a myth, narrating about the origins of ritual ear-piercing:

(21) (tal\_kamu\_kwat1, 0149.869) *Tsã= to- mopuge-tu ti meeeeeeeeee.*3pl= REC-pierce.vt -NOM EVID PART
'They pierced them (their ears) (for a long time).'

An "all-embracing" gesture by the speaker additionally confirms that the extension in time is caused by the large quantity of people who have their ears pierced. Jakumin translates and explains: "A onde eles fizeram a furação. Aí tem os tempos onde ele fala [ $\epsilon$ :]. Esses aí são os tempos" ("(It is) where they made the piercing. There are the times where he says [ $\epsilon$ :]. These are the times."), (transl tal kamu kwat1, 10:00-10:07min, [my

translation]).

Apart from the ideophones with a mono- or disyllabic base form there is a third type with the syllable structure  $C_1V_1.rV_1$ , as in (22):<sup>409</sup>

(22)a. (tal\_mamuti\_2\_8, 1670.961)

/tarara/ [tarara] 'spinning cotton' (by rolling it on one's thigh)

b. (tal\_mamuti\_1\_8, 1164.939), (kal\_kwaza, 1625.36)

/kiriri/ [kiriri] 1)'unfastening of a hammock'

2)'dragging'

c. (mop\_manioc, 0226.954 ), (kal\_kamukuaka6, 1379.896)

/pururu/ [pururu] 1) 'throwing solid objects to the ground',

2) 'running of a jaguar'

<sup>&</sup>lt;sup>408</sup> In Awetí an extension in space or time is most often indicated by the prolongation of the vowel in the clause-final particle *me* (see figure (12) in section 4.6.3 for an illustration).

<sup>&</sup>lt;sup>409</sup> These ideophones are formally identical with the so-called "noise words" in Paraguayan Guaraní (Langdon 1994: 95).

For this type of ideophone it is difficult to determine the primary stress which seems to vary between the first and the third syllable.

Other ideophones with three syllables are extended forms with the suffixes -y or -yhy. These suffixes indicate that the activity expressed by the ideophone is terminated in an abrupt manner. In addition, there are ideophones consisting of more than three syllables, which are instances of partial or full reduplication. These phenomena will be described in subsection 4.3.

With regard to the distribution of phonemes ideophones are more restricted than other words in the language. The initial consonants of ideophones of group I are mostly oral voiceless stops / p/, /t/, /k/ and the affricate /ts/<sup>410</sup>. Initial vowels predominantly occur in ideophones which are embedded in complex verb phrases,<sup>411</sup> and depict human speech or other sounds produced by human beings or animals, i.e. which belong to group II. Examples are given in (23):

(23)a.(tal\_mamuti\_4\_8, 0816.842)
atiw atiw [a'tʃiu a'tʃiu] 'sneezing'
b. (tal\_mamuti\_3\_8, 1439.565)
ihĩ ihĩ [i'hĩ] 'crying'

Most often, however, the C<sub>1</sub>-Position of such ideophones is occupied by a /h/ or a /?/, as in examples (3) or (4)(b) above.

Medial consonants in the disyllabic ideophones of group I most frequently consist of an alveolar flap /r/ and less frequently of an alveolar plosive /t/ or a retroflex fricative /z/. As was already observed in section 3.2.1, these three phonemes are historically related. This relation is reflected in certain ideophones with two variant forms, alternating between /r/ and /t/ or between /z/ and /t/ in C<sub>2</sub>-position, as will be shown below.

 $<sup>^{410}</sup>$  A second affricate follows from the phonetic realization of /t/ before /i/ as [tʃ] (cf. section 3.2.2).

<sup>&</sup>lt;sup>411</sup> Cf. section 4.4.

The final phoneme in a monosyllabic ideophone may consist of the plosives /k/ or /t/, but not /p/.<sup>412</sup> The coda can further be a nasal /m/, /n/, /ŋ/, an oral or nasal vowel, or a glide /w/ or /j/, in the latter case forming a diphthong with the preceding vowel, as illustrated in (24):

(24)a.(tal\_mamuti\_1\_8, 0181.651) *zaj* [zaj] 'scaring away an animal' b. (tal\_mamuti\_2\_8, 1629.622) *zyw* [ziu] 'wiping with one's hand'

Nearly all of the disyllabic ideophones of group I with the typical syllable structure CVCVC end in /k/. In some cases the final consonant is omitted.

Ideophones of group II tend to have syllable structures which are less typical for verb stems than those of group I, e.g. the disyllabic ideophone *he'heeẽ* [,hɛ?'hɛ̃:] ('to clear one's throat') in (7)(d), where a consonantal coda of the first syllable is followed by a consonantal onset of the second, leading to the string CVC.CVC. Other ideophones, like the following in (25) which occurs very frequently throughout the corpus, are altogether unusual for the language:

(25)(tal\_mamuti\_1\_8, 1340.261) *hm hm hm* ['hm'hm'hm] 'animal devouring sth.'

In terms of syllable structure (25) would have to be described as CN.CN.CN. An approximation to phonetically transcribe a syllable of this ideophone is [<sup>h</sup>m], i.e. its nucleus is a pre-aspirated bilabial nasal consonant.

Although a major part of the ideophones of both groups seems to be standardized, some of them show slight variation, often performed by the same speaker in the same text. In most cases, however, one of the variants is more accepted than the other(s). This was confirmed in an interview with Waranaku and Awajatu Awetí in October 2007, when discussing a list of ideophones encountered in the corpus.

The vowel quality may vary, e.g. between [5] and [u] or [a] and [5], as in (26)(a) and (b):

<sup>&</sup>lt;sup>412</sup> Cf. examples (1), (13).

(26)a. (tal\_mamuti\_1\_8, 0684.971), (kal\_angut2, 1219.342) *tok* ['tok] vs. *tuk* ['tuk] 'beating (with a club)'
b. (awu\_fishing, 0603.164), (maw\_male\_recl, 0334.462) *tsak* ['tsak] vs. *tsok* ['tsok] 'hitting with an arrow'

This kind of variation can also be observed in other Awetí words, as in the pronunciation of *mo'at* ('person')<sup>413</sup> or in the alternative forms azo(j)- and ozo(j)- used for prefixes and possessor clitics marking the first person plural exclusive on verbs and nouns.

Alternation could also be found between [a] and [1], illustrated in (27):

(27)(tal\_mamuti\_2\_8, 1670.961), (awu\_fishing, 0162.271) tarara [tarara] vs. tyryry [tiriri] 'spinning fibre' (by rolling it on one's thigh)

In this case the possibility exists that the vowel alternation is semantically motivated to distinguish between the spinning or "thread-rolling" of soft cotton, depicted by *tarara*, and the spinning of the hard fibre of coconut shell (*tyryry*) which afterwards can be bent like a piece of wire to form a fishing hook.<sup>414</sup>

There are further speakers who prefer a nasal variant with regard to certain ideophones to an oral one used by other speakers. An example given by Awetí consultants, which belongs to the less standardized ideophones of group II with a stronger tendency for irregularities, is (28):

(28) (Waranaku Awetí/ Awajatu Awetí, 10/2007, personal communication)
 *toho toho* [to'ho] vs. *tohõ tohõ* [to'hõ] 'coughing'

<sup>&</sup>lt;sup>413</sup> Cf. section 3.2.1.

<sup>&</sup>lt;sup>414</sup> An argument against this hypothesis is one example where the speaker starts with *tyryry* and then switches to various repetitions of *tarara* (cf. tal\_mamuti\_1\_8, 0908.843). Whether this is an immediate repair of an error by the speaker or evidence for alternative forms depicting the same event can only be determined by a native speaker.

In word initial position the plosive [p] alternates with [t], as in (29)(a) and (b), and the plosive [t] with [k], as in (29)(c) and (d):

(29)a.(awu_fishing, 0389.806, 0394.173)	
<i>putok</i> [pu'tək] vs. <i>tutok</i> [tu'tək]	'shooting with an arrow'
b. (tal_mamuti_1_8, 0196.763, 0312.1	25)
<i>pururururu</i> ['pururururu] vs. <i>turururu</i>	uru ['tururururu] 'running in the forest'
c. (tal_mamuti_2_8, 0659.226, 1212.7	(49)
<i>tyryk tyryk</i> [tɬˈɾɨk] vs. <i>kyryk kyryk</i> [kɬˈ	'climbing up/down a tree'
d. (tal_kamu_kwat1, 0873.31)	
<i>karak</i> [kaˈɾak]vs. <i>tarak</i> [taˈɾak]	'drilling a stone with one's beak'

Variation also occurs with regard to intermediate f(ts), t/, r/ and z/, exemplified in (30), whereby in the case of the latter three phonemes this may reflect an ongoing sound change from r/ to z/ and from t/ to r/ in intervocalic position:<sup>415</sup>

(30) a. (awu\_fishing, 0394.173, 0239.43) *tutok* [tu'tok] vs.*tutsok* [tu'tsok] 'shooting with an arrow'
b. (kal\_sham\_myth1, 0412.49), (kal\_kamukuaka4, 1572.178) *kutuk* [ku'tuk] vs.*kuzuk* [ku'zuk] 'entering, getting inside'
c. (tal\_mamuti\_2\_8, 1212.749), (kal\_awakap1, 0939.477) *kytyk kytyk* [kt'ttk] vs. *kyryk kyryk* [kt'rtk] 'climbing up/down a tree'

An interesting observation in this context is that the Awetí speakers working at the transcription of the data were often not able to clearly distinguish the flap [r] from the fricative [z] in this phonetic environment, which indicates a non-distinctive sound

<sup>&</sup>lt;sup>415</sup> See section 3.2.1 and Drude (2006: 35).

alternation at the current stage and – given that the flap [r] is the original sound<sup>416</sup> – is another argument for the assumption of an ongoing sound change.

While the variants presented in (28) to (30) are generally accepted by Awetí speakers, with slight preferences for the one or the other, there are also cases of variation in the data which, according to the consultants, are ad-hoc-creations of the speaker.<sup>417</sup>

A revealing example for the usage of a non-standardized form of the ideophone pyw, which is afterwards pronounced according to standards, is the passage in (31) from a narrative:

(31)(kal\_tawozy4, 0967.83, 0973.829)

Kujtan ype tepe ti pxyw e'i, a'ang tepe pxyw. DEM POSP FRUST EVID IDEO.turn.over 3say, EVID FRUST IDEO Mojte nã=zymane -tu. Pxyw, pyw, pyw. An tepe watu ti immediately 3= circulate.vi-NOMIDEO IDEO IDEO NEG FRUST big.one EVID *i- pytu'ẽ -ka*, pxyw.

3- insist.st -NEG, IDEO

'There far (up in the air) it (the big turtle) tried to make pyw, turn him over, (I imagine that) it tried to turn him over. It immediately went in a circle. Pyw, pyw, pyw. The big one didn't insist any more (on turning him over), pyw.'

Note that all ideophones were orthographically transcribed as pyw by Awetí consultants, but of the six instances the first three and the last one are pronounced as  $[{}^{1}p{}^{S}iv]$ , the fourth and the fifth as  $[{}^{1}piv]$ .<sup>418</sup> In addition, the first of the non-standard ideophones is introduced as the component of a complex verb phrase with a finite form of the verb 'e ('to say').<sup>419</sup> This way many of the ideophones of group II, which also tend to be less standardized, are syntactically embedded, so that one may hypothesize that this is a

<sup>&</sup>lt;sup>416</sup> The flap also exists in the closely related TG-languages and in Mawé, whereas the fricative [z] is absent from their phoneme inventories (cf. Drude 2006).

<sup>&</sup>lt;sup>417</sup> It was observed that such individual creations are more accepted when uttered by the two professional story-tellers in narratives than by other speakers in other genres.

<sup>&</sup>lt;sup>418</sup> Another interpretation of the non-standard form is that it represents a sound-symbolic depiction of a movement which fails to be accomplished.

 $<sup>^{419}</sup>$  See section 4.4.

more general means to introduce non-standard material in the language.<sup>420</sup> This idea will be further pursued in chapter five, when describing several scenarios for a possible development of ideophones.

### 4.2.4 Prosodic features

Ideophones in Awetí are often marked in terms of their prosodic features. They have specific stress patterns, depending on their number of syllables. They may form a prosodic unit apart from the rest of the utterance and tend to be produced with high pitch and with prolonged vowels. These observations can be illustrated by Praat-generated sound charts. The upper part of each chart records the wave form of the sound, i.e. the variation in air pressure (on the vertical axis) relative to time (on the horizontal axis). On the lower part the pitch curve is documented. The outline of the sound charts is relatively simple, since an indepth phonetic analysis is not intended here, and only the information relevant to represent the phonetic characteristics of ideophones in comparison to the rest of the utterance is given. The different wave forms of the ideophones in the sound charts are taken as measures for loudness due to the fact that an increase or decrease of loudness correlates with an increase or decrease in the amplitude of air pressure. No values are given for measuring frequency which is indicative of pitch – the relevant differentiation is between high and low frequency. The utterances are orthographically and not phonetically transcribed since individual allophones are irrelevant here. The chart is further divided into segments for individual ideophones on the one hand, and the rest of the utterance on the other.

The prosodic features presented here do not only indicate syntactic boundaries but may also modify the meaning of ideophones in various ways, as will be described below.

# 4.2.4.1 Word stress

Ideophones in Awetí have a specific stress pattern. In mono- and disyllabic ideophones of group I the fixed word stress is on the only or last syllable, as is the norm in the Awetí language.<sup>421</sup> Ideophones with a trisyllabic base form either have stress on the first or on the

<sup>&</sup>lt;sup>420</sup> See also section 4.6.3. <sup>421</sup> Cf. section 3.2.3.

third syllable. In trisyllabic ideophones which have undergone a process of reduplication, e.g. *piririk* ('to grab an animate moving object') in (8)(b), stress is on the last syllable. Multisyllabic ideophones are stressed on the first syllable. In ideophones suffixed with -y/-*yhy* the fixed stress pattern of the base form remains unchanged. The suffixes themselves are unstressed. With regard to the less standardized ideophones of group II it can be observed that most of the mono- and disyllabic as well as the few trisyllabic ones in this respect behave like those of group I.

## 4.2.4.2 Indication of separate prosodic units

In (32), a sequence of three ideophones depicts an event which is also referred to by the finite verb  $otylym\tilde{u}$  ('she spat'):

(32)(tal mamuti 2 8, 0722.036)

Me'ymtiTanumakalu o-tylymũ tia'yn,short.whilePOSPPropN3-spit.ivEVID PART,pujpuwupek'ywo.

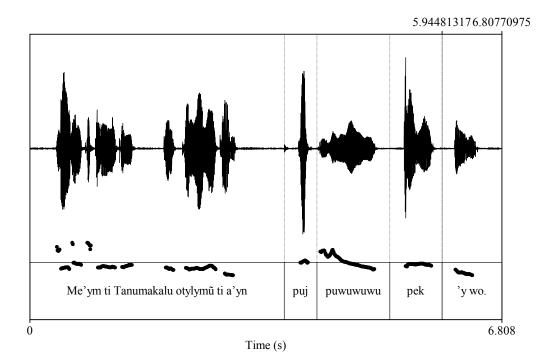
IDEO.spit IDEO.fall IDEO.hit.water-surface water POSP

'Shortly afterwards Tanumakalu spat. She spat puj puwu pek into the water.'

Each ideophone depicts a phase of the event – puj, saliva coming out of the mouth, puwu, falling and pek, hitting a surface.<sup>422</sup> Together they could be interpreted as having the function of a manner adverb to the finite verb. The speech wave form, however, indicates that the sequence of ideophones and the following locative adjunct '*y* wo ('into the water') are separated from the preceding clause by a speech pause which divides the utterance into two prosodic units. Syntactically, this division into two units is reflected by a clause boundary, indicated by the clause-final particle *a*'yn.

<sup>&</sup>lt;sup>422</sup> Cf. section 4.5 for a semantic analysis of this utterance.

Figure (2): Waveform and pitch of example (32)



A second example where prosodic features divide the utterance into two units is given in (38)(a) below. The prosodic features of the ideophone *pywpywpyw* ('unwind') differ considerably from the following part by showing little variation in the wave form, which – in addition – is rhythmically structured, and by having a hardly visible pitch contour.

# 4.2.4.3 Rhythm and Speed

Variation in rhythm is a productive means to imitate different kinds of locomotion. This will be exemplified here by two utterances, in which the ideophone *popopo* ('to move one's wings') depicts the typical flight pattern of different birds.

In (33) the characteristic flying of a woodpecker is illustrated by uttering the ideophone in a specific rhythm:

# (33)(tal\_kakaja, 0456.181)

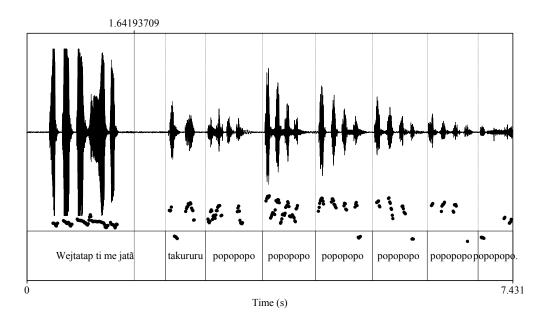
 Wej-t atap
 ti
 me,
 jatã takururu
 popopopo [...] popopopo popopopo.

 3 EPEN-cross.vt
 EVID PART DEM cry.of.woodpecker
 IDEO.fly

 (1)
 5
 10
 10
 10

'It crossed (the field) this (one which makes) takururu, (flying) popopopo popopopo.'

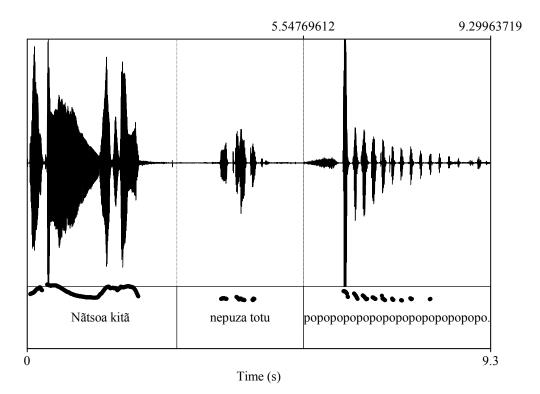
Figure (3): Waveform and pitch of example (33)



This example can be contrasted with (34), where the ideophone depicts the flying of pigeons:

'In that direction it was that the birds flew.'

Figure (4): Waveform and pitch of example (34)



When comparing the Figures for (33) and (34), one can see that the ideophones in both cases are uttered with little variation in pitch but that they differ considerably from each other in their respective shape of waveform. While for the ideophone in utterance (34) the waveform shows a uniform rhythm uttered in a decrescendo, possibly having the function of indicating increasing distance, in (33) the ideophone is rhythmically structured into six separate units of four syllables, which – from the second to the sixth – also gradually decrease in loudness. In addition, within each instance of *popopopo* a second decrescendo is formed.

Most woodpeckers, and also the subspecies of Colaptes (campestris) which is referred to in the narrative from which utterance (33) is taken, have a specific 'undulating' flight pattern (German: *Bogenflug*) characterized by a series of fast wing beats followed by a bound.<sup>423</sup> This is neatly depicted by the rhythm of the ideophone, indicating several beats of the wings and a pause, when the wings are bound to the body, until the bird loses height

<sup>&</sup>lt;sup>423</sup> See http://www.wissenschaft-online.de/abo/lexikon/biok/12592 for "Bogenflug" and http://de.wikipedia.org/wiki/Goldspechte for "colaptes" (last checked on the 3<sup>rd</sup> of January 2011).

and starts to beat its wings again. Pidgins, on the other hand, referred to by *nepuza* ('(pet) bird') in utterance (34), fly by continually beating their wings, a pattern equally depicted by the respective ideophone with its regular shape.

Speed of utterance can make a semantic difference in sound imitating ideophones, such as *huhuhuhuhu* ("humming of bees"), uttered at high speed, which is contrasting with *hu hu hu hu hu hu hu (*"to scare away people or animals").<sup>424</sup>

### 4.2.4.4 Pitch

The observation that ideophones and prosodic peak, if existent in an utterance, coincide was first observed by Kita (1997).<sup>425</sup> Variation in pitch at the performance of the ideophone can also make a semantic contribution to the utterance. Two examples are given in (35) and (36), where the marked pitch contour accompanies the expressive lengthening of a vowel in the ideophone. In (35) a regular but not standardized ideophone *puuu* ('fly and fall'), uttered with a falling pitch contour, depicts the flying of an arrow and its gradual lowering. The landing of the arrow coincides with a punctual event depicted by a second ideophone *tyk* ('to catch sight of sth.').

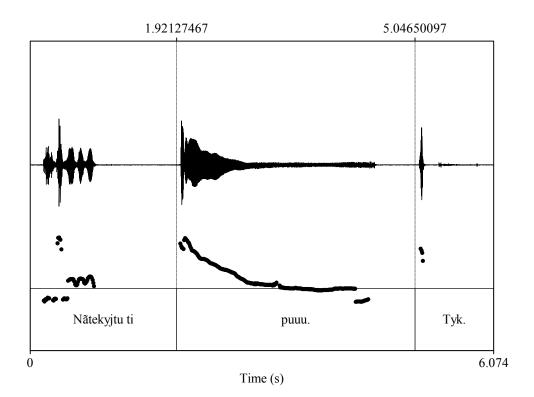
(35) (tal\_kujakyt, 0733.671)
Nã=tekyj-tu ti puuuu<sup>426</sup>. Tyk.
3= draw.bow.vi-NOM EVID IDEO.fly.fall IDEO.catch.sight
'He drew his bow, and puuuu (the arrow flew and fell). Tyk (he saw where it fell).'

<sup>&</sup>lt;sup>424</sup> Cf. Appendix II.

<sup>&</sup>lt;sup>425</sup> Cf. section 2.5.

<sup>&</sup>lt;sup>426</sup> This ideophone seems to be the result of a fusion of *powowo* (or *puwuwu*) ('to fly') and *tuu* ('to fall').

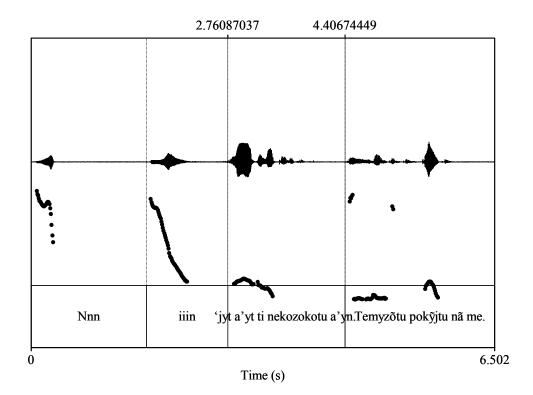
Figure (5): Waveform and pitch of example (35)



In example (36) the falling pitch contour of the ideophone *nnn iiin* ('grow thin') also adds an aspect to its meaning, indicating that the individual affected by this event loses weight in a very rapid manner:

(36) (kal\_sham\_myth1, 0906.412) *Nnn iiin, 'jyt a'yt ti n=ekozoko-tu a'yn.*IDEO.grow.thin small EMOT EVID 3=become.vi-NOM PART *Temyzõ -tu po- kỹj -tu nã me.*be.jealous.vi-NOM SUBJ-kill.vi-NOM 3PRO PART
'The poor guy grew very thin. Jealousy killed him.'
(lit: '(Growing thin rapidly), the poor one became small.')

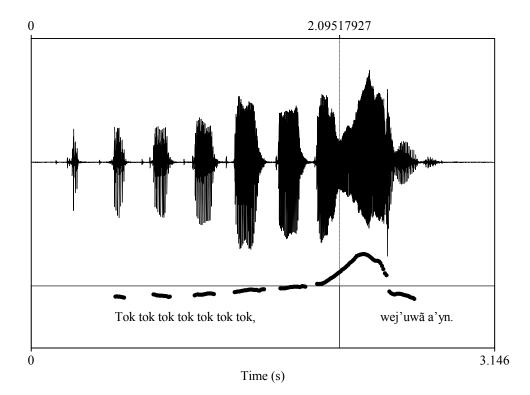
#### Figure (6): Waveform and pitch of example (36)



#### 4.2.4.5 Loudness

There are many examples in the corpus, where ideophones are uttered with a crescendo or a decrescendo, i.e. they either increase or decrease in loudness. A crescendo usually indicates a climax in the narrative, while a decrescendo can mark increasing distance, as in (33) and (34) above. It can further mark the long duration of a process as well as the "endless" repetition of an action or a repetitive activity which finally reaches an end. Nuckolls (1995: 156) describes the same technique of increasing or decreasing in loudness during the utterance of a repeated ideophone in Pastaza Quechua as a simulation of "one's awareness of the way an action unfolds through space and time". An example for a crescendo is given in (37) with anthropomorphized jaguars as main protagonists. In the utterance the killing of people, expressed by repeated ideophones, culminates in the eating of all victims without exception. This latter event is expressed verbally: (37) (kal\_kamukuaka6, 1159.536) *Tok tok tok tok tok tok, wej-'uwã a'yn.*IDEO-beat.with.club 3- eat.completely.vt PART
'They killed them (with clubs) and ate them all.'

Figure (7): Waveform and pitch of example (37)

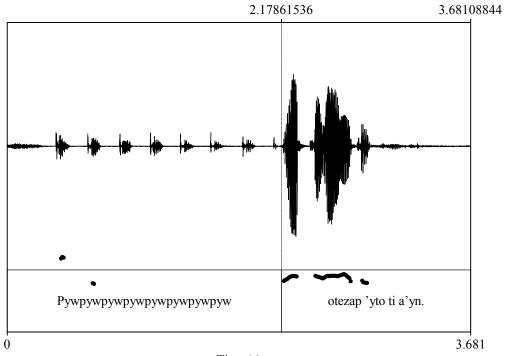


Example (38)(b), the second in a sequence of two clauses from a narrative, illustrates how a decrescendo in *pywpywpyw* ('wind') makes an additional semantic contribution to an utterance, when compared to the same ideophone in (38)(a) where it is uttered without this variation in loudness.

(38) a. (kal\_kamukuaka5, 0514.82) *Pywpywpywpywpyw, o-te- zap 'yto ti a'yn,*IDEO.wind 3-REFL-untie.vt then EVID PART,
'Then he unwound it (the leg ornament), he untied himself.'

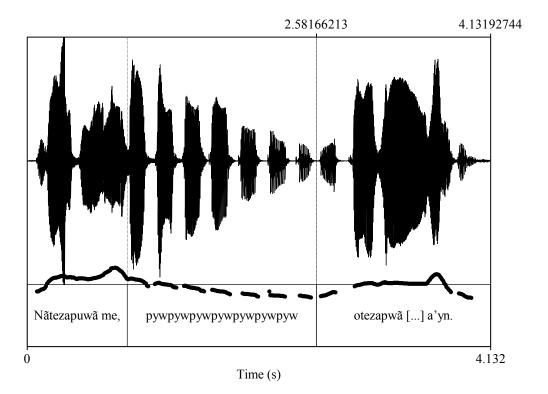
b. (kal\_kamukuaka5, 0518.528)
Nã=te- zap -u =wã me, pywpywpywpywpywpywpywpyw, o-te-zap=wã a'yn,
3= REFL-untie-NOM=COMPLPART IDEO.wind 3-REFL-untie=all PART,
'He untied himself thoroughly, (unwound it completely), untied himself thoroughly.'

Figure (8): Waveform and pitch of example (38)(a)



Time (s)

# Figure (9): Waveform and pitch of example (38)(b)



When comparing the waveforms of the ideophones in figures (8) and (9), the decrease in the amplitude of air-pressure in (9) is clearly visible. Both ideophones, a multiple reduplication of the simple form pyw ('to turn'), depict – in this specific context – the unwinding of a cotton thread tied around a person's lower leg as an ornament. The same ideophone may also depict the reverse activity as well as several other events performed with a comparable movement.<sup>427</sup> In utterance (38)(a) the clause following the ideophone contains the finite verb *otezap* ('he untied himself'), referring to an activity which eventually will be terminated. In Sasse's (1991) terminology the lexical aspect of the verb thus encodes a gradually terminative state-of-affairs (GTER).<sup>428</sup> The two verb forms in utterance (38)(b), by contrast, both contain the enclitic particle  $w\tilde{a}$ , indicating completive aspect, by which the state-of-affairs encoded by the verb is changed from gradually terminative to totally terminative, i.e. the situation change (the end of the process of unwinding) is focussed on and not, as in (38)(a), the situation eventually leading to the

<sup>&</sup>lt;sup>427</sup> Cf. section 4.5.3.2.

<sup>&</sup>lt;sup>428</sup> Cf. section 3.3.4.2.1.

situation change. This change in the state-of-affairs is also expressed in the performance of the ideophone which is inserted between the two finite clauses. Since ideophones are morphologically invariable, gradually lowering the voice during their performance is a means of depicting that an activity comes to an end. At the same time the pitch curve shows little variation during the utterance of both ideophones, a means to indicate that the activity depicted is processual and repetitive.

#### 4.2.5 Summary

As could be shown in this subsection, neither the phoneme inventory nor the syllable structure of Awetí ideophones is particularly irregular in comparison to the rest of the lexicon, whereby this applies to a slightly lesser degree to the onomatopoeic ideophones of group II. Unlike other words, all ideophones may be pronounced with phonetic variation (e.g. fortis versus lenis plosives), and several phonologically variant forms depicting identical activities are also existent in the language. With regard to prosodic features ideophones are clearly marked. They form separate prosodic units from the rest of the utterance, and variation in pitch, loudness and speed or a specific rhythm have a direct affect on their meaning.

# 4.3 Morphological aspects

Ideophones in Awetí are uninflected and, with the exception of a small subgroup, do not combine with any verbal affix or nominal clitic. But they may exhibit full or partial reduplication and serve as a base for verb formation or be derived from verb roots. In discourse ideophones can appear as single or repeated words.

#### 4.3.1 Suffixes indicating forcefulness or suddenness

As already briefly mentioned in section 4.2.3, there are two suffixes, -y and -yhy, which exclusively combine with a small subgroup of the more conventionalized ideophones of group I uttered only once and depicting – in the terminology of Sasse (1991) – totally terminative states-of-affairs (TTER). While the suffix -y can be attached to mono- as well as disyllabic ideophones, suffixation of -yhy is only possible with monosyllabic forms, as

shown in table 4.1. From this it can be concluded that an ideophone in Awetí may not consist of more than three syllables, unless there is reduplication involved.

Ideophone	Meaning	- <i>y</i>	-yhy
kyryk	'fit sth. in'; 'tie sth. around sth.'	Х	
lok	'pull out'	X	Х
pok	'put/ sit down'; 'give'	X	Х
*pyk <sup>429</sup>	'take up'; 'grab'	X	X
tak	'cut'; 'break'	X	X
tok	'knock down (with club)'; 'cut wood'	X	Х
torok	'break sth. wooden'	X	
tuk	'kick'; 'step'; 'start running'	X	Х
tyk	'catch sight; 'arrive'; 'meet'	X	Х
tsak	'cut through'; 'pierce'; 'hit with arrow'	X	Х
tsok	'pull out'; 'hit with arrow'	X	Х
tsuk <sub>1</sub>	'enter the ground'	X	
tsuk <sub>2</sub>	'light fire'		Х
tsuruk	'split'; 'pin onto sth.'	X	
tsyk	'put into ground'	Х	

Table 4.1: Ideophones combining with the suffixes -y and -yhy according to corpus data

Like most suffixes in Awetí, -y and -yhy do not change the stress pattern of the word which remains on the only or the final syllable of the ideophone. This is illustrated in (1)(a) to (c):

(1) a. (kal\_sham1, 1488.059) /lokihi/ ['lɔ.ki.hi]

'pulling out with force'

<sup>&</sup>lt;sup>429</sup> There is no base form *pyk* for *pyky* and *pykyhy* but the very frequent form *pyw*. No explanation can be given for the change from /w/ to /k/ in the coda of the base form. One possibility is to assume that the simple suffix is *-ky* instead of *-y*. In the other ideophones in table 4.1, then, the geminate consonants would be simplified.

b. (kal_angut1, 1162.419)	
/tsakihi/ [ˈtsa.ki.hi]	'piercing with force'
c. (kal_makawaja, 0908.907)	
/torok <sub>ł</sub> / [tɔ'rɔk <sub>ł</sub> ]	'breaking through'

The semantic contribution of the suffixes is an intensification of the punctual event depicted by the ideophone. This may convey an impression of forcefulness, as in (2)(a) and (b):

(2)a. (tal mamuti 3 8, 0993.535)

**Tsak** -yhy, wej-tap ti kitã kaj= tak Uperiru a'yn. IDEO.cut.through-INTENS 3- cut.vt EVID TOP 1pl.incl=grandmother PropN PART 'Tsakyhy, our grandmother Uperiru cut her (throat).'

b. (tal\_mamuti\_4\_8, 0693.125)

*Nã=por- apy -zoko-tu* a'yt ikaza, jatã kasolina wo me ika ki'a. 3= ANTI-burn.vt-IMPF-NOM EMOT EPIST, DEM petrol with PART EPIST EVID Nanywo ti kitã me, **tsuk** -vhvwej-t- apv ti tsãn a'yn. EVID TOP PART IDEO.light.fire-INTENS 3-EPEN-burn.vt EVID 3pl.PRO PART there 'I'm not sure but I think that they set her on fire with petrol. There it was tsukyly (with high flames), they burned her.'

A certain 'suddenness' or 'abruptness' characterizing the performance of the action can also be expressed by the suffixes. In addition, there is some evidence in the data that the two morphemes may differ in their degree of intensification, when used with the same ideophone. In that case the more extended form seems to express a stronger impact, as illustrated for the single utterance of *tyk* in (3)(a) and (b):

(3) a. (tal\_mamuti\_1\_8, 1231.654)

b. (tal\_mamuti\_1\_8, 1512.808) *Tsirik tsirik tsirik, tyk-yhy tapaj 'yp.*IDEO.walk.in.forest IDEO.come.across-INTENS buriti.tree
'They walked in the forest and suddenly came across a buriti tree.'

In both examples the ideophone tyky(hy) depicts the end of a movement expressed by repeated ideophones. But while in (3)(a) tyky has been translated as 'arriving', indicating that people are walking on a path and know that it ends at a river, in (3)(b) the more extended form tykyhy seems to suggest that coming across a buriti tree in the middle of the forest is an unexpected event. This tree thereafter plays a major role in the development of the narrative plot. One may suspect that in these two examples the difference in meaning between the repeated tyk tyk tyk ('walk') and a single tyk ('arrive', 'stop walking', 'meet') is conveyed by the suffixes, but counterevidence is given by the simple ideophone tyk in (3)(c):

(3) c. (kal\_ta\_wat, 0434.794)
Nã=to -zoko-tu me, tyk tatyta ete ti [a'yn].
3= go.vi-IMPF-NOM PART, IDEO.come.across river.snail POSP EVID
'He went on. Tyk, (he came across) the river snail.'
(lit.: 'He went on. Tyk. It was at/ against the river snail.')

The intensifying suffixes usually occur on the only ideophone in an utterance, as in (2), or on a last ideophone in a sequence attributed to one agent, as in (3). This is further illustrated in (4), where the ideophones *kyryryryry*, *pyw* and *pokyhy* belong to the protagonist of the narrative Kamukuaka, while *kyryryryryr* and *kon* are ideophones depicting activities of another agent, a monster-snake:

(4) (tal\_kamu\_kwat1, 0628.839)

Kyryryryr kaminu'at pyw,aka aka aka,pok-yhymõjIDEO.dragboyIDEO.grabIDEO.cry.with.fearIDEO.put.down-INTENSsnakewatukyty,kyryryryryr, kon.

big for IDEO.ingest IDEO.swallow

'(Kamukuaka) dragged along a boy (who was) crying. (He) put (him) down for the big snake (to fetch him). (The snake) ingested and swallowed (him).'

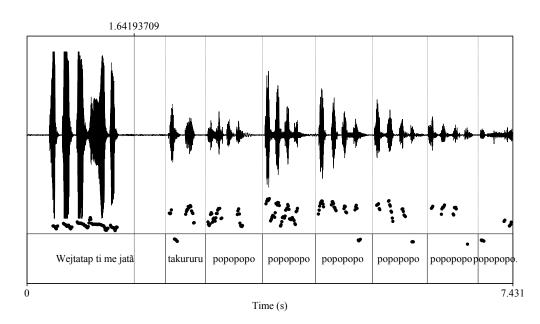
When asking two young Awetí speakers whether the usage of the ideophones with or without the two suffixes makes a difference in meaning, they claimed that the preference of one variant over the other is merely a matter of individual taste and that they are identical in meaning.<sup>430</sup> Further evidence, however, for the assumption of an additional meaning component of intensification is given in section 4.6.2, where gestures co-occurring with such ideophones are taken into account.

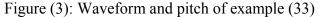
# 4.3.2 Repetition and reduplication

Ideophones may be uttered once or repeatedly and also be reduplicated. A distinction between repetition and reduplication is drawn on phonological and prosodic grounds. Both processes are semantically motivated in depicting the temporal contour of the activity the ideophone refers to. Repetition, in addition, may depict the number of involved participants. The expression of aspect of the depicted event by both processes can be illustrated by the sound chart in figure (3) below for example (33) in section 4.2, repeated here for convenience, where both processes occur. One criterion for reduplication in contrast to repetition is the absence of a pause between two base forms which thus form one phonological word.<sup>431</sup> As can be seen by the waveform, the ideophone depicting the flying of a woodpecker is divided into six phonological units /popopop/ which are separated from each other by pauses.

<sup>&</sup>lt;sup>430</sup> Although throughout the analysis I have relied on the judgments of my consultants, in this specific case there is a high probability that the two Awetí speakers may not be able to verbalize a difference between the items due to the fact that their meta-linguistic awareness is not trained. In addition, both are not trained as story-tellers and for this reason may not be aware of this specific technique to create varying degrees of suspense in a story. <sup>431</sup> Cf. Kita (1993: 19) and Kita (1997: 400).

In addition, in a reduplicated ideophone only one syllable carries the accent, whereas in repeated ideophones each word has an accent. This is also true for the individual *popopopo* units where in each case the first syllable receives the primary accent. As was described in section 4.2, the flying of a woodpecker is characterized by an undulating movement of flapping wings alternating with a motionless gliding through the air. These alternating sequences are depicted by the repetition of the ideophone followed by a pause, while flying in general involves repeated movements of the wings as depicted by the reduplication in *popopopo*.





The difference can further be illustrated by the ideophones *tuk* and *pururu* in examples (5)(a) to (c). These ideophones differ from each other in that the monosyllabic *tuk*, depicting a step, refers to a punctual distinct movement, whereas *pururu* ('running', 'throwing several objects') depicts events where individual movements are somewhat less discernible. Thus, a movement consisting of several steps performed at a slower pace is expressed by repetition, as in (5)(b), and a continuous running by the multiple reduplication of the syllable /ru/ in (5)(a):

(5) a. (tal\_mamuti\_1\_8, 0187.82)

Tuk, [e]o-tantikitã kaj=amũjMawutini, purururururu.IDEO.step3-run.viEVID TOP 1pl.incl=grandfatherPropN,IDEO.run'Tuk, our grandfatherMawutini (started and) ran, pururururu.'

b. (kal\_makawaja, 0579.203)
Nanype tepe 'yto ti me, tuk tuk tuk tuk.
3=POSP FRUST then EVID PART IDEO.step
'There (they say that) he tried it then, (he stepped on it) tuk tuk tuk tuk.'

c. (kal\_kamukuaka6, 1379.896) *O-tan a'yt ti ta'wat a'yn. Pururu pururu,*3-run.vi EMOT EVID jaguar PART. IDEO.run.through.forest IDEO IDEO *o-tematem=wã ti a'yn.*3-flee.vi =COMPL EVID PART
'The jaguars ran. Pururu pururu pururu, they all fled.'

A combination of both processes, as given in (5)(c), depicts an event characterized by not clearly discernible movements which occur several times, because they are performed by more than one participant. In the case of non-anthropomorphized non-human participants repetition is a productive means to indicate plurality, since this cannot be done by grammatical means.<sup>432</sup> A similar observation was made by Beck (2008: 13, (16)) for ideophones in Upper Necaxa Totonac, where plurality of non-individuated inanimate participants was expressed by reduplication.

### 4.3.2.1 Repetition

Some ideophones occur repeatedly, indicating that an event happens more than once, either simultaneously involving different agentive participants, as in (5)(b) where several jaguars running at the same time are depicted by the repeated ideophone *pururu* ('running'), or subsequently and performed by one participant, as shown in (6):

<sup>&</sup>lt;sup>432</sup> Cf. section 3.3.1.2.

(6) (tal\_mamuti\_4\_8, 0144.387)

Wej- 'atyzung ti 'yp - 'jyt ete, tsuruk tsuruk tsuruk.
3- pin.vt EVID wood-DIM on, IDEO.pin IDEO IDEO
'He pinned them (the fish) on a stick, tsuruk tsuruk tsuruk.'

As already illustrated in figure (3) and example (5)(b), ideophones, referring to a type of locomotion where individual movements are clearly distinguishable, must be repeated to depict motion as a processual (ACTI) state-of-affairs in the terminology used by Sasse (1990).<sup>433</sup> This is demonstrated by (5)(b), with a repeated ideophone referring to repeated stepping, in comparison to (5)(a), where a single utterance of *tuk* depicts the beginning of a (rapid) movement, thus conceptualizing a situation change and the following situation, which characterizes an inchoative state-of-affairs. Another pair of examples, where a single ideophone should be treated as depicting a different state-of-affairs and in fact a different event as the one referred to by its repeated form, is given in (7). Here an utterance containing a repetition of *tyk* for a continuous movement is contrasted with another utterance, where an identical ideophone occurs only once and signals the end of a movement. The repeated ideophones in (7)(a) encode a processual state-of-affairs as opposed to a terminative *tyk* in (7)(b), where the preceding continuous movement, i.e. a processual state-of-affairs, is depicted by the repeated usage of *kyryk*:

(7)a. (tal\_mamuti\_3\_8, 0041.46)  $W = ok \quad kyty \quad ti \quad n\tilde{a} = to \quad -tu \quad me, \quad tyk \quad tyk$ 

b. (tal\_mamuti\_2\_8, 1212.749) *W-ekyp* ti a'yn, kyryk kyryk kyryk tyk.
3- climb.down.vi EVID PART IDEO.climb IDEO.step
'She climbed down, kyryk kyryk kyryk kyryk, (arrived on the ground) tyk.'

<sup>&</sup>lt;sup>433</sup> Cf. section 3.3.4.2.1.

A similar situation, a processual state-of-affairs followed by a punctual event, which was translated by Jakumin Awetí, is presented in (7)(c):

(7) c. (tal\_kamu\_kwat, 0815.988)

**Tarak tarak tarak tarak tak**, o-te-'aka ti  $n=\tilde{a}j$  a'yn.

IDEO.pick IDEO.break.off 3- REFL-break.vt EVID 3= tooth PART

'Tarak tarak (the bird picked at the solid material with its beak), tak (it broke its beak). Its beak broke itself.'

Jakumin's oral translation into Portuguese confirms the aspectual distinctions<sup>434</sup>: "Ele continua roendo, destruindo a pedra, tarak tarak tarak tarak tarak, e – de novo – quebra o dente dele" ("It continues gnawing, destroying the stone, tarak tarak tarak tarak, and – again – breaks its beak") [my translation] (transl\_tal\_kamu\_kwat1). While he translates the first repeated ideophone as indicating an ongoing process, the meaning of the second ideophone is included in the translation of the following clause.

Other activities, which – like slower manners of locomotion – are characterized by the repetition of a discernible movement, are also depicted by repeated ideophones. These – as in (8) – are not always separated by a pause, but each of the individual repetitions carries an accent:

(8) (kal kamukuaka4, 0800.517)

 $N\tilde{a}=po-zap -(p)u$  ti nã. **Pyw pyw pyw pyw** o= pytati(k) atsam. 3= ANTI-unwind.vt-NOM EVID 3PRO IDEO.turn IDEO.turn IDEO IDEO 3coref=ankle ornament 'She unwound it. Pywpywpywpyw her ornament of the ankle.'

Repetition also occurs in other word classes. If a verb form is repeated, as in (9), this can only indicate that the event referred to occurs several times in a temporal sequence:

<sup>&</sup>lt;sup>434</sup> The translation contains contextual information not given in the utterance.

(9) (kal kwaza, 2173.242)

*O* '*ajpogoko ouzokwaw Tiuja, na*'yza. o- 'ajpok -oko o= ut -oko -aw Tiuja, n=a'yt -za 3- return.vi -IMPF 3coref=come.vi-IMPF-GER PropN 3=child -PL

Tsāka'atu, tsāka'atu, tsāka'atu, tsāka'atu.

tsã=ka'at -tu, tsã=ka'at -tu, tsã=ka'at -tu, tsã=ka'at -tu. 3pl=sleep.in.forest.vi -NOM 3pl=sleep.vi-NOM 3pl=sleep.vi-NOM

'They were returning, coming (back), the Suya, their children. They slept in the forest for several nights.'

For verbs, unlike ideophones, there are various grammatical means to indicate that the activity referred to is simultaneously performed by several individuals. In (8) this is done by the plural marking on the action nominal. Other means are reduplication of the verb stem or the insertion of a marker of reciprocity.

# 4.3.2.2 Full and partial reduplication

Reduplication occurs in ideophones depicting processual activities which cannot be divided into further units and which are characterized by not clearly discernible movements. These include specific kinds of locomotion such as running or flying, the entering of a house or a tunnel by a large quantity of people or the throwing of various objects.

Syllable structure of ideophone	Reduplicative pattern
C <sub>1</sub> V <sub>1</sub>	$C_1V_1[C_1V_1](t)$
$C_1V_1C_2$	-
$C_1V_1.C_2V_2C_3$	-
$C_1V_1$ .r $V_1C_3$	$C_1V_1$ . f $V_1$ . [f $V_1$ ] $C_3$
	$C_1V_1$ . f $V_1$ . f $V_1$ . [f $V_1$ ]
$C_1V_1$ .f $V_1$ .f $V_1$	-

Table 4.2: Patterns of reduplication of ideophones

Reduplication in ideophones is either full or partial of the final CV of the root, followed or not by a final C which is not reduplicated. The reduplicated segments, indicated in table 4.2 by square brackets, can be repeated from once to multiple times. Illustrations of the individual reduplicative patterns are given in the following examples.

Full reduplication, according to the criteria established here, only occurs in monosyllabic ideophones of the CV structure. These forms always contain multiple reduplicants, as in (10)(a) and (b), and can be concluded by /t/:<sup>435</sup>

(10)a. (kal\_mene, 1319.381), (tal\_mamuti\_4\_8, 0710.449)

piwiwiwiwiwiwi

tututututututut	<i>utut</i> ['tu.tu.tu.tu.tu.tu.tu	.tut] 1) 'person or animal running'
		2)'fire burning'
b. (kal_kamu	kuaka6, 0940.691), (kal_a	wytyza1, 1503.963)
роророро	['pɔ.pɔ.pɔ.pɔ]	1) 'bird flying up'
		2) 'person stumbling'

In this type of reduplicated ideophone, as shown in (11), the intervocalic consonants can be lenited from /t/ to /f/ or /p/ to /w/:

(11)a.(tal_mamuti_1_8, 0312.125), (Waranaku Awetí, 10/07)		
tururururururu	['tu.ru.ru.ru.ru.ru.ru]	1) 'person running through the forest'
		2) 'fire burning'
b. (tal_tawozy3, 0	981.31)	
рожожожою	['pɔ.wɔ.wɔ.wɔ.wɔ]	'bird flying smoothly'
c. (tal_mamuti_3_8, 1670.789)		

['pi.wi.wi.wi.wi.wi.wi]

'smoke rising into the air'

 $<sup>^{435}</sup>$  It is possible that this /t/ which does not occur in the root is identical with the optional suffix *-t*, used to mark enumeration of participants or recurrent events. This suffix is mostly attached to a clause-final particle *me*, but also to nouns or nominalized verbs. In this usage on multiply reduplicated ideophones it may have a similar function of marking recurrent movements.

Whether the base form for the reduplicated ideophones of this type is the monosyllabic CV ideophone which is characterized by an extra-long final vowel is questionable, since the vowels in the reduplicated ideophones are typically short and the meanings of the 'base' and the extended form are only distantly related. In the case of the CV form *tsu* ('pouring water'), moreover, the reduplicated form is not *tsutsutsutsutsut* but *tsururururu* ('urinating').<sup>436</sup>

According to Awetí consultants, the usage of variant (10)(a) or (11)(a) with the second meaning is a matter of individual preferences of the speaker, whereas (10)(a) in its first meaning is not equivalent to (11)(a). Here the change from intervocalic /t/ to /r/ is semantically motivated and expresses a difference in the medium the activity is performed in, i.e. while (10)(a) refers to running in general which normally occurs on a path, (11)(a) encodes that the running takes place on the dry leaves of the forest. Such an observation of similar meanings expressed by ideophones differing in one phoneme has been termed "absence of lexical discreteness" (Diffloth 1976) in the literature.<sup>437</sup>

In ideophones of a  $C_1V_1C_2V_2C_3$  structure reduplication only occurs if the vowels are identical and if the  $C_2$  consonant is /r/. These forms usually have one reduplicant as in (12)(a) to (c):

(12)a. (kal_awakap1,	0426.528), (kal_a	angut1, 0829.265)
kyryryk kyryryk	[k1.r1.'r1k]	1) 'climbing up/ down a tree'
		2)'object slipping down'
b. (kal_makawaja	, 0891.693)	
piririk	[piri'rik]	'grabbing something while moving'
c. (ary_fem_recl,	0087.908)	
tsururum tsururur	n [tsu.ru.'rum]	'cooling down hot liquid with a ladle'

A partial reduplication as in (12) does not necessarily imply that a corresponding nonreduplicated form exists in current language use. With regard to the examples, there is,

<sup>&</sup>lt;sup>436</sup> Cf. section 4.2.3 examples (18) and (19).

<sup>&</sup>lt;sup>437</sup> See section 1.3.2 example (12) for this phenomenon in the North American language Mohawk, as given by Mithun (1982).

according to Awetí consultants, no form /pirik/ or / tsurum/, but there is a form / kirik/ which indicates a somewhat slower movement than / kiririk/, as shown in (7)(b). A form *pururuk* with the meaning 'perforate', on the other hand, seems to signal that an activity *puruk* occurs exactly twice. In the utterances in (13) from a narrative the trickster hero is caught by the enemies who pierce both his ankles, depicted by a repeated utterance of *puruk*, in order to carry him to the village, hanging from a piece of wood. When the narrator depicts the same activity performed on the hero's three younger brothers, he uses the reduplicated form *pururuk*:

(13) a. (kal\_awakap1, 0819.815)

*Puruk,* wej-mopuge ti tsãn a'yn, puruk. [...] IDEO.perforate, 3- pierce.vt EVID 3pIPRO PART, IDEO 'Puruk, they pierced him (his ankles), puruk.'

b. (kal\_awakap1, 0831.091)

Nã=tsu wezanu n=ywy-za, pururuk kujtã, pururuk kujtã, pururuk.
3= like again 3=younger.brother-PL, IDEO.perforate DEM, IDEO DEM, IDEO '(They did) like that also (with) his brothers, pururuk (on) that one, pururuk (on) that one, pururuk.'

A different reduplicative process seems to occur with the same base form, the result of which could also be the possible outcome of a further reduplication of the already reduplicated (base) form  $C_1V_1$  f  $V_1$  f  $V_1$ . In this case the last CV segment is reduplicated more than once and the final plosive is deleted. A minimal pair from the corpus with the frequent ideophone *kuzuk* is given in (14): <sup>438</sup>

<sup>&</sup>lt;sup>438</sup> As outlined in section 3.2.1 the development from /r/ to /z/ in some environments seems to be a recent development. The probably older ideophone *kuruk* also occurs once in the Awetí corpus with a more specialized meaning of narrowing down (teeth) until crushing the inserted object (cf. kal\_kamukuaka4, 1044.571).

(14) a. (kal\_kamukuaka4, 1572.178)

*Kuzuk*, w-etse ti o=tw -aw a'yn. IDEO.get.inside 3- get.inside EVID 3= go.vi-NOM PART 'Kuzuk, he got inside.'

b. (kal\_awakap2, 1572.178)

Newizako n=etse -tu. O= kang ti kurururururururu.
afterwards 3= get.inside.vi-NOM 3coref=leg EVID IDEO.get.inside
W-etse ti o= up -ej -aw a'yn, 'ywykwat ywo.
3- get.inside.vi EVID 3coref=be.vi-IMPF-GER PART, hole POSP
'Afterwards he got inside. He entered (with) his leg. He was getting inside the hole.'

In this case the reduplication creates a semantic effect of spatial or temporal extension which is not interrupted by a final plosive, usually signalling a boundary. In the example the reduplicated ideophone indicates that the process of the protagonist lowering his leg into a hole is ongoing and at the same time conveys the spatial impression that the hole must be quite deep.

For what has been listed in table 4.2 as a last "base form"  $C_1V_1$  .r  $V_1$  .r  $V_1$ , no further reduplication is assumed. The structure is itself a reduplication, but it has been added to the inventory of base forms<sup>439</sup> since it regularly occurs in Awetí discourse and since in at least two attested cases it has formal counterparts in verb roots.<sup>440</sup> As was outlined in section 1.3.3, it also seems to be a typical structure of 'noise words', verb roots which seem to be based on ideophones, in the closely related language Guaraní. In addition, for many of these forms non-reduplicated disyllabic base forms do not exist or are extremely rare.

There are further systematic pairs of ideophones with clearly related meanings which cannot be described in terms of reduplication and which are exemplified by (15), where *puk* and *puruk* depict two different manners of dancing:<sup>441</sup>

<sup>&</sup>lt;sup>439</sup> Cf. section 4.2.3 example (22).

<sup>&</sup>lt;sup>440</sup> Cf. table 4.4 in section 4.3.5.

<sup>&</sup>lt;sup>441</sup> See also section 4.5.1.

(15) a. (kal\_kwaza, 0842.763)

Puk puk puk puk puk, watu titsã=n-azung -oko -tua'yn,IDEO.dancemuch EVID 3pl= EPEN-dance.vi-IMPF-NOM PARTpepi 'ingkap ywo a'yn, Tsukahamãj.village.centre inPART, PropN

'Puk puk puk puk puk puk, they used to dance a lot in the village centre, the Tsukahamãj.'

b. (kal mene, 1108.531)

Puruk puruk puruk,  $ts\tilde{a}=tepy -ju -tu$ .IDEO.dance3pl= sing.vi-IMPF-NOM'Puruk puruk puruk (they were dancing), they were singing.'

The correspondence suggests that the disyllabic  $C_1V_1$ .r  $V_1C_3$  ideophone, listed as a basic structure in table 4.2, has itself formed from the monosyllabic  $C_1VC_2$  ideophone by insertion of /r/ and copying of the syllable nucleus. A counterargument is given by the fact that the correspondence is restricted to ideophones which have a velar plosive /k/ in the coda of the last syllable and – due to the fact that there are no monosyllabic ideophones with two identical consonants – cannot have a /k/ in the onset of their first or only syllable. Thus a form like e.g. *kyryk* ('fit in', 'tie') could not be captured by this analysis.

As an illustration of how ideophones combine reduplication and repetition in various ways to depict a variety of activities, a kind of paradigm, formed by the variants of an ideophone generally depicting events involving friction, is presented in table 4.3.

Neither a base form *ky* nor *kyry* could be attested in the corpus or by elicitation. Since neither the ideophones nor their meanings listed in table 4.3 can be clearly related to each other by taking into account the morphological processes which have led to their respective shapes, it seems to be more adequate to describe variation in ideophones in terms of their phonosemantic compositionality, as will be shown in section 4.5.1.

Form	Meaning <sup>442</sup>	Morpological process	Problem
kyryk	'fit in'; 'tie around'	base form	-
kyryryk	'put on clothes'; 'rub and	partial reduplication	-
	get stuck'		
kyry kyry	'scratch'	repetition	no base form kyry
kyryk kyryk	'climb'	repetition	-
kyryry kyryry	'drag'; 'rub along a	repetition, partial	no base form kyry
	surface'; 'climb up tree'	reduplication	
kykyky	'lie down in a hammock'	full reduplication	no base form <i>ky</i>
kyryryryry	'drag'; 'pull'	partial reduplication	no base form <i>kyry</i>
kyryryk kyryryk	'slip down'	partial reduplication,	-
		repetition	
kyrykytyk	'move and get stuck'	fusion	-

Table 4.3: 'Paradigm' of an ideophone depicting friction

# 4.3.4 Fusion

A phonological fusion of two ideophones and a subsequent loss of the morphological boundary between them can occasionally be observed or – owing to the lack of a diachronic dimension – rather be deduced from the synchronic existence of the two items used individually in other contexts. An example is the ideophone kyrykytyk which is used several times in the corpus to depict activities where something enters a narrow slot or a hole or rubs along a surface and subsequently gets stuck. In (16)(a) a person wants to climb through a hole in the roof and gets stuck with his shoulders, while in (16)(b) a group of young women roll up their hair and fasten it on a feather headdress in order to be taken for men (with short hair):

(16) a. (kal\_kamukuaka5, 0000.0)

*Kyrykytyk*, *jatã watu*,  $n\tilde{a}$ =*pepokang watu*. *O*-*te'emp* -*eju ti a'yn*. IDEO.get.stuck, DEM big, 3= shoulder big, 3-get.stuck.vi-IMPF EVID PART

<sup>&</sup>lt;sup>442</sup> There are several meanings of each of the forms. The table only lists the ones which are most frequently referred to in the corpus.

'Kyrykytyk, they were large, his shoulders were large. He became stuck.'

b. (kal kujamary1, 1619.209)

O= 'ap apatpare-tu ti tsã ne.  $Ts\tilde{a}=por-at\tilde{i}$  -tu ikatu ti, 3coref=hair roll.up.vi -NOM EVID 3plPRO PART 3pl= ANTI-fasten.vt-NOM well EVID kyrykytyk  $n\tilde{a}=$  'apo [me]. IDEO.roll.up.and.fasten 3= POSP 'They rolled up their hair. They fastened it well, kyrykytyk on it (the feather headdress).'

This complex ideophone has formed from the individual ideophones *kyryry* ('rub along a surface') and *kytyk* ('get a hold on something')<sup>443</sup>. Examples for their use in isolation or in combination with other ideophones are given in (17) and (18):

(17) (kal\_awytyza1, 0424.783) *Mo'at kyty ti nã=to -tu me, kyryryryry.*person for EVID 3= go.vi-NOM PART, IDEO.drag
'He went for the (dead) people, dragging them (over the ground).'

(18) (kal\_kwaza, 1967.667)

*'Ywawo tepe ti kitã tẽpo izyk-u powowowo kytyk.* upwards FRUST EVID DEM liana throw-NOM IDEO.fly IDEO.get.hold 'He threw the liana upwards without success. It flew powowowo, (finally) kytyk, got a hold.'

Since the complex ideophone *kyrykytyk* ('move and get stuck') occurs seven times in the same form in different texts told by one of the two story-tellers and since its meaning was confirmed by two Awetí consultants, it is not considered to be a sequence of two individual ideophones. The latter is given in (19) with a combination only occurring once in the corpus and consisting of two monosyllabic ideophones *kyw* ('cut') and *tak* ('loosen'):

<sup>&</sup>lt;sup>443</sup> The ideophone *kytyk* can further be the result of a fusion of *kyryry* with *tyk* ('come to a standstill'). According to an Awetí consultant *kytyk* further refers to 'getting stuck' or 'hanging something onto a nail'.

(19) (tal\_mamuti\_4\_8, 0125.9) *O=pytã ti, jatã ti kyw tak, kyw tak* 

4.3.5 Ideophones as a base of verb formation

In Awetí there are a number of examples, where an ideophone formally resembles the root of a corresponding lexical verb. This indicates a historical relation between ideophones and verbs, which has also been observed in other languages of the world<sup>444</sup>. Since there is no diachronic data available to confirm one theory or the other, either process – the development of ideophones into verb roots and vice versa – should be taken into consideration.

Ideophone	Meaning	Verb root	Meaning	
kut	'drink'	mokure	'swallow something big',	
			'devour'	
kyryryk kyryryk	1. 'hang loosely';	kyryryge	1. 'crawl' (of a toddler);	
	2. 'climb'		2. 'slip down'	
lok	'get out of something'	loge	'get out of something'	
ри ри	'boil'	pupure	'boil'	
purururu <sup>445</sup>	'shake'	pyryryge	'shake'	
pytit	ʻslip'	pytire	'slip'	
tarara tarara	1. 'spin cotton';	tararage	'be in line'	
	2. 'roll cigar'			

Table 4.4: Ideophones and related verb roots in current language use

<sup>&</sup>lt;sup>444</sup> Cf. section 2.6.

<sup>&</sup>lt;sup>445</sup> This ideophone deviates from the others in not having the same vowel quality as the verb root. It was also not immediately recognized by two young male consultants at its first occurrence in a text, and the same applied to the corresponding verb. In addition, in the two examples with this ideophone the phonetic form is [pururuфuфuфu], i.e. the alveolar flaps are increasingly substituted by voiceless bilabial fricatives.

tyryk tyryk	'limp'	tyryge	'limp'
wyw	1. 'bend'; 2. 'get well'	wywe	'bend'

The roots of all these verbs are di- or trisyllabic and have an  $/\epsilon/$  as the nucleus of their final syllable. The consonant preceding this final  $/\epsilon/$  is always lenited, while the corresponding ideophone either has a homorganic fortis consonant, an identical lenis consonant or ends in a vowel. Unlike in other verbs, stress in these verb roots falls on the penultimate syllable. Examples for mono- and disyllabic ideophones ending in /k/ and their corresponding verb roots with a lenis  $/\gamma/$  are given in (20)(a) and (b) and in (21):

(20)a. (kal\_awytyza1, 0151.549)

*Lok*, *wej-mo- loge ti a'yn*. IDEO.get.out.of.sth. 3- CAUS-get.out.of.hole.vi EVID PART 'Lok, he pulled it out (of the hole).'

b. (tal\_mamuti\_1\_8, 1185.879) *O-loge* ti a'yn.
3-get.out.of.sth. EVID PART
'He got out (of the snake-costume).'

(21) (kal\_makawaja, 1303.784) *Tyryk tyryk e'i a'yt ti n=eko -tu a'yn. Tyryge -tu<sup>446</sup> me.*IDEO.limp 3say EMOT EVID 3=walk.vi-NOM PART, ø-limp.vi-NOM PART
'Tyryk tyryk, does the poor (animal) when walking. It limps.'
(lit.: '[...] There is limping.')

In (22) a fortis /t/ in the coda of the ideophone corresponds to /r/ in the verb root:

<sup>&</sup>lt;sup>446</sup> Although the Awetí consultants insisted on the analysis as a fully lexicalized (impersonal) action nominal, the audio recording rather suggests *tyryk 'etu*, i.e. a nominalized verbal construction formed by an ideophone and an inflected light verb.

(22) (kal\_angut1, 1084.33)

Kapatsu-ka tenekaj=up-(p)upytitkaj=mo-pytire-tu,what-NEG simply 1pl.incl=become.vi-NOMIDEO.slip 1pl.incl=CAUS-slip.vi -NOMpytitpopopotoo.IDEO.slip IDEO.stumble IDEO.fall

'What will simply (if we don't succeed) become of us is that: pytit, they will make us slip, pytit, (stumble and fall down) popopo too.'

In (23)(a) and (b) the ideophone and the verb root are identical, except for the final  $\frac{\epsilon}{\epsilon}$  of the latter, which, however, is deleted in front of the imperfective suffix *-eju* in (23)(b):<sup>447</sup>

(23) a. (awu\_fishing, 0166.343)

*Ky'um, ky'um mo* = *wywe-tu tene ti wyw.* iron iron CAUS=bend.iv-NOM simply EVID IDEO.bend 'They simply bent iron, wyw.'

b. (tal\_mamuti\_2\_8, 0653.197)
Matsapezan 'yp wyw -eju -tu ti tãjpe 'apo katu a'yn.
copaíba tree bend.vi-IMPF-NOM EVID riverbank above INTENS PART.
'The copaíba tree was bowing down right above the harbour.'

In (24)(a) and (b) an ideophone *tarara* ('to roll something into a line')<sup>448</sup> is presumably related to a verb *tararage* ('to put into line') which has an additional lenis  $/\gamma$ / at the onset of its final syllable:

(24) a. (tal\_mamuti\_3\_8, 0844.811) *O-tige ti kitã kaj= tak Tanumakalu oteny pywo* 3- sit.vi EVID DEM 1pl.incl=grandmother PropN door POSP

<sup>&</sup>lt;sup>447</sup> The deletion of the root-final  $|\varepsilon|$  is made transparent by the stress pattern of the word: primary stress falls on the first syllable of the allomorph *-eju* which only combines with vowel-final stems.

<sup>&</sup>lt;sup>448</sup> The same ideophone is used for the activity of rolling a cigar.

amatitu powã -jan, tarara tarara tarara tarara [...].

cotton spin.vt-ATT, IDEO.spin

'Our grandmother Tanumakalu sat down next to the door to spin cotton (rolling it on her thigh), tarara tarara tarara tarara.'

b. (tal kakaja, 1350.892)

*Ywap* mo= tararage -tu nã me. manioc.drink CAUS=be.in.line.vi-NOM 3PRO PART 'She put the (vessels with) manioc drink into a line.'

All the verb roots listed here, which resemble ideophones, have in common that they belong to a group of intransitive middle verbs. In the examples this is illustrated by the fact that the verbs in their simple form are intransitive and can be transitivized by the addition of a causative prefix *mo*-, as shown by *loge* ('to get out') in (20)(b) compared to *mologe* ('to pull out') in (a) or *wywe* ('to bend (by itself)', 'to bow') in (23)(b) compared to *mowywe* ('to bend') in (b). An exception is *mokure* ('to swallow something big') in table 4.4, for which no simple form exists in current language use.

While two of the ideophones in the examples (20) to (24) occur repeatedly and depict processual states-of-affairs, all the lexical verbs are non-reduplicated and thus do not morphologically reflect any aspectual features. In (25)(a) to (c) a simple as well as a reduplicated verb referring to the same event exist for the – usually repeated – ideophone *kyryryk kyryryk* ('hanging loosely', 'slipping down'). The text, concerned with life after death, informs about belts and head ornaments used by spirits, which are not tightly fastened and therefore slip down:

Nã kitã nemiezeko hm hm hm ha kyryryk kyryryk a'vt ti me, kitã n=emieze- eko a'vt ti hm hm hm ha kyryryk kyryryk nã me. 3PRO TOP 3=REL-NOMpat-COM-walk.vi EMOT EVID PART, IDEO IDEO IDEO.hang.loosely 'etu tene ti me. 'e -tu tene ti me say-NOM simply EVID PART

<sup>(25)</sup> a. (kal\_angut1, 0829.265)

'This is the thing the poor ones walk with, (the spirits walk and) it simply makes "kyryryk kyryryk" (wanting to fall down).'

b. (kal angut 2, 1006.063)

Netytaan okyryrykyryrygykaa'yn ne'ẽ.n=e-tytaan o-kyryryk-kyryryge-ykaa'yn ne'ẽ3=REL-leg.ornament NEG 3-RED-slip.down.vi -NEGPART PART PART'His leg ornament doesn't keep slipping down.'

c. (kal angut 2, 1052.436)

Nã=kyryryge -tu jatã pit- pit<sup>449</sup> ete n=e- 'yzapwaj.
3= slip.down.iv-NOM DEM RED-edge POSP 3=REL-feather.headdress

'His feather headdress slips down very near to the edge (of the eyebrows).'

Without any evidence from diachronic data it is impossible to decide, whether the ideophones in these cases have historically developed from verbs or vice versa. Both processes seem to exist for ideophones in other languages of the world. McGregor (2001) as well as Schultze-Berndt (2001) assume that in the Australian languages they investigate ideophones may have been incorporated in the verbal system at some stage as the uninflecting parts of a compound verb construction formed with a small set of inflected verbs. Both authors list a number of ideophone-like properties of the uninflecting parts of these verb complexes. Nuckolls (2001:272) reports for ideophones in Ayacucho Quechua that they may form verbs which are fully inflected for tense, person and number. For the Mexican language Upper Necaxa Totonax Beck (2008:16, 17) assumes that most ideophones have formed from verb roots by a process of reduplication which in current language use is only productive in ideophones. A smaller set of the ideophones in this language, however, may also have been the origin of verbs. In Awetí, as was shown in sections 3.3.8.3.1 and sections 4.3.2 and 4.3.3, both, reduplication in verbs and reduplication and repetition in ideophones are productive processes. A piece of evidence for a possible development from ideophones to verb roots can be seen in Drude's (unpubl.

<sup>&</sup>lt;sup>449</sup> The reduplication indicates an intensification: *pit ete* 'at the edge' versus *pitpit ete* 'very near to the edge'.

a: 8) hypothesis that disyllabic verb roots in Awetí with an unstressed final  $\langle \varepsilon \rangle$  after a lenis consonant have originated in monosyllabic verb roots ending in a fortis consonant which were then suffixed by an element *-e*. An argument in favor of his idea is that monosyllabic verb roots in Awetí are mostly identical in structure with monosyllabic ideophones of the CVC type. However, verbal base forms which are formally identical to the ideophones listed in table 4.4 do not exist in current language use. There are further arguments for ideophones as sources of the intransitive verb roots ending in  $\langle \varepsilon \rangle$ . One of them is the existence of a construction, exemplified by (21) and (25)(a) and further described in section 4.4.4, where the ideophone is the uninflected part of a complex predicate which has an inflected light verb based on the root '*e* ('to say'). There are several action nominals in the Awetí corpus, of which there are two variants, a form which retains a voiceless plosive followed by a /?/ before the  $\langle \varepsilon \rangle$  and another which does not. One example for a minimal pair is given by (25)(a) above and (25)(d), occurring a few clauses later in the same text:

(25) d. (kal\_angut1, 0841.105)

Nã=kyryryk-kyryryg -e -tu

3= RED- slip.down.vi-EPEN-NOM

'It continuously slipped down.'

Example (25)(d) shows a typical verb reduplication pattern in Awetí, which for verb roots ending in a plosive either has a full reduplicant or – as a variant – one without the final plosive. The base form, by contrast, always has a lenis plosive extended by  $/\varepsilon$ / which in the example has been glossed as an epenthetical element.<sup>450</sup> As a matter of fact, the reduplication pattern is identical for verb roots ending in a plosive and for those ending in  $/\varepsilon/,^{451}$ so that one may hypothesize that the reduplicant with a realized plosive may be the original form of an ideophone that all verbs with a final  $/\varepsilon$ / are derived from. The element  $/\varepsilon$ / in this context is a relict of the nominalized dummy verb 'e ('etu) of a complex predicate formed with two ideophones, as shown in (25)(a), which has generalized to form part of the reduplication pattern not only in all nominalized verbs but also in finite verbs. Verbs

<sup>&</sup>lt;sup>450</sup> Cf. section 3.3.8.3.1, table 3:  $RED_{[V]}$ -[V]-EPEN or  $RED(cv_{[...]}cv)$ -V( $cv_{[...]}cvc$ )-EPEN.

<sup>&</sup>lt;sup>451</sup> Cf. section 3.3.8.3.1.

deriving from ideophones have retained the  $/\varepsilon/$ , while others have a base form without this element. Another argument in this context is that the resultant verb roots can be subsumed under a class of intransitive middle verbs which typically, and similar to ideophones, have a low elaboration of the event and especially of participants.<sup>452</sup> Drude (forthcoming b: 11) further points out that the unusual stress pattern of such verb roots and the fact that  $/\chi/$  as in (25)(d) usually only occurs morpheme-finally is another piece of evidence for the hypothesis that an underlying root did not have the  $/\varepsilon/$ .

Another argument for the development of verb roots from ideophones is given by the fact that in two of the instances listed in table 4.4 there is a meaning differentiation between a single and a repeated ideophone *kyryryk* and *tyryk*, and the meaning is generally broader, encoding movements rather than specific activities, while the corresponding verb – reduplicated or not – has the more restricted meaning of a specific motion event. The verb root *kyryryge* ('to slip down') in examples (25)(b) and (c) refers to the same event as the repeated ideophone *kyryryk kyryryk* in (25)(a), from which it must have been derived. The resultant verb can only express a processual (ACTI) state-of-affairs, while the ideophone distinguishes between an ACTI state-of-affairs, encoded in its repeated form, and a TTER state-of-affairs, depicted by a single utterance, as in (26):

(26) (kal makawaja, 1927.824)

Pooo, nã=py kyryryk, tum wej-zoto a'yn.
IDEO.surface 3=foot IDEO.go.for.and.get.hold IDEO.fall.into.water 3-take.vt PART
'It (the monster) surfaced from underwater, pooo, went for his foot and got hold of it, kyryryk, dived into the water, tum, and took him away.'

*Kyryryk* belongs to a group of ideophones with a general meaning, depicting any activity characterized by a movement of one object against or towards another one, which comes to an end.<sup>453</sup> If uttered only once, it can depict such diverse activities as reaching out for something and getting hold of it, throwing a liana which entangles on a branch of a tree

<sup>&</sup>lt;sup>452</sup> For a considerable number of these verbs one must assume that the corresponding ideophone has disappeared from current language use.

<sup>&</sup>lt;sup>453</sup> Cf. table 4.3 in section 4.3.2.2 and section 4.5.2.

or swallowing a thorn which gets stuck in the throat. Only when uttered repeatedly, *kyryryk* depicts a manner of locomotion which is characterized by a continuous interruption as, for example, climbing up or down a tree by clutching its trunk or walking with a belt around one's waist, which is not tightly fastened and moving with each step.

Similarly, the repeated ideophone *tyryk tyryk*, having the meaning 'to limp' in example (21), can also be used as a phonological variant of *kyryk kyryk* and depict a climbing movement, as in (27)(a):<sup>454</sup>

(27) a. (tal\_mamuti\_2\_8, 0659.226) *O-tep ti a'yn, tyryk tyryk tyryk tyryk tyryk tyryk tyryk,*3- climb.vi EVID PART, IDEO.climb.tree *o-to ti täjpe 'apo katu o= tig -ej- aw a'yn.*3-go.vi EVID harbour above INTENS 3coref=sit.vi-IMPF-GER PART
'She climbed up (the tree), she went to be seated right above the harbour.'

As a single form it can further depict different movements involving wood, constituting a variant of *torok*, which is illustrated in (27)(b):

(27) b. (tal kujakyt, 0124.81)

Tututututut, o-tan a'yn.Tyryktorokotẽtapwej-toapytym a'yn.IDEO.run3-run.vi PART IDEO.open.door IDEO.close.doordoor3-close.vtPART'Tutututututu, she ran and, tyryk torok, closed the door.'

The difficulty to sometimes clearly set apart one ideophone from another, due to the existence of phonological variants which are formally identical with ideophones referring to different events, was also noticed by other researchers: "What is perplexing about ideophonic morphology [...] is that in certain contexts, changes in form correspond to seemingly motivated changes in meaning, whereas in other contexts, changes in form correspond to no changes of meaning whatsoever" (Nuckolls 1999: 241). One way to account for this problem is to assume that ideophones of this type have different phonosemantic properties which provide individual meaning components of the event. In

<sup>&</sup>lt;sup>454</sup> Cf. example (29)(a) in section 4.2.3.

specific contexts not all of these components are relevant, but the relevant components would be expressed by each of the phonological variants of the ideophone. Since in (27)(a) and (b) the event is also referred to by a finite lexical verb in an adjacent clause, one may hypothesize that the ideophones have other functions than that of clearly identifying a specific event. In (27)(a) the ideophone seems to convey an aspectual contour by depicting a uniform smooth movement which is further characterized by repeated interruption. Relevant components of the ideophone are its disyllabic structure with an intermediate /r/, its vowel harmony and repeated occurrence but not the initial /t/.<sup>455</sup> In (27)(b) the two ideophones tyryk and torok ('open and close door') are semantically more specific than the verb toapytym of the following clause which only refers to the closing of a door. Each of the two ideophones in (27)(b) depicts a punctual event for not being repeated and ending in /k/, which further consists of more than one movement, due to the fact that the ideophone has two syllables instead of one. The initial /t/ suggests that it is performed in connection with wood.<sup>456</sup> The difference in vowel quality between *tyryk* and *torok* seems to additionally depict the different sounds uttered by a door when being opened and closed.

The reference of the verb *tyryge*, by contrast, is restricted to a limping movement in (21) and in all its other occurrences. The same applies to the verb *kyryryge* which has 'to slip down' as its sole meaning, so that one may conclude that the verb-formation is a more recent development which has led to the conventionalization of one specific meaning.

The phonosemantic properties of ideophones which have been briefly mentioned in connection with these last two examples will be elaborated in section 4.5. The development from ideophones to verb roots as well as other developments involving ideophones will be further described in chapter five and set into a broader perspective within the Tupian family in chapter six.

# 4.3.6 Other derivational processes involving ideophones

Finally it can be observed that onomatopoeic ideophones of group II can develop into nouns, usually the name of an animal derived from a specific sound uttered by it, such as

<sup>&</sup>lt;sup>455</sup> See section 4.5 for information on phonosemantic features of Awetí ideophones.

<sup>&</sup>lt;sup>456</sup> Cf. section 4.5.1 on phonosemantic properties of ideophones.

*oly-oly* for a kind of puma<sup>457</sup> or *kutik-kutik* and *tywtyw'jyt* for specific kinds of birds. Formally such a name in nearly all cases consists of one repetition only. This seems to be a productive process in other Amazonian languages, too. For Wari', a Western Amazonian language belonging to the Txapakura family, Everett & Kern (1997: 427-432) distinguish between "verbal" and "nominal" ideophones, the latter of which mostly consist of nounformations of this type.

The nominalization may also include an inflected form of the verb '*e*, as in (28), where /i/i in front of the agent nominalizer *-at* has turned into a glide /j/i by resyllabification:

(28) a. (tal\_kakaja, 0043.866)

*po-po'jat* ('the one who makes "po-po"') 'cururu toad' (Rhinella species)

b. (tal\_kamu\_kwat1, 0804.903)

*ka-ka'jat* ('the one who makes "ka-ka"') 'kind of parrot'

c. (tal\_kaminu, 1422.746)

tum nã'jawut ('the place where she had made "tum"')

tum nã= 'j -ap -put

IDEO.jump.into.water 3= say-NOMpl-NPST

'the place where she had jumped into the water'

These two derivational processes are not very productive in Awetí.

# 4.3.7 Summary

Special suffixes can be attached to ideophones expressing punctual events or totally terminative states-of-affairs to add a meaning component of suddenness of forcefulness to the depicted activity. Most ideophones can and some – in order to convey certain interpretations – have to be repeated. Ideophones of the more conventionalized group I can undergo different processes of reduplication. Repetition and reduplication can mostly be differentiated by the fact that repeated ideophones each receive an accent, while reduplicated ideophones only have one accent. Both processes are often combined in ideophones. Formal variation in semantically related ideophones cannot always adequately

<sup>&</sup>lt;sup>457</sup> Cf. section 3.3.8.3.2.

be described by reduplicative processes. There are a number of verbs in current language use which formally resemble ideophones. All these verbs have in common that they end in  $\epsilon$ /after a lenis plosive. This formal property characterizes a class of intransitive middle verbs which can be transitivized by a causative prefix *mo*-.

# 4.4 Syntactic aspects

In this section the different levels of integration of ideophones into the syntactic structure of the Awetí language and combinatorial restrictions with regard to sentence types will be outlined. With regard to the interaction of ideophones with their syntactic environment, a distinction needs to be drawn as to whether the ideophone is used to merely highlight, to complement, or to totally replace a lexical verb. In the first two functions, the ideophones – due to their special status as performative simulations which are neither decomposable, nor in need of any larger structures to convey meaning – are detached from their syntactic surroundings, in the latter function they can be integrated into the clause to varying degrees. Table 4.5 summarizes the different syntactic statuses of ideophones and their respective functions.

Syntactic status	Function		
Extra-clausal	Highlighting of activity referred to by verb		
(independent existential clause)	of preceding or following clause		
Extra-clausal	Addition of manner component to event		
(independent existential clause)	referred to in preceding or following clause		
Invariant predicate	Similar to finite verb; event-focus		
Invariant component in light-verb	Primary meaning component in complex		
construction forming predicate	verb phrase (gradual loss of status as		
	ideophone) <sup>458</sup>		

Table 4.5: Syntactic status of ideophones and their respective function

<sup>&</sup>lt;sup>458</sup> See also section 4.6.3 and 5.3.

# 4.4.1 Highlighting function of ideophones

In this usage ideophones are prosodically marked as independent elements – preceding or following a clause. Nuckolls (2001: 277/8) describes similar ideophones in Ecuadorian Lowland Quechua as functioning like verbal gestures which – without adding new content to the utterance – put the meaning of the lexical verb intonationally into the foreground. In early analyses this usage of ideophones has often been described as redundant.<sup>459</sup> Kita (1997: 388/9) compares the alleged "redundancy" of Japanese adverbial 'mimetics' (ideophones) with that of other adverbials and shows that they do not create this effect, i.e. that an adverbial mimetic can always combine in one sentence with an ordinary adverbial which has the same meaning. Two ordinary adverbials with equivalent meanings, on the other hand, create "wordiness". Based on this observation he argues that this combinability is evidence for a separate 'affecto-imagistic dimension' of meaning representation for mimetics as opposed to the 'analytic dimension' of other words.<sup>460</sup>

In (1) the ideophone *ãj ãj* ('crying') is positioned behind the clause with the inflected predicate *otakeju* ('he was crying'):

(1) (tal\_mamuti\_1\_8, 0735.335) *Warakunī o-tak -eju 'inī pywo a'yn, ãj ãj ãj ãj ãj.*PropN 3-cry.iv-IMPF hammock in PART, IDEO.cry
'Warakunī was crying in his hammock.'

The ideophone *kon* ('swallowing') at the beginning of (2) does also not participate in the structure of the clause predicated by the inflected verb *wejmokure* ('he swallowed it').<sup>461</sup> This is made obvious by the fact that the second position particle *ti* occurs behind the verb which – accordingly – is in the first clause position:

<sup>&</sup>lt;sup>459</sup> Cf. Derbyshire (1977) outlined in section 1.3.1.

<sup>&</sup>lt;sup>460</sup> Cf. section 2.3.

<sup>&</sup>lt;sup>461</sup> Diffloth (1976) observed for Semai, too, that the position of ideophones in this function was extra-syntactic.

(2) (tal\_mamuti\_3\_8, 0621.544)

*Kon, wej-mokure ti u'wyp tapwa a'yn. Kon kon mu'jẽ.* IDEO.swallow 3- swallow.vt EVID arrow tip PART IDEO IDEO ready

Mokõj wene ti wej-mokure a' yn.

two still EVID 3-swallow.vt PART

'Kon, (they say that) she swallowed the tip of an arrow. Kon, kon (she stopped). (They say that) she still swallowed two (arrow tips).'

The highlighting function becomes especially obvious in the second and third clause of example (2): Two utterances of *kon* and a concluding particle *mu'jẽ* ('ready', 'finished') represent exactly two instances of the event which is also referred to by the following finite verb and a numeral.

In (3) the ideophone is again placed after a sentence final particle a'yn. The noun *nemi'ũkangut* ('a rest of his food') consequently must be analysed as an argument of a clause predicated by the ideophone:

(3) (kal\_ama\_maw\_oldvillages, 0477.397)
Wej-t- atĩ tsãn a'yn, pywpywpyw n-emi'ũkangut.
3- EPEN-wrap.up.vt 3plPRO PART, IDEO.tie 3-rest.of.food
'They wrapped it up, pywpywpyw a leftover.'

Further examples, where the ideophones apparently do not have any other function than that of putting the activity referred to by the lexical verb into the foreground, are the ones presented in 4.3.4 with formally (almost) identical ideophones and verb roots.

4.4.2 Addition of manner component by independent ideophones

Ideophones can also function similar to adverbs, mostly characterising the manner of performance of an activity which is encoded in semantically not very complex lexical verbs like *to* ('go'), *ut* ('come') or '*u* ('ingest'). Most often, this kind of construction encodes manner of locomotion. In this usage the ideophones represent separate clauses, so that they

cannot be analysed as manner adverbs.<sup>462</sup> The ideophones can be positioned in front of the clause with the lexical verb, as shown in (4), or behind, as in (5):

```
(4) (kal_tawozy3) (0056.911)
Powowowo, o-to a'yn.
IDEO.fly, 3-go.vi PART
'It flew off.'
(lit.: '(There was) powowowo, it went off.')
```

(5) (kal\_sham\_myth1, 0845.865)
W= e- pe (e)te ti nã=po'at -(t)u [mhm].
3coref=REL-tobacco POSPEVID 3= make.vi-NOM
Nã=por- 'u -tu nã, tsyw tsyw tsyw.
3 =ANTI-ingest.vt-NOM 3PRO IDEO.suck.cigar
'He made his cigar. He ingested (i.e. smoked) it, tsyw tsyw tsyw.'

In both examples the ideophone makes a major contribution to the utterance meaning. In (4) it specifies the manner of locomotion as flying. In (5) the ideophone specifies the meaning of the finite verb 'u which – without any explicit argument – would normally refer to the ingestion of food. Note that in the example the unexpressed direct object can be deduced from the context, since *wepe* ('tobacco') has been introduced in the preceding clause.

Nuckolls (2001: 273) characterizes a corresponding function of ideophones in Pastaza Quechua as follows: "[They] specify configurational patterns of an action, the direction of an action's movement, the medium in which it takes place, the manner in which it was executed, and even, the shape of an action's agent".

The second position particle *ti* in example (6) again indicates that the ideophone *kyryry kyryry* ('drag') in this function does not participate in the structure of the clause predicated by the action nominal *nãtotu* ('he went'):

<sup>&</sup>lt;sup>462</sup> There are two other means to encode manner of an activity in the language. One is by a 'gerund' form (cf. section 3.3.8.1.7), the other by a PP, consisting of a demonstrative pronoun and the postposition *tsu* ('like'), which is either accompanied by a representational gesture or refers to an event introduced in the preceding discourse (cf. section 5.3.3).

(6) (kal\_kwaza, 1592.515) **Kyryry kyryry,**  $o = py'\tilde{a}$  wo ti  $n\tilde{a}=to-tu$ . IDEO.drag 3coref=knee POSP EVID 3= go.vi-NOM 'Dragging along, on his knees he went.'

Example (7)(a) and (b) with twice the same lexical verb *tep* ('climb up') clearly show that ideophones in this environment do not simply restate the activity referred to by the verb of an adjacent clause but, as in this case, capture a characteristic of the agent<sup>463</sup> by depicting the manner of movement:

(7)(a) (kal\_awakap1, 0331.407) *O-tep ti a'yn, kyryry, kyryry kyryry.*'He (a person) climbed up (the tree), kyryry kyryry kyryry.'

(b) (kal\_kamukuaka5, 0275.391) *Kyzyzyzyzyzyzy, o-tep tut a'yn.*IDEO.snake.climbing 3-climb.up FUT PART
'Kyzyzyzyzyzyzyzyzy, it (the snake) will climb up (the rope).'

In addition, the ideophone *kyryry kyryry* in (7)(a) is identical to the one in (6) but depicts a characteristic aspect of a different activity. The common denominator between limping and climbing a tree is friction of a moving object against a surface.<sup>464</sup>

For Australian languages McGregor (2002: 341) sees in this usage of ideophones as independent 'minor clauses' with a high degree of detachment from the syntactic structure of the rest of the language an initial state which is followed by their increasing integration into the clause via a complex verb construction, as outlined in 4.4.4. He does not, however, mention any occurrences of ideophones in these languages that can have the function of predicates, as described in the following subsection.

<sup>&</sup>lt;sup>463</sup> In the case of a non-agentive activity the ideophone encodes characteristics of the theme.

<sup>&</sup>lt;sup>464</sup> Cf. section 4.5.

## 4.4.3 Predicate function of ideophones

Ideophones can occur in the same position as inflected verbs and function as predicates. Unlike verbs, however, they never have a subject but the agent or experiencer of an event expressed by an ideophone must always be deduced from the preceding discourse context. Moreover, clauses with ideophones in this function rarely end with a sentence final-discourse particle (*a'yn* and/or *me*).

Similar to verbs ideophones can have arguments and adjuncts, and the order of constituents may vary according to their respective discourse prominence. In clauses where a sequence of several ideophones depicts one event or consecutive events the order of the ideophones is strictly chronological. These observations are illustrated by the following examples.

A typical clause structure for ideophones in predicate function is given in (8) where  $ih\tilde{i}$  *ih* $\tilde{i}$  ('crying') is placed in third position behind a temporal adjunct and a second position evidential particle *ti*:

(8)(tal\_mamuti\_3\_8, 1691.316)
Mã tsu ti ihĩ ihĩ.
Now like EVID IDEO.cry
'They say that at that moment he was crying.'

Temporal and locative adjuncts in the first position of such clauses are recurrent throughout the corpus.<sup>465</sup> The ideophones in these contexts usually depict events which were introduced by verbs in the immediately preceding discourse environment. This is illustrated in (9), where the speaker talks about the ritual of cutting one's skin open with a scraper in order to become a skilful fisherman. The event of "scratching" one's skin and rubbing in medicine is introduced by two corresponding verbs together with the ideophones, which in the following clause, starting with the adjunct *ko'jem* ('tomorrow'), are used without any verb:

<sup>&</sup>lt;sup>465</sup> Cf. parallel observations for Emerillon in Rose (2003: 577) and section 5.1.3 and for Kayabi in Dobson (1997: 112) and section 5.1.2.

(9) (awu fishing, 1158.952)

Nā=te- ati -tu me, kywkywkywkyw. Kutsukutsu, nā=potang -ku me, 3= REFL-scratch.vt-NOM PART IDEO.scratch IDEO.rub.in 3= put.on.medicine-NOM PART kywkywkyw. Ko'jem kutsukutsukutsu kywkywkyw.

IDEO.scratch tomorrow IDEO.rub.in IDEO.scratch

'He scratches himself, kywkywkywkyw. Kutsukutsu, he spreads the (soothing) medicine (on his skin), kywkywkyw. The next day (the same happened) kutsukutsukutsu kywkywkyw.'

The clauses with ideophones in (8) and (9) both lack a sentence-final particle. Instead they end with the ideophone itself which represents a whole event. This supports the idea postulated by Kita (1997), that ideophones are on a different level of semantic representation than words in grammatical structure and that therefore the end of their performance itself expresses a conclusion which does not need to be marked by grammatical means.<sup>466</sup> This also applies to (10), where the ideophone *pok* functions like a verbal predicate with two arguments:

(10)(kal\_sham\_1, 1322.688)

Wepemotoaputkajkyty,nãkytypoknepy.W= e- pemoto -at-putkaj=kyty,nã=kytypokn=e-py3coref=REL-smoke give.vt-NOMag-NPST 1pl.incl=POSP, 3=POSP IDEO.give 3=REL-payment'(To) the one who gave his smoke to us, to him (we) give his payment (for it).'(lit: 'The(re was the) former giver of his smoke to us. To him pok his payment.')

One of the constituents is marked as an oblique argument with the postposition *kyty* to which the semantic role of the recipient is ascribed, the other argument is unmarked and refers to the theme. The marking of the arguments is identical to the marking of recipient and theme of a verbal predicate *moto* ('give'), as illustrated in the same example by the

<sup>&</sup>lt;sup>466</sup> Cf. section 2.3.

internal structure of the preceding existential clause *wepe motoaput kajkyty* ('the former giver of his smoke to us'), consisting of an agent nominalization derived from this verb.<sup>467</sup>

Apart from those ideophones which, similar to inflected verbs, govern an unmarked direct object or an oblique, there are others, as for example tyky(hy) ('come to a stop', 'come across X', 'meet X', 'catch sight of X'), which have a different argument structure. This ideophone is equivalent to the more complex verb construction *X* 'aparype o'at ('he came across X'). A locative argument with the postpositions (y)pe ('in', 'at', 'to'), wo ('in', 'to') or *ete* ('at', 'with'), as exemplified in (11), can be inserted to specify what is being encountered, whereas in the construction with the lexical verb 'at ('meet')<sup>468</sup> in (12) an oblique argument is obligatorily marked with the postposition 'aparype ('across'), not used with any other verb, to assume this specific meaning:

## (11) (tal\_mamuti\_1\_8, 1231.654)

(12) (kal\_kwaza, 0648.568) *Kujtan ype mo'a -za 'aparype nã='at -(t)u, tok tok tok aka aka.*DEM POSP person-PL POSP 3= meet.vi-NOM IDEO.beat IDEO.cry.with.fear
'Over there (far away) he met people, tok tok tok aka aka (and killed them).'

The constituent order in clauses with verbal predicates varies, depending on pragmatic factors, and the same seems to occur with ideophones as predicates.<sup>469</sup> Evidence is given by the following two examples (13) and (14), where the position of a patient-object depends on its respective discourse prominence:

<sup>&</sup>lt;sup>467</sup> Note that the agent nominalization is translated as if it were a left-dislocated apposition, but it is not marked by the same postposition as the following argument  $n\tilde{a}kyty$  ('to him').

<sup>&</sup>lt;sup>468</sup> There is a second intransitive lexical verb *'at* ('fall') which does not subcategorize for an oblique argument.

<sup>&</sup>lt;sup>469</sup> Cf. section 3.3.9.2.

#### (13) (kal\_awytyza1, 1250.068)

 $N\tilde{a}$ =men tykyhy.  $N\tilde{a}$ =men 'apar-eju -tu a'yt ti  $n\tilde{a}$ ='ypy wo wene. 3= husband IDEO.encounter 3= husband lie.vi-IMPF-NOM EMOT EVID 3= beginning POSP still '(He came across) her husband, tykyhy. Her husband was still lying near her.'

(14) (tal\_kamu\_kwat1, 0628.839)

IDEO.ingest IDEO.swallow

'(He) dragged along a boy (who was) crying. (He) put (him) down for the big snake (to fetch him). (The snake) ingested and swallowed (him).'

In (13) the object *nãmen* ('her husband') precedes the ideophone *tykyhy*. In the immediately preceding discourse context a young man finds the body of his sister, who was killed together with all other inhabitants of her village in an attack by a hostile group. Her husband is the next one of her family to be found and thus prominent in discourse as a newly introduced referent. In (14), by contrast, a sequence of ideophones reports on the complex event of a chief sacrificing the first inhabitant of his village to a voracious monster. The object NP *kaminu'at* ('a boy') is positioned behind the ideophone *kyryryry* ('drag'). Contrasting with (13), not the object referent in this sequence is in the focus of attention but the individual activities starting with *kyryryryy* ('drag'). Together these constitute an important cycle of events in the narrative, which is afterwards repeated many times with other object referents.<sup>470</sup> The second argument in the sequence is marked by the postposition *kyty* as oblique. As in ordinary clauses with finite verbs it follows the predicate. A second possibility for a syntactic position of this constituent is given in (10) above, where the oblique argument *nãkyty* ('to him') occurs at the beginning of the clause before the ideophone *pok*.

The temporal sequence of events in utterances with several ideophones like (14) is reflected in their order. This characteristic of ideophones has been pointed out by Nuckolls (1995), who compares sound symbolic utterances in Pastaza Quechua to images of video

<sup>&</sup>lt;sup>470</sup> Cf. section 4.6.1 for a more detailed analysis of the example.

and cinema. She states that these utterances "by their performativity [...] simulate the salient qualities of an action as it unfolds in time" (Nuckolls 1995: 150). A further example from Awetí narrative discourse is given in (15), where a sequence of three ideophones depicts the same event of spitting which is referred to by the finite verb *otylymũ* ('she spat') in the immediately preceding clause. The ordering of the ideophones here, too, corresponds to the temporal order of the phases of the event:

(15) (tal\_mamuti\_2\_8, 0722.036)

Me'ym ti Tanumakalu otylymũ ti a'yn,

right.after POSP PropN 3-spit.iv EVID PART,

puj puwu peek, 'v wo.

IDEO.spit IDEO.fly IDEO.hit.water-surface water POSP

'At that very moment Tanumakalu spat, (she) spat out, (the saliva) flew, landed in the water.'

In example (16) different ideophones occur in a sequence which is concluded by the sentence-final discourse particle *a'yn*:

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(16) (awu_fishing) (1032.21)
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Tsã=po- puka-tutia'yn, tum tum tum tum tiwkpo3pl= ANTI-stirr.up.vt-NOM EVID PART IDEO.beat.on.waterIDEO.jump IDEO.fly.into.nettiwkpotiwktuma'yn.IDEO IDEO IDEO IDEO.beat.on.waterPART

'They stirred them up, (people) beating on the water surface, (the fish) jumping up and getting into the net.'

No argument is expressed in the clause with the ideophones. The predicate *tsãpopukatu* ('they stirred them up') of the preceding clause, formed from the transitive verb *puka*, indicates that the event has two participants: an agent (which is in fact a causer), explicitly marked as an A subject by the clitic  $3^{rd}$  person plural pronoun *tsã*=, and a patient (i.e. a cause), which syntactically would surface as a P object but remains unexpressed here. While a 'subject perspective' is encoded in the action nominal by means of the antipassive

marker po(r)- and the subject pronoun, the sequence of ideophones, depicting the same causative event of people stirring up fish, alternates between the activities of two participating agents: the beating on the water surface by people (*tum*) and the jumping up (*tiwk*) of fish. Thus the representation of meanings in the surface form differs between lexical verb and ideophones in that one transitive verb encodes the whole complex event by selecting two participants to which the roles of agent and patient are assigned, while two different ideophones tum and tiwk depict the consecutive activities of two different participants, whereby the causal relationship can only be inferred from the chronological order in combination with world-knowledge. This characteristic of ideophones, to represent the relation between events as "merely spatiotemporally contiguous", reflects, according to Kita (1997), the architectural principles of the 'affecto-imagistic dimension' of cognitive meaning representation, where "facets of an experience do not stand in syntagmatic relationships" (Kita 1997: 387). Such an ordered structuring of meaning components according to rational concepts only applies to the 'analytic dimension' of meaning representation, where all words with the exception of ideophones are stored.<sup>471</sup>

Further encoded in the utterance in (16) is an iterative event contour depicted by the repeated occurrence of *tum* ('beat on water'), provoking an uncoordinated jumping of the fish (tiwk). The verb puka does not have any aspectual marking indicating iterativity. Another meaning component of the event, which is exclusively provided by the ideophone *po* is the catching of fish jumping up in the air.

# 4.4.4 Ideophones as parts of complex predicates

Ideophones may further be integrated into the syntactic structure of a clause similar to quoted speech, followed by an inflected form of a light verb based on 'e ('say'). This is most often the  $3^{rd}$  person form e'i but can also be a nominalized form, i.e. an action nominal or a gerund, which may additionally have 1<sup>st</sup> or 2<sup>nd</sup> person marking. The shorter form nã'e, which frequently occurs in connection with quoted speech and seems to have grammaticalized into a quotative marker,<sup>472</sup> is not used in these contexts. This usage of

<sup>&</sup>lt;sup>471</sup> Cf. the summary of Kita's theory in section 2.3. <sup>472</sup> Cf. section 3.3.7.2.1.

ideophones is demonstrated in (17) with a reduplicated ideophone *tyryk* ('limp') depicting manner of locomotion:

(17) (kal\_makawaja, 1303.784) *Tyryk tyryk, e'i a'yt ti n=eko -tu a'yn.*IDEO.limp, 3say EMOT EVID 3= walk.vi-NOM PART
"Tyryk tyryk", the poor (animal) does when it walks."

Another example is (18), where this type of construction appears within a sequence of quoted speech and with an ideophone depicting an audible activity which is not connected to locomotion:

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(18) (kal_awakap1, 0451.605)
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*"Kyj waraju me, n=e- kapem kyj parang e'i a'yn", e'i a'yn.* DEM savage PART, 3=REL-club DEM IDEO.beat.on.wood 3say PART, 3say PART *""There is the savage, there his club makes "parang"", he said."* 

Especially sentences such as (17), with an ideophone depicting manner of motion, may formally resemble the combination of ideophones and verbs as represented in (4) and (6), where the ideophone is accompanied by a finite form of a motion verb. Unlike in (6), however, in constructions with an inflected form of 'e ('say') no other element can occur between the ideophone and the verb, by which it is always immediately followed. The two elements moreover form a syntactic unit which in (17) is indicated by the two second position particles *a'yt* and *ti* following the whole complex *tyryk tyryk e'i* ('it does "tyryk tyryk"', 'it limps').

On the semantic level, too, the examples (4) to (6) differ considerably from (17) and (18). In the former three examples the ideophones encode motion or ingestion and add information on the manner, the medium or on characteristics of the participant involved in the activity which is also encoded by the finite verb form,<sup>473</sup> while in (17) and (18) the ideophones carry all the meaning, being accompanied by a finite form of what appears to be

<sup>&</sup>lt;sup>473</sup> In the case of a motion event the lexical verb adds a further 'path' component which is not encoded in the ideophone (cf. section 4.6.4).

a semantically empty light verb 'e.<sup>474</sup> Consequently, in a sentence like (4) to (6) either part, each belonging to a separate clause, can be omitted, still leaving the other one meaningful, whereas in the construction with 'e the ideophone is the sole meaning-bearing part of a complex predicate. In the Awetí corpus these complex predicates exist on several levels of grammatical integration which will be outlined in more detail in chapter five.

The frequency of occurrence of this syntactic embedding of an ideophone in Awetí discourse is far lower than that of ideophones occurring as separate clauses or as uninflecting predicates. Their overall number and distribution in narrative and non-narrative discourse is given in table 4.6 below.

In the table the ideophones are further distinguished according to whether they express a 'vocal' event  $(VOC)^{475}$ , either of a person or an animal, or an activity (ACT).<sup>476</sup> The light verbs the ideophones are accompanied by occur in four forms: as finite forms, invariably in the third person (*e'i*), as action nominals, mostly in the third person (singular, plural and coreferential) but also in the second person singular (PRO='etu), as subordinate action nominal constructions with the suffix *-awut* (*-ap* + *-put*)<sup>477</sup> and as a so-called 'gerund' form marked with a co-referential clitic pronoun (PRO='*jaw*).<sup>478</sup> Another criterion was whether the light verb is morphologically 'simplex' or 'complex', i.e. whether it contains any affix other than the obligatory person prefix or clitic pronoun, e.g. a suffix of verbal negation or an aspectual suffix.

<sup>&</sup>lt;sup>474</sup> See the discussion of the element 'e in section 5.3.

<sup>&</sup>lt;sup>475</sup> This includes 'crying' and 'clearing one's throat'.

<sup>&</sup>lt;sup>476</sup> McGregor (2002: 346, 186ff.) points out that vocalization/ communication as well as translational motion events, i.e. events with a manner specification, are most likely in the Australian language Nyulnyul to be represented by a comparable type of complex verb construction. He considers the motion domain an extension in event representation from concrete to more abstract.

<sup>&</sup>lt;sup>477</sup> Cf. section 3.3.9.4.3.

<sup>&</sup>lt;sup>478</sup> Cf. section 3.3.8.1.7.

Discourse	narrative			non-narrative				
type/	VOC		АСТ		VOC		АСТ	
Form of	simplex	complex	simplex	complex	simplex	complex	simplex	complex
auxiliary								
e'i	18	8	7	-	3	-	2	1
PRO='etu	5	-	6	-	1	-	1	1
PRO='jaw	-	-	1	-	-	-	1	-
PRO='jawut	-	-	1	-	-	-	-	-

Table 4.6: Complex predicates formed with ideophones

Table 4.6 shows that vocal events are more frequently than non-vocal events referred to by a complex predicate structure (35 versus 20 instances). This may be an indicator for the hypothesis that this structure has developed from a construction signalling quoted speech as claimed by many researchers who describe similar phenomena in other languages<sup>479</sup> or that the light verb has retained part of its semantic content in favouring ideophones depicting vocalization.

Another interesting feature is that morphologically complex light verbs (eight instances out of ten) also rather tend to co-occur with vocal events – as they do when marking quotes.<sup>480</sup> Two morphologically complex forms of non-vocal ideophones, encountered in non-narrative discourse and given in (19)(a) and (b), do not fit into this scheme:<sup>481</sup>

(19) a. (mopot\_manioc, 0336.682)

Pu pui='e-zoko-tume,o-kypa'yn.IDEO3=say-IMPF-NOM PART, 3-cook.vi PART'Pu pu it usually does, (when) it cooks.

<sup>&</sup>lt;sup>479</sup> Cf. section 1.3.

 $<sup>^{480}</sup>$  Cf. section 5.3, where the morphosyntactic and semantic characteristics of the verb 'e ('say') are presented in detail.

 $<sup>^{481}</sup>$  Cf. section 4.6.3 for a discussion of these examples which show a further correlation with the usage of gestures.

b. (mopot manioc, 0342.718)

*I*= *kyp* -(*p*)*u akyj nje*, *an pu pu e'i* -*ka a'yn*. 3F=cook.vi-NOM PART PART NEG IDEO.boil 3say.iv-NEG PART 'It cooks, (until) it does not make "pu pu" (any more).'

Both forms have the same ideophone pu pu ('boil with steam coming out of the vessel') as their centre. In both cases the ideophones are only uttered twice and pronounced without marked prosody, two features which are considered signals for a higher level of grammaticalization than e.g. that of examples (17) and (18) above which – although forming a syntactic unit with the light verbs – retain their prosodic markedness.<sup>482</sup> An explanation for the morphological complexity of the light verb is that the loss of prosodic or morphological features ideophones experience in the course of their grammatical integration is increasingly replaced by grammatical structure, as in these two examples, where a depiction of manner is translated into grammatical aspect.

(20) (kal\_kamukuaka4, 0558.276)

<sup>&</sup>lt;sup>482</sup> McGregor (2002: 334) in the context of Australian languages draws a distinction between ideophones on the one hand, and 'uninflecting verbs' (UVs) on the other which are not uttered with an "unusual voice register". He adds, however, that there is some kind of transition stage, where "some of the demonstrative value may remain in the UV for a long time, permitting it to continue to be used demonstratively – e.g. in a marked voice register, as an ideophone" (McGregor 2002: 335).

(21) (kal tawozy2, 0759.637)

*O-te- mo- pytewe watu ti nã, pxyw nã='e -tu tut,* 3- REFL-CAUS-turn.over.vi big EVID 3PRO, IDEO.turn.over 3= say.vi-NOM FUT e=zymane-tu tut nã='ywo. 2sg=circulate.vi-NOM FUT 3=POSP

'The big (turtle) will make itself turn over, it will make pyw, (and) you will circulate with it.'

Neither the labiodental fricative in (20), nor the uvular fricative in (21) belongs to the phoneme inventory of the language, nor does the syllable structure of both ideophones correspond to that of other words.<sup>483</sup> In both examples with action nominals as the inflected components of the complex verb phrases the second position particle *tut* again indicates that the whole construction represents one syntactic unit.

## 4.4.5 Ideophones and sentence type

With respect to their distribution over different sentence types it can be stated that ideophones almost exclusively appear in declarative sentences and mostly in the indicative mood. There are no ideophones in interrogative sentences, but the following two examples (22) and (23) seem to indicate their combinability with the imperative mood:

(22) (kal tawozy5, 0425.927)

Kuzukjatã tsoa,kaj-tetne'a.IDEO.get.insideDEM towards,HORT-fall.asleep.viPART PART,'Get in on this side, let's start to sleep.'

(23) (kal\_tawozy3, 0104.092)
Jatãn ywo tut jatã e- moanga-zoko e= mẽpyt ne 'a.
DEM POSP FUT TOP 2sg-paint.vt -IMPF 2sg=child PART PART,
Nã='ap pyterype tut kutsukutsukutsuk, nã='ap pyterype zotsu tut [...]."
3=hair in.the.middle FUT IDEO.apply 3=hair POSP indeed FUT

<sup>&</sup>lt;sup>483</sup> Cf. sections 3.2.2 and 3.2.4.

'With this you will keep painting your son, (you) will apply it on the back of his head, right in the crown of his hair.'

In both examples the ideophones are used as predicates in combination with locative complements. In (22), which is the only example of this kind encountered in the corpus, the ideophone *kuzuk* ('get inside') has the function of an imperative verb. In (23) *kutsukutsukutsuk* ('apply sth. on sth.') together with a future tense particle *tut* and a contextually given  $2^{nd}$  person participant also conveys the interpretation of a command.

## 4.4.6 Ideophones and periphrastic TAM-marking

Ideophones, when used as uninflecting predicates of clauses with further elements, can combine with the tense and mood particles *tut*, *tepe* and *(t)utepe* and with the element *mu'je* in its function as a marker of perfective aspect.

In the previous example (23) the particle *tut*, in second clause position in front of the ideophone, temporally situates the depicted event in the future, while the ideophone in (24) is accompanied by the frustrative particle *tepe* which marks the activity as unsuccessful:

(24) (tal\_kujakyt, 0129.977)
Otẽtap ete tepe ti tok tok tok.
door POSP FRUST EVID IDEO.knock
"'ymy, 'ymy, ange, ange!", an zotsu a'yn.
INTERJ mother.VOC mother.VOC, NEG indeed PART
\*She knowled at the down in actin "Way a facily mother wether " Nething (homeoned) '

'She knocked at the door in vain. "I'm afraid, mother, mother!". Nothing (happened).'

The irrealis particle *(t)utepe*, which marks an event as hypothetical or counterfactual, could not be encountered in the corpus in combination with an ideophone functioning as a predicate.

Perfective aspect is marked by  $mu'j\tilde{e}$  ('(al)ready', 'finished')<sup>484</sup> in clauses with ideophones which do not depict a punctual event or are repeated several times, as in (25) and (26) respectively:

<sup>&</sup>lt;sup>484</sup> Cf. section 3.3.5, example (100).

(25)(kal\_sham\_myth\_3, 0045.746)

Howww<sup>485</sup> how, nã=por- 'apozyp -eju -tu

IDEO.accumulate.sth.above.the.skin IDEO, 3= ANTI-cure.with.hand.vt-IMPF-NOM

ti nã me, howww mu'jẽ.

EVID 3PRO PART, IDEO PERF

'Howww (he accumulated something above his skin), he cured him (performed a shamanic ritual) with his hand, finished.'

(26)(kal tawozy3, 1063.558)

Ko'jem ti me, wej-'u 'yto ti kitã a'yn,

tomorrow EVID PART, 3- ingest.vt then EVID DEM PART,

puuuuu, puuuu, puuuuu mu'jẽ a'yn.

IDEO.vomit PERF PART

'The next day, he took it (the potion to make someone vomit) then, pu pu pu finished (he vomited and finished vomiting).'

Independent ideophones "adopt" the temporal setting expressed in the TAM affixes or particles of adjacent clauses. In (27) the event referred to in the preceding clause is situated in the future. Since the ideophone depicts the same activity, ear-piercing, to which it adds a manner component ('by means of arrows'), it has the same location in time:

(27) (kal\_kamukuaka4, 0108.115)

Kapatsu tut kaminu'at etetsã=po'at-(t)u?Jatã tsu teta t=up-attok-(k)uwhatFUT boyPOSP 3pl=make.iv-NOM, DEM like size 3-be.vi-NOMagpierce.tv-NOMtuttsã'e,wyyw.FUT 3plPRO PART, IDEO.pull.bow-string

'What are they going to do with the boys? They will pierce (the ears of) those of a size like this, wyyyw (with arrows).'

<sup>&</sup>lt;sup>485</sup> The meaning of the ideophone was given by a consultant without looking at the video recording, which suggests that it is either conventionalized or that the consultant gave this interpretation due to his contextual knowledge.

Ideophones in this function can likewise occur in the environment of clauses referring to hypothetical and counterfactual events marked by the particle (*t*)*utepe*. In (28) three ideophones precede the respective clauses with finite predicates depicting the same activities which are marked as counterfactual:

## (28)(kal\_awakap1, 0939.477)

Kytyk kytyk kytyk, o-tep a'vn, **huuu**, utepe ti o-tem tene 3-climb.up.vi IRR EVID PART IDEO.come.out 3-come.out.vi simply IDEO.climb.tree utepe waraju a'yn. Tok tok tok tok, o-pap utepe ti waraju a'yn. IRR savage PART IDEO.kill.with.club 3-finish.vi IRR EVID savage PART 'Kytyk kytyk kytyk, if they had climbed up (the tree), huuu (all of a sudden), the savages would simply have come out. Tok tok tok tok tok (being killed with a club), the savages would have finished.'

The ideophones in (28), as in (27), specify the manner of performance: *kytyk kytyk* depicts the act of climbing (up or down) a tree, *huuu* indicates that the movement is sudden, and *tok tok* provides information on the way the savages are killed.

Another illustration is (29) from the same mythological narrative about the origins of the ear-piercing ritual as (27). In the old times the ritual was performed by the brothers Sun and Moon on a protagonist called Kamukuaka by shooting with an arrow. The two actually wanted to kill him by hitting his eye instead, but he anticipated the arrow and turned his head at the right moment, so that it only hit his earlobe:

(29) (kal\_kamukuaka4, 0113.783)

An tut tetapokwawawyka kaminu'at a'yn. **Tsaky,** neta wo wene **tutepe** a'yn. An tut t-etapokwawap-yka kaminu'at a'yn, tsak-y n=eta wo wene tutepe a'yn NEG FUT 3-anticipate.st-NEG boy PART IDEO.hit-INTENS 3=eye POSP still IRR PART, *omajõ tutepe a'yn*. o-majõ tutepe a'yn 3-die.vi IRR PART

'A boy will not anticipate (the arrow). Tsaky, it would still be in the eye. He would die.'

Syntactically, the ideophone *tsaky* ('hit with an arrow') must be analysed as preceding a non-verbal clause with a locative PP as its predicate and an unexpressed subject, due to the fact that the PP *neta wo* ('in the eye') is followed by two second position particles. The referent of the unexpressed subject, however, is identical with the referent of *tsaky*, so that the TAM-marking can be adopted.

In (30) the event depicted by the ideophone tok is the second in a sequence of three events – not seeing, killing with a club and eating – of which the other two are encoded by finite predicates and – by addition of the particle utepe – marked as counterfactual. In two subsequent clauses marked with utepe, the event referred to in the second clause usually is a consequence of the event referred to in the first clause. Thus the event depicted by the ideophone is also marked as counterfactual, whereby its classification as cause or consequence must be inferred by contextual knowledge:

(30) (kal\_makawaja, 2201.535)
Wej-tuw -yka a'yt utepe ti kitã,
3- see.vt-NEG EMOT IRR EVID DEM,
tok, wej-'u a'yt utepe ti zanu a'yn.
IDEO.beat.with.club 3- eat.vt EMOT IRR EVID also PART
'If he hadn't seen them, tok (they would have killed him), they also would have eaten him.'

Similar to (29), in (31) a semantically almost empty clause with grammatical particles is followed by another clause which consists of an independent ideophone depicting a repetitive event. Again, the grammatical information can be related to the content information conveyed by the ideophone:

(31) (kal\_makawaja, 0579.203)
Nanype tepe 'yto ti me, tuk tuk tuk tuk.
3=POSP FRUST then EVID PART IDEO.step
'There (they say that) he tried it then, (he stepped on it) tuk tuk tuk tuk.'

As in the case of 'knocking' in (24), the activity of stepping on a surface, expressed by the ideophone, is marked as unsuccessful in the sense that the activity took place but the effect

was not the one hoped for. In the narrative context a protagonist tries to lose weight in order to be able to walk on a delicate surface, but during the attempt referred to in the example the surface breaks under his feet.

Ideophones occurring as invariant content elements in complex verb phrases can be combined with both imperfective markers *-ju* and *-zoko* on the finite light verb *'e* as well as with TAM particles due to the status of these constructions as full lexical verbs. Examples for a combination with the future particle *tut* are given in (20) and (21) above, and in (32) the "ideophonic verb" *pxyw e'i* ('he turned over') is combined with a frustrative particle *tepe*, which in this case can be interpreted as an unsuccessful attempt to perform the action:

#### (32) (kal\_tawozy4) (0967.83)

*Kujtãn ywo tepe ti, pxyw e'i a'ang tepe. Pyw, mojte nã=zymane-tu.* DEM POSP FRUSTEVID IDEO.rotate 3.say EVID FRUST IDEO immediately 3=circle.iv-NOM 'High up there it tried (to turn him over), "pyw", it made in vain. Pyw, immediately he went in a circle.'

This interpretation contrasts with the ones in examples (24) and (31) above in that the performance of the turning movement actually does not take place during this first attempt. While the frustrative particle in combination with finite verbs and "ideophonic verbs" can convey both interpretations, i.e. an unsuccessful attempt and a performance without the intended effect, with independent ideophones or ideophones as invariant predicates the interpretation can only be the second one, because the use of ideophones implies the performance of the activity they depict.<sup>486</sup>

## 4.4.7 Ideophones and clausal negation

Since ideophones in their more independent functions cannot be separated from their performance, they also cannot combine with negative morphology. That ideophones cannot be negated in any language has been pointed out by many researchers, e.g. by Kilian-Hatz's (2001:158) who states that they are affirmative by definition due to their function of adding a dramatic dimension to an action that takes place in the discourse by simulating a

<sup>&</sup>lt;sup>486</sup> In the case of hypothetical or counterfactual events the performance may be interpreted as taking place in the imagination of the interlocutors.

sensation. In the rare cases where they do occur in negated sentences, these sentences are usually rhetoric<sup>487</sup>. Dickinson (2002: 195) observes for the language Tsafiki that ideophones in combination with a 'generic' verb<sup>488</sup> can occur under the scope of negation but that in this case the negation represents a metalinguistic evaluation, indicating that the performance took place in a different way from what is depicted by the ideophone. This is illustrated by the example reproduced in (33):

(33) (Dickinson 2002: 196) *Poton poton poton ti -tu -e.*IDEO say-NEG-DCL
'It didn't go poton poton poton (it made a different sound).'

Unlike in Awetí, where this feature is subject to variation and signals the degree of grammaticalization an ideophone has undergone, in Tsafiki the ideophones in these constructions are all prosodically marked, which may be the reason for this restriction. An example from the Awetí corpus, where the ideophone occurs in a similar type of construction but without being prosodically marked, is (19)(b), repeated here for convenience:

(19)b. (mopot\_manioc, 0342.718)

I= kyp -(p)u akyj nje, an pu pu e'i -ka a'yn.
3F=cook.vi-NOM PART PART NEG IDEO.boil 3say.iv-NEG PART
'It cooks, (until) it does not make "pu pu" (any more). (= until the sound, indicating that steam comes out of the vessel, changes or ceases)'

As indicated in the translation, the negation embracing the complex predicate does, similar to the Tsafiki example, not indicate that an activity does not take place but simply that the depicted activity changes its sound quality or ceases.

<sup>&</sup>lt;sup>487</sup> See Kilian-Hatz (2001: 158) for an example from Baka, a language spoken in Southeast Cameroon.

<sup>&</sup>lt;sup>488</sup> Cf. section 1.3.6.

More examples of this kind were elicited with two Awetí consultants. The negative construction works with ideophones depicting activities with a certain characteristic sound (e.g. *parang* 'hit with a club', *tirik tirik* 'walk on dry leaves') as well as with those which are not accompanied by a specific sound (e.g. pyw 'grab', kuzuk 'get inside'). In the first case it can either mean that the activity did not take place or that it took place without a sound or with a different one, the interpretation depending on contextual information. In the second case the activity is negated, i.e. the scope of the negation extends over the whole verb phrase as it does with simple verbs. The possibility of both interpretations of logical as well as meta-linguistic negation for sound-imitating ideophones in these constructions would in Kita's (1997: 390/1) line of argumentation be evidence for a dual status of this complex verb phrase in terms of its categorization as belonging to the 'affecto-imagistic' or the 'analytic' dimension of meaning representation.<sup>489</sup> In a later article Kita (2001: 434) admits this dual status for Japanese 'mimetic verbs' which he did not discuss in his earlier work. In the context of this study of Aweti ideophones the possibility of interpreting the negation either way is taken as evidence for the beginning of a development from ideophone to ordinary verb.

In example (34) the ideophone *tirik* ('step on dry leaves'), referring to a motion event accompanied by a characteristic sound, occurs in a complex predicate together with a nominalized light verb. The speaker describes how people put their bows onto the ground and step on them in order to avoid making a sound when approaching the enemy:

(34)(kal\_awakap1, 0498.167)

 $N\tilde{a}$  = 'apo waraju o-ut a'yn, 'yzapat 'apo pok, 'yzapat 'apo pok, 3PRO=on savage 3-come.vi PART, bow on IDEO.put.to.ground, bow on IDEO, tirik o = 'etu ti me.

IDEO.step.on.dry.leaves, 3coref=say-NOM EVID PART

'(Stepping) on it the savages approached, on a bow that they put onto the ground, on a(nother) bow that they put onto the ground, (in order) <u>not</u> to make "tirik" (when stepping on dry leaves)'.

<sup>&</sup>lt;sup>489</sup> Cf. section 2.3.

The complex predicate was translated by Awetí consultants with a clausal negation, even though no negative element is given in the clause. An alternative construction with an explicit negator would have been the insertion of the negated verbal form *an tirik e'ika* ('it does not make "tirik"") in the same clause position, as confirmed by an Awetí consultant.

Similarly, no negation is used in (35), neither in the main clause predicate, the action nominal *tsãtempu* ('they go outside'), nor in the ideophonic construction in the subordinated clause, which is formed with the gerund. Instead, a negative marker *an* ('no') is given as the non-verbal predicate of the following clause and thus extends its scope over the whole preceding sentence. The example is taken from the autobiography of an old man. The speaker complains about the young men who do not practice the traditional wrestling any more which begins with a ritual stamping of the feet:

(35) (kup\_autobiogr, 0399.076)

Kape-'jyttut ãtiwo tsã=tem-pu,tuk tuk tuko='j-aw,an a'yn.where-DIM FUT after3pl=go.outside.vi-NOM, IDEO.stamp.feet3coref=say.vi-GER, NEG PART'Not now nor later will they go outside to make tuk tuk tuk.'

(lit.: 'Now or later they will go outside making tuk tuk, no (they won't).')

The reason for the absence of a negation in the ideophonic constructions in (34) and (35) is that the nominalized form of the light verb is used which – due to a gap in the paradigm – cannot be negated. A possible historical explanation for this absence of a negation in these nominalized constructions will be given in chapter five, where different phases of a grammaticalization process will be described.

### 4.4.8 Summary

Syntactically, free ideophones always occur as independent clauses, even if they semantically combine with the finite predicate of a preceding or following clause by adding a manner component similar to manner adverbs. When functioning as predicates, they can either occur by themselves or together with arguments and adjuncts. Ideophones – less frequently – can be the invariant part of a complex predicate in combination with a finite light verb '*e*. The ideophones in these constructions predominantly refer to vocal events.

They can be prosodically marked or not, whereby there seems to be a correlation between absence of prosodic markedness and morphological complexity of the light verb. When occurring as independent linguistic units, ideophones always constitute affirmative declarative clauses. They can combine with various TAM particles, expressing e.g. future and irrealis mood or indicating that an activity, marked as processual by repetition of the ideophone, is concluded. But when they form complex predicates with a light verb, ideophones can combine with most of the verbal morphology, including negative markers. The interpretation in the case of sound-imitating ideophones in such constructions can be one of meta-linguistic or logical negation. These constructions are considered 'ideophonic verbs' rather than ideophones in a proper sense.

## 4.5 Semantic aspects

As outlined in section 2.3, the mental conceptualization of the meaning of ideophones is assumed by various researchers to be distinct from that of other words in a language. As a consequence, their meanings cannot be described in the same way as the meanings of other lexical words with their specific referents which are defined by convention. Due to their sound-symbolic nature ideophones communicate in various semiotic modalities: they are words, i.e. arbitrary symbols, and at the same time they have characteristics of iconic signs in that they simulate events or their most salient features, as was e.g. pointed out by Nuckolls (1996: 12).<sup>490</sup> Nuckolls further argues that ideophones thus represent performative statements which – unlike assertions – do not state anything about an event but become the event itself, i.e. a speech event turns into a narrated event and the distinction between one and the other, as postulated by Jakobson (1971: 133), collapses. A further distinction which Nuckolls draws between these and other words in a language is that sound-symbolic words (of which ideophones – in her conception – are a subgroup) have an "image-schematic" structure of meaning in the narrow sense outlined by Johnson (1987) and Lakoff (1987). While words in a proposition are structured by cognitive operations involving logic or abstract thought, image schemata are "embodied patterns of meaningfully organized experience" which are generated by "our perceptual interactions

<sup>&</sup>lt;sup>490</sup> In Dingemanse's definition, reproduced in section 1.1, this feature of ideophones is expressed in the word "depict".

and bodily movements within our environment" (Johnson 1987: 19).<sup>491</sup> Image schemata are preconceptual and consequently nonpropositional. They "exist [...] in a continuous, analog fashion in our understanding" (Johnson 1987: 23). Lakoff (1987: 267) states that schemata in this sense describe knowledge structures recurring in everyday bodily experience (such as containers, paths, links, forces, balance) as well as in orientations and relations (e.g. updown, part-whole, centre-periphery). According to Nuckolls it is due to this schematic structure that ideophones in Pastaza Quechua are directly meaningful, and this also explains their ability to occur in syntactic isolation and be meaningful to their speakers without a context, a feature which was also observed for Awetí ideophones.<sup>492</sup> Nuckolls states that a prerequisite for their identification without a context is shared world knowledge, and other scholars, too, noticed that such elements in specific languages cannot as readily be identified by members of other speech (and cultural) communities.<sup>493</sup> As a further consequence of their schematic structure, ideophones - as the schemata of bodily experience given by Lakoff indicate – do usually not refer to (or depict) specific activities. They rather contain "structural features [which are] common to many different objects, events, activities and bodily movements" (Johnson 1987: 24). Therefore they receive different interpretations in context, where they imitate (perceptually salient features of) concrete events.

An alternative approach towards the meaning of ideophones is to treat them like other words in a language and assume the existence of homonymy, i.e. that one form can have various related or unrelated meanings. Due to the special semiotic status of these elements, which makes them more similar to representational gestures than to arbitrary words, this approach does not seem very appropriate and will only marginally be taken into account here. Although there are examples in the Awetí corpus of identical forms depicting completely different events, which may be accounted for in this way, the major part of the usages of one specific form can be related to the same underlying bodily experience.

<sup>&</sup>lt;sup>491</sup> While in a broad definition, based on the *schema-thema* distinction in classical Greece, schemata are conceived of as action-orientated visualizations of concepts (cf. Baer 2010: 874), Johnson (1987: 25) does not limit them to the perceptual modality of vision.

<sup>&</sup>lt;sup>492</sup> Cf. sections 4.4.1 and 4.4.2.

<sup>&</sup>lt;sup>493</sup> Cf. Munro's (1998) expressive 'say' constructions in Chicasaw and a summary of her results in section 1.3.4.

While Nuckolls (1996) lists collocations of ideophones with different verbs, this has not been done here, because ideophones do not need a verb in an adjacent clause to be meaningful. They can be interpreted by means of different contextual information, including representational gestures – a feature which will be explored in detail in section 4.6.

The sound-symbolic features of Awetí ideophones on the level of phonemes or phoneme clusters will be described in section 4.5.1. In section 4.5.2 the semantic domains covered by these elements will be presented. Different levels of conventionalization can be observed for Awetí ideophones, which are outlined in section 4.5.3. A major semantic contribution of ideophones to an utterance is the expression of aspect, i.e. the temporal contour of events, as will be shown in section 4.5.4. In section 4.5.5 the major differences in the presentation of events by ideophones and lexical verbs will be outlined.

#### 4.5.1 Phonosemantic characteristics of ideophones

As was outlined in section 4.3.2.2 and illustrated by the variant forms of one ideophone in table 4.3, the semantic variation in ideophones cannot entirely be attributed to morphological changes caused by full or partial reduplication. Since it is also often not possible to find a base form for a morphologically complex ideophone, it must be assumed that meaning-bearing units in this class of words are smaller than morphemes.

Many linguists have pointed out that the form-meaning relationship of ideophones across languages is less arbitrary than that of other words and that there are correlations between form and meaning on a sub-morphemic level. Thus, Kita (1997: 379/ 380), in his study of Japanese ideophones, suggests that "in this realm of mimetic forms, phonemes seem to have meanings of their own". And Jendraschek (2002: 42), who finds many correspondences between individual phonemes or a certain syllable structure and meaning in Turkish ideophones, cites Wissemann's observation regarding onomatopoeia, which in this respect display a similar behavior: "Im rein notionalen semantischen Bereich der Sprache ist das Wort und höchstens noch das Kompositionsglied bzw. Suffix die kleinste

Sinneinheit, im onomatopoetischen Bereich aber darüber hinaus Silbe, Lautgruppe und Laut" (Wissemann 1954: 139).<sup>494</sup>

Unlike what Gabas & Van der Auwera (2004: 410) state for ideophones in the Tupian language Karo which, according to the authors, "do not exhibit any strict sound-meaning correspondence", the Awetí data indicate that in this language such correspondences exist and definitely could be carefully described in the same way as has been mostly done for Asian languages. Since this kind of description requires a native speaker competence coupled with a well-developed meta-linguistic awareness or at least a close cooperation with native speakers, I will restrict myself here to a few systematic correspondences for which corroborative evidence could be found in the corpus.

# 4.5.1.1 The meaning of final /k/, /m/ and vowels

A first sound-meaning correspondence can be observed between mono- and disyllabic ideophones ending in the plosive /k/, ideophones with a nasal /m/ in the coda of the only or last syllable, and monosyllabic ideophones with a vocal coda. While the velar plosive and the nasal indicate contact with hard and soft surfaces respectively, the vocal coda implies the absence of contact.<sup>495</sup>

The repeated ideophone *tok tok tok* ('knock at door') in (1) is an example for the first type:

(1) (tal\_kujakyt, 0129.977) *Otẽtap ete tepe ti tok tok tok.*door POSP FRUST EVID IDEO.knock
'She knocked at the door in vain.'

<sup>&</sup>lt;sup>494</sup> "On a purely notational semantic level of language the word and possibly the morpheme are the smallest meaning-bearing units, but on the onomatopoeic level additionally the syllable, phoneme class and phoneme" [my translation].

<sup>&</sup>lt;sup>495</sup> A similar sound-meaning correspondence between final /?ks/ as opposed to a final /m/ was observed for Iroquoian languages by Mithun (1982: 54, footnote 1). And van Gijn (2006: 86/ 87) points out for Yurakaré that punctual events are expressed by ideophones ending in a plosive, while less punctual events are expressed by a final fricative, nasal or vowel.

For the second type examples are given in (2) and (3):

(2) (tal mamuti 1 8, 1243.932)

Nã 'ywo ti kujã **tom**. Tom tom tom tom tom. nã='ywo ti kujã tom tom tom tom tom 3= with EVID woman IDEO.jump.in.water IDEO.swim Kujã 'ytatawokotu ti me. -oko -tu kujã *'ytatap* ti me woman cross.water.vi-IMPF-NOM EVID PART 'Together with him the woman tom (jumped into the water). Tom tom tom (she was swimming. The woman started to cross (the river).'

(3) (maw\_male\_recl, 0470.367) *Tatitap tsom* ny wo. O-wurwure -ju tatitap a'yn.
scraper IDEO.throw.into.water liquid POSP 3-float.vi -IMPF scraper PART
'Tsom (he throws) the scraper into the liquid. The scraper is floating.'

In both examples (2) and (3) the ideophones refer to the contact between an entity and water. There are two opposition pairs in these two utterances. In (2) a punctual ('jump into water') and a repetitive activity ('swim') are expressed by the opposition between a single utterance and a repeated utterance of the ideophone *tom*. In addition, the ideophone *tsom* in (3) as opposed to the ideophone *tom* in (2) indicates that the object which falls into water is small or not heavy.

Examples (4) to (6) contain ideophones ending in vowels:

(4) (kal\_makawaja, 0763.719)
Awati pii pii pii. Wej-'apyky ti a'yn.
corn IDEO.sprinkle 3- distribute.vt EVID PART
'Pii pii pii (he sprinkled) corn. He distributed it.'

(5) (kal\_mene, 0106.487) **Pu pu pu**. W-e'en ti tsãn a'yn. IDEO.vomit 3- vomit.vi EVID 3plPRO PART 'Pu pu pu (vomiting). They vomited.'

(6) (tak\_kujakyt, 0633.142)

Tuuutarak,wej-'awỹtia'yn.IDEO.fly IDEO.fail.target 3-fail.target.with.arrow.vt EVID PART'Tuuu tarak (the arrow flew and fell to the ground), he failed to hit with an arrow.'

In (4) and (5), with repeated ideophones, processual states-of-affairs are depicted. Example (6) with a single ideophone *tuu*, referring to the flying or falling of an entity, illustrates that ideophones with a final vowel do not by themselves depict any contact, because here the interruption of the movement is expressed by a following ideophone *tarak* ('fly and fall to ground'), ending in a voiceless plosive.

The meanings of single and repeated occurrences of monosyllabic ideophones ending in a diphthong /10/ or /10/ are summarized in table 4.7 below. Here it is more difficult to find any semantic feature unifying all the depicted events, except that in none of them the movement is obstructed by a spatial boundary or resistance of material. In addition, compared to monosyllabic ideophones ending in a vowel, the depicted movements seem to be shorter and, if repeated, slower than a reduplicated vowel-final ideophone.

Form	Meaning in context	Form	Meaning in context
/kŧu/	'cut'	/kɨʊ kɨʊ kɨʊ/	'eat'; 'scratch' <sup>496</sup> ; 'carve';
			ʻdig'
/рғо/	'get up'; 'take'; 'turn'	/pɨʊ pɨʊ pɨʊ/	'row'; 'circulate'; 'fly with
			difficulty'
/t∫iu/	'tear apart'	/tʃiʊ tʃiʊ tʃiʊ/	'cut feathers'; 'sweep'
/tsiu/	'treat with medicine'		'smoke'

Table 4.7: Non-arbitrary form-meaning correlation in ideophones

<sup>&</sup>lt;sup>496</sup> In this specific cultural context "scratching" refers to the ritual cutting of the skin by means of a scraper which (in the past) used to be fabricated from the teeth of the carnivorous trahira fish. This procedure is believed to make men become good wrestlers or hunters (cf. Hartmann 1986: 179).

/włu/	'bend flexible material'; 'get up	-	
	(from lying position)'; ('get		
	well') <sup>497</sup>		
/ZIU/	'stroke'; 'wipe'	/210 210 210/	'scoop together'

Examples for single and repeated pyw and tiw will be given in 4.5.3.

Form $C_1VC_2$	Meaning in context	Form $C_1V_1\mathbf{r} V_1C_2$	Meaning in context
/pɛk/	'saliva hitting water'	/pɛrɛk/	'fish jumping up and down'
/pɔk/	'put'; 'sit down'; 'give	/porok/	'get up'
	sth.'		
/puk/	'dance'	/puruk/	'dance'
/tak/	'break solid object'; 'hit	/tarak/	'fail target with arrow';
	solid object'		'break solid object'
/tək/	'hit wooden object';	/tərək/	'break wooden object';
	'beat with stick'		'close door'
/tuk/	'step'	/turuk/	'dig ground'
/tik/	'step'	/tirik/	'limp'; 'climb tree'
		/t∫irik/, /t͡sirik/	'walk on dry leaves'
/tsok/	'pierce with arrow'	/tsorok/	'pierce through' (e.g. ear)

Table 4.8: Systematic correspondences between mono- and disyllabic ideophones

4.5.1.2 The semantic difference between ideophones of a  $C_1V_1C_2$ , a  $C_1V_1\mathbf{r}V_1C_2$  and a  $CV_1[\mathbf{r}V_1]\mathbf{r}V_1$  syllable structure

All the ideophones listed in table 4.8 above have a final voiceless plosive /k/, indicating hard surface contact. In addition, the ones in the first column differ from the ones in the third in that they are monosyllabic, while the other ones are disyllabic with two identical vowels and an intermediate consonant /r/.

<sup>&</sup>lt;sup>497</sup> This is an extended meaning of "getting up". Generally *wyw* can be characterized as depicting any movement of an entity from straight to bent, without material resistance.

For the pair *tok* ('beat with/ hit wooden object') and *torok* ('break wooden object', 'close door') examples are given in (7)(a) to (c) and in (1) above:

(7) a. (kal\_kwaza, 1609.761)

Tok tok tok tok tok,  $ts\tilde{a}=k\tilde{y}j$  -oko -tu tepe ti, tok, mokawa wo me.IDEO.knock3pl=kill.vt-IMPF-NOM FRUST EVID IDEO.beat weapon with PART'(Beating), he tried to kill them, (beating) with a weapon (a big bow).'

b. (kal\_makawaja, 0911.581) *Wej-kang-tap ti a'yn, torok.*3- bone- break EVID PART, IDEO.break
'He broke its leg.'
(lit: 'He bone-broke it.')

c. (kal\_mene, 0631.903)
Matsapezan 'yp 'ype tok tok tok torok.
copaiba tree bark IDEO.beat IDEO.break
'They took off the bark of the copaiba.'

The examples in (1) and (7) demonstrate that the involvement of a wooden object or a bone in the activity is an element both ideophones have in common. All ideophones end in /k/, indicating that wood is a hard object. The difference between activities depicted by monosyllabic and by disyllabic ideophones of this type is that the monosyllabic activities ('beat', 'knock') are performed in one movement, while the disyllabic ones ('break bone', 'take off bark of tree') can be characterized as being performed with an interrupted movement due to material resistance.

In (8) (a) to (d) the semantic difference between *tyk* ('step') and *tyryk* ('limp', 'climb tree') is illustrated:

(8) a. (tal\_mamuti\_1\_8, 1231.654)

'The woman went on together with him, (walking) tyk tyk tyk.'

b. (kal\_ta\_wat, 0434.794)
Nã=to -zoko-tu me, tyk tatyta ete ti [a'yn].
3= go.vi-IMPF-NOM PART, IDEO.step river.snail POSP EVID
'He went on. Tyk, (he came across) the river snail.'
(lit.: '[...] Tyk, (he made one step and stopped). There was the river snail.')

c. (tal\_mamuti\_2\_8, 0659.226) *O-tep ti a'yn, tyryk tyryk tyryk tyryk tyryk tyryk tyryk.*3- climb.vi EVID PART, IDEO.climb.tree
'She climbed up (the tree).'

d. (kal\_makawaja, 1303.784) *Tyryk tyryk e'i a'yt ti n=eko -tu a'yn. Tyryge -tu me.*IDEO.limp 3say EMOT EVID 3=walk.vi-NOM PART, limp.vi-NOM PART
'Tyryk tyryk, does the poor (animal) when walking. There is limping.'

Similar to (7), the activities depicted by monosyllabic *tyk* ('step') in (8)(a) and (b) refer to uninterrupted moves, while *tyryk* in (8)(c) and (d) is used for activities, the salient feature of which is interrupted movement involving friction, such as climbing (i.e. 'moving the arms upwards and pulling up the body') or limping (i.e. 'stepping with one foot and dragging behind the other leg').<sup>498</sup> Example (8)(c) with a sequence of six *tyryk*, used autonomously to depict the climbing of a tree, occurs repeatedly in the corpus with this interpretation. As illustrated by (8)(d) with a light verb construction, the same ideophone can also depict a limping manner of locomotion. The almost identical verb root *tyryge*, however, which occurs in the same sentence in the form of an action nominal, can only refer to limping and never to the climbing of a tree. This shows that the concept expressed

<sup>&</sup>lt;sup>498</sup> Cf. section 4.3.5 and 5.3.

by the independent ideophone must be more general, admitting both interpretations, while the finite verb form can only refer to one specific event.<sup>499</sup>

In table 4.9 several systematic correspondences between ideophones of the syllable structures listed in table 4.8 and ideophones of a  $CV_1[rV_1]rV_1$  structure are summarized. The reduplicated forms without a consonantal coda in the right column differ from the mono- or disyllabic forms to their left in that they depict processual states-of-affairs which are either characterized by many quick, uniform movements or by the involvement of a long object or entity in the activity.

	-	-	_
Form C <sub>1</sub> VC <sub>2</sub> /	Meaning in context	Form	Meaning in context
$C_1V_1\mathbf{f} V_1C_2$		$\mathrm{CV}_1[\mathbf{f}\mathrm{V}_1]^{500}\mathbf{f}\mathrm{V}_1$	
/kirik/	'climb a tree'	/kiriririririri/	'friction of rope on a beam'
/kuzuk/	'enter'	/kururururu/	'enter a tunnel/ hole'
/puk/, /puruk/	'dance'	/purururururu/	'shake (one's body)', 'run'
/tirik/	'climb a tree'	/tiriririririri/	'slip down a tree stem'
/tsuruk/ <sup>501</sup>	'enter'	/tsururururu/	'enter a tunnel/ hole'
/tuk/	'step'	/tururururu/	'run'

Table 4.9: Correspondences between mono-/di- and multisyllabic ideophones

An example for *tyryryryry* ('slip down a tree stem') as opposed to *tyryk* ('climb a tree') in (8)(c) is given in (9):

(9) (tal\_mamuti\_4\_8, 0399.613)

*Tyryryryryry, tsãn=ekyp* -(*p*)*u ti me, tyryryryryr, tykyhy.* IDEO.slip.down 3pl= climb.down.vi-NOM EVID PART, IDEO.slip.down, IDEO.arrive 'Tyryryryryry (they slipped down the tree stem), they climbed down, tyryryryryr, arrived on the ground, tykyhy.'

<sup>&</sup>lt;sup>499</sup> Whether the light verb construction admits both interpretations could not be verified by corpus data.

<sup>&</sup>lt;sup>500</sup> Square brackets indicate that his segment can be repeated multiple times.

<sup>&</sup>lt;sup>501</sup> This ideophone is of Kamaiurá origin (cf. section 5.2).

Further examples for ideophones in the right column of table 4.9 are (13) and (20) below.

4.5.1.3 The components i t su/and i t so/as conventionalized sound symbolism

In table 4.10 ideophones with the components  $\hat{fsu}$  and  $\hat{fso}$ , mostly occurring in the first syllable, are listed. These components are analysed as instances of conventionalized sound symbolism referring to water or liquids in general.<sup>502</sup>

Form	Meaning in context
/kutsu kutsu/	'wash', 'rub liquid into fresh cuts in the
	skin'
/potsok/	'liquid gushing out and hitting an object or
	a surface'
/tsu/	'pour liquid'
/tsu:/	1)'urinate', 'pour liquid', 2) 'open door',
	3) 'suck'
/tsu tsu/	'wash'
/tsurum tsurum/, /tsururu tsururu/,	'cool down liquid'
/tsururum tsururum/	
/tsuruk/	1) 'get inside', 'insert', 2) 'pierce'
/tsurururu/	1) 'urinate', 2) 'get inside a deep hole'
/tsojk/	'(blood) gushing out (of wound)'
/tsom/	'sth. light falling into water'
/tsom tsom tsom/	'wash'

Table 4.10: Ideophones with the components  $f(s_0)$  and  $f(s_0)$ 

<sup>&</sup>lt;sup>502</sup> Cf. Mithun (1982: 54, footnote 11), who mentions that Iroquoian ideophones referring to water also usually contain sibilants.

An example with the ideophone *tsom* ('sth. light falling into water') was given in (3) above. Two further examples with *tsururum* ('cooling down hot liquid') and *tsojk* ('liquid gushing out') are (10) and (11):

(10) (ary\_fem\_recl, 0087.908)
I= por-ymywaje -tu ozo= kyty me, tsururum tsururum.
3=ANTI-cool.down.vt-NOM 1pl:incl=for PART, IDEO.cool.down
'She cools it down for us, tsururum tsururum (with a ladle).'

(11) (kal\_tawozy4, 1103.792) *Tsojk*, n=uwyk pore(-tu) watu ti [a'yn].
IDEO.gush.out 3=blood jump.vi-NOM big EVID
'Tsojk, its blood jumped out a lot.'

While the activity depicted by a repetition of *tsururum* in (10) involves more than one movement and a soft (or flexible) surface, *tsojk* in (11) indicates that something heavy (in this case a large quantity of blood) meets a hard surface.

Counterarguments to the idea that the component  $\frac{1}{12}$  has conventionalized as referring to liquids are apparently given by (12)(a) to (c):

(12) a. (tal\_mamuti\_2\_8, 1750.525) *Tsuruk*, *w-etse* ti a'yn.
IDEO.go.inside 3- go.inside.vi EVID PART
'Tsuruk, he went inside (into the house).'

b. (tal\_kujakyt, 2423.188) *O-to ti a'yn. Tsuuu otẽtap.*3-go EVID PART IDEO.open door
'He went. Tsuuu (he opened) the door.'

c. (tal\_kujakyt, 0195.842) *Tsurururu*, w-etse a'yn. O-to ti 'ywykwat ywo. 'Ywykwat ti 'og -an ne. IDEO.go.inside 3-go.inside.vi PART 3-go.vi EVID hole into hole EVID house-ATT PART 'Tsurururu, they went inside. They went into the hole (in the ground). The hole was a den (of the fox).'

While *tsuruk* ('enter', 'insert') is only used with this meaning, *tsu* ('open door') and *tsurururu* ('enter a deep hole') can both also occur as ideophones depicting liquids. Note, however, that the ideophone *tsuruk* is of Kamaiurá origin and that the speaker of (12), married to a Kamaiurá woman and living in a Kamaiurá village at the time of the recording, is the only person who regularly uses this form.<sup>503</sup> The equivalent form in Awetí, which is in use among the other speakers, is *kuzuk*. It is the same Kamaiurá-influenced story-teller, who uses the variant form *tsurururu* in the sense illustrated in (12)(c), indicating that the place which is entered is extended in space. The other story-teller, by contrast, uses *kururururu* to refer to an identical event, as shown in (13), a direct Awetí equivalent of (12)(c):<sup>504</sup>

(13) (kal\_awakap2, 1572.178)

Newizako n=etse -tu. O= kang ti kururururururu.
afterwards 3= get.inside.vi-NOM 3coref=leg EVID IDEO.get.inside
W-etse ti o= up -ej -aw a'yn, 'ywykwat ywo.
3- get.inside.vi EVID 3coref=be.vi-IMPF-GER PART, hole POSP
'Afterwards he got inside. He entered (with) his leg. He was getting inside the (deep) hole.'

Both story-tellers but none of the other speakers use the form tsu when referring to the event of opening a door. However, the ideophone does not depict the activity of entering a place but the sound made by an opened door, i.e. it is not semantically related to the ideophones in (12)(a) and (c) and may simply belong to the creative repertoire of ideophones as they are used by story-tellers.

<sup>&</sup>lt;sup>503</sup> Cf. section 5.2.

 $<sup>^{504}</sup>$  Cf. section 5.2 for an explanation of the sound change which has occurred in the intermediate consonant.

All other speakers use ideophones with the affricate  $\overline{/ts}/$  followed by /u/ or /o/ only when referring to liquids, so that the second meaning ('enter'), as illustrated in (12), is seen as an influence from Kamaiurá.

### 4.5.1.4 Creative variation

According to McGregor (2002), sets like the one listed in table 4.3,<sup>505</sup> of ideophones depicting friction, or of ideophones related to water, as summarized in table 4.9, are the result of the formation of neologisms based on patterned regularities which emerge "in the relation between ideophonic elements and the events they designate" (McGregor 2002: 344). This could be shown by the systematic correspondences between monosyllabic and disyllabic ideophones in table 4.8, by the semantic contribution of final plosives, nasals or vowels or of reduplication and repetition as outlined in section 4.3.

Another set, used by the two story-tellers, shows how a base form *popopo* ('fly') can be creatively modified to depict different manners of flying:

(14) a. (tal\_kamu\_kwat1, 0788.158)

Arakamo'ege-tunã.**Popopopopo** pok.species.of.birdmake.vt-NOM3PROIDEO.flyIDEO.land'He (the creator)made a parakeet. It flew up and landed.'

b. (kal\_tawozy3, 0613.549)

Put nã=ty. Powowowo nã='ytang a'yn.
IDEO.come.out 3= mother IDEO.fly.smoothly 3= in.front.of PART
'Put (came out) his mother. Powowowowo (it flew smoothly) in front of her.'

c. (tal\_kakaja, 0456.181)
Wej-t- atap ti me, jatã takururu,
3-EPEN-cross.vt EVID PART DEM speech.of.woodpecker

<sup>&</sup>lt;sup>505</sup> Cf. section 4.3.2.2.

### роророро роророро роророро роророро роророро. [...]

IDEO.woodpecker.flying

'It crossed (the field), this (one which makes) takururu, (flying) popopopo popopopo.'

d. (kal tawozy5, 0180.472)

"E=pywata-pywatan -eju -tu tut ne!". Purururururu.

2sg=RED- move.wings.vi-IMPF-NOM FUT PART IDEO. hummingbird.flying

"(You will) keep moving your wings!". Purururururu (the hummingbird vibrates its wings)."

e. (kal\_tawozy4, 0952.959)

*Pyw pyw pyw, nã=por-ezo- wure-tu 'yto ti, in, 'ywawo 'yto ti* IDEO.fly.with.difficulty 3=ANTI-COM-fly.vi-NOM so EVID, there, upwards so EVID

wej-zoto a'yn.

3-take.vt PART

'Pywpywpyw (flying with difficulty), he flew together with it then, there upwards he took it then.'

A comparison of the variant forms, which all depict the activity of flying, shows that the various processes of reduplication, repetition and a certain choice of final or intermediate phonemes have been combined in various ways to describe a specific manner in which the flying was carried out. In (14)(a) and (b) the opposition between intermediate /p/ and /w/ in the ideophones creates an image of forceful versus smooth movements, while the pair in (d) and (e) expresses a difference in speed: quick movements are signaled by reduplication with an intermediate flap, slower movements by the repetition of monosyllabic forms ending in a diphthong. In example (14)(c) the multiple reduplication and repetition creates a rhythmic sequence which verbally imitates a woodpecker's flight.<sup>506</sup>

### 4.5.2 Semantic domains

In comparison to ideophones in other parts of the world, Awetí ideophones are rather restricted with regard to the semantic domains they cover. At the same time they seem to be typical representatives of ideophones in Amazonian languages.<sup>507</sup> The predominant domains are sound, activities or movements and – within the latter – manner of locomotion. These domains are represented by the two groups of ideophones to different extent.

# 4.5.2.1 Sound and other sensory domains

The less conventionalized onomatopoeic ideophones of group II, as outlined in the introduction, are characterized as imitating sounds produced by humans, animals and elements of nature. These are, in the terminology used by Dingemanse (2009), instances of direct iconicity and belong to the category of 'imitative sound symbolism', as defined by Hinton et al. (1994). In Awetí these ideophones occur much more often in a construction with a light verb based on 'e ('say') than ideophones not related to sound, which would be corroborative evidence for the hypothesis that the original meaning of this verb played a role in the formation of the light verb construction.<sup>508</sup>

Sound may also play a role in ideophones of group I. These, however, more generally depict activities which may or may not be associated with a characteristic sound.

Apart from hearing, the sensory domain of sight can arguably be covered by group II ideophones, as illustrated by (15), with a prosodically marked ideophone in a light verb construction:

(15) (kam village, 0964.777)

Tututue'i-zoko'yto peti'a-putwyrype taza a'yn.IDEO.fire.burning 3.say-IMPF sopequi-DEVunderfirePART'Tututu makes the fire under (what used to be) the pequi fruit (in the pot).'

<sup>&</sup>lt;sup>506</sup> See sections 4.2 and 4.6 for more details.

<sup>&</sup>lt;sup>507</sup> Cf. sections 1.3 and chapter six.

<sup>&</sup>lt;sup>508</sup> Cf. section 4.4, table 4.6, and section 5.3.

The conventionalized ideophone *tututu* in (15) imitates a fire. The crackling of the fire may on the one hand be an audible sensation. On the other hand, the ideophone may also depict a visual sensation evoked by the movement of the flames. This hypothesis is supported by the observation that this aspect of the event is depicted by a gesture, produced during the utterance of the ideophone. In the gesture the speaker moves his arms in an uncoordinated way on a low level in front of himself.

Similarly, smell can be represented by a sound symbolic element in combination with a gesture:

(16) (tal\_kakaja, 1154.538)
"Mmm, i'ak wian", nã='e-tu a'yn.
sense.smell, poison still 3= say-NOM PART
"(I sense a smell), there is still poison (in the manioc soup)", she said.'

In (16) the sound-symbolic element *mmm*, occurring several times in this function in the same narrative, depicts the act of smelling. It is uttered with rising pitch, and the speaker at the same time lifts his right hand to his nose. However, the same nasal sound, although here indicating a 'nasal activity', also occurs in other contextual environments in the corpus, and its interpretation is always highly context-dependent. In addition and contrasting with ideophones, it does not have the structure of a monosyllabic word with a vocal nucleus. Therefore, it appears to be more appropriate to consider the iconic gesture, accompanied by a non-linguistic sound, as the meaningful sign in this utterance.

The sensory domains of taste and touch are not covered by ideophones but by interjections, which differ in various respects from ideophones, as was outlined in the introductory section and in section 3.3.7.3. Two examples of these highly conventionalized words are given in (17) and (18):

(17) (kal\_sham1, 0975.394) *Ete* jatã 'e! O-pitezewure watu [a'yn].
INTERJ DEM PART 3-swell.vi much
'This burns. It swells up a lot.'

(18) (kal kamukuaka6, 0317.687)

*Ymy me, an kaj- ekyw -yka me!* INTERJ PART NEG 1pl.incl-climb.down.vi-NEG PART 'We're afraid, we won't climb down!'

While *ete* in (17) is an exclamation uttered when feeling the pain of a burn, *ymy*, indicating that the speaker is scared, in (18) is an example for the expression of emotion which in Awetí, unlike in other languages, is also not a semantic domain covered by ideophones.

### 4.5.2.2 Activities and movements

All group I ideophones in Awetí express activities or rather the sensory perception of activities in terms of embodied image schemata.<sup>509</sup>

Nuckolls (1996: 138) groups ideophones in Pastaza Quechua according to "such cognitively basic experiences as falling, opening and closing, making contact with surfaces or penetrating through barriers, making deformative movements and gestures, experiencing sudden realizations and other highly salient perceptions". As outlined in the introduction of this subsection, this is also an appropriate framework for a semantic sub-classification of group I ideophones in Awetí, since it explains the characteristic feature of these ideophones to refer to a variety of events which can be related to each other by certain salient activities or movements they have in common.

In the scope of this dissertation the semantics of ideophones can only be treated exemplarily. The three typical ideophones in (19) represent three of the categories which were also found in Pastaza Quechua:

(19) (tal\_mamuti\_1\_8, 1574.226)

**Norok**, *o-te'ok ti a'yn. "Haj"*,  $n\tilde{a}$ =*'e-tu ti*, *tuuuuu*, *tom*. IDEO.tear 3-tear.vi EVID PART exclamation 3=say-NOM EVID IDEO.fall IDEO.fall.into.water 'Norok, it (the leaf she grasped on) tore. "Haj", she cried, tuuuuu (fell from great height), tom (into the water).'

<sup>&</sup>lt;sup>509</sup> Cf. section 2.3 and introduction to section 4.5.

While *norok* ('tear') can be classified as 'deformative action', defined by Nuckolls (1996: 232) as causing "the violation of an object or entity's integral structure", *tuuuu* ('fall') is an example for 'falling' and *tom* ('fall into water') for 'surface contact'.

Another example of an ideophone, the concept of which is also subsumed by Nuckolls (1995: 229f.) under the category of 'falling', is given in (4), repeated here for convenience:

(4) (kal\_makawaja, 0763.719)
Awati pii pii pii. Wej-'apyky ti a'yn.
corn IDEO.sprinkle 3- distribute.vt EVID PART
'Pii pii pii (he sprinkled) corn. He distributed it.'

Contrasting with *tuuu* in (19) the falling entity here is characterized as a collection of small objects which in Awetí tend to be represented by high front vowels.<sup>510</sup>

A third example, in which two ideophones represent 'surface contact' of different kinds of objects, is given in (20):

(20) (tal kakaja, 529.968)

Kyryryryryryryryryryryryryryryrytuk-yhy.W-ekypokywãna'yn.IDEO.friction.of.ropeIDEO.meet.surface-INTENS,3-come.down girl.in.seclusion PART'(He made the cage with the girl come down), its rope rubbing along the roof beam, it metthe ground forcefully. The girl in puberty seclusion came down.'

The ideophone *kyryryry* depicts the friction of a moving object or entity along a surface. The multiple repetition of the second syllable indicates that it is a long, uniform movement (or alternatively a long object, as the rope in the example, since the two actions can be subsumed under the same image schema); the friction is indicated by the flap. The following ideophone *tukyhy* refers to the contact of a big or heavy object on a hard surface. The ideophones further differ in that the first expresses a processual and the second a terminative state-of-affairs.

<sup>&</sup>lt;sup>510</sup> A similar ideophone *ki* in Pastaza Quechua is defined as "to throw, spill, or sprinkle a collection of similar objects or entities" (Nuckolls 1996: 229).

Manner of locomotion

Special attention will be given here to one large subgroup within the ideophones of group I, which can be characterized as vocal imitations of 'manner of locomotion'. These ideophones differ from other ideophones depicting activities in that they primarily convey information on the manner the activity is performed in and that they also often impose semantic restrictions on the agent involved in the motion event. Ideophones referring to locomotion are always repeated or reduplicated and thus depict iconically the repetitive nature of the activity.

A semantic restriction with regard to the participant can be illustrated by (14) above. In the example several ideophones are listed, which depict different manners of flying. Within this group there are two ideophones in (14)(c) and (d), which not only narrow down the agents to birds (or – as in one narrative – to a person with wings) but to a hummingbird and a woodpecker which can be distinguished by their characteristic flying movements.

Ideophones depicting locomotion in most cases occur in the direct environment of clauses with finite predicates referring to the same motion event. Two examples are given in (21)(a) and (b):

(21) a. (tal\_kakaja, 0576.926) *O-ut* ti n=atitoza a'yn, tyk tyk.
3-come.vi EVID 3=mother-in-law PART, IDEO.walk
'His mother-in-law came, (walking) tyk tyk.'

b. (tal kamu kwat1, 0993.873)

Nãn=ete o-tem tsãn a'yn, tyk tyk.
3= POSP 3-go.outside.vi 3pl.PRO PART IDEO.walk
'Through it they went outside, (walking) tyk tyk.'

In both examples the ideophone *tyk tyk* imitates a person's walking on a path. The complete motion event, however, includes a component of direction or path which is not provided by the ideophone but by the verbs *ut* ('come') and *tem* ('go outside') in the adjacent clauses. In the following example (2), repeated from above, another verb '*ytatap* 

('cross water') again provides information on the path (and on the ground), while the ideophone *tom tom* ('swim') refers to the manner:

(2) (tal\_mamuti\_1\_8, 1243.932)

[...] **Tom tom tom tom.** Kujã 'ytatawokotu ti me. tom tom tom tom tom kujã 'ytatap -oko -tu ti me IDEO.swim woman cross.water.vi-IMPF-NOM EVID PART

'[...] Tom tom tom (she was swimming. The woman started to cross the water (river).'

This general semantic restriction of ideophones of locomotion which – in order to express full motion events – often depend on motion verbs in adjacent clauses is also reflected in a specific use of co-occurring 'path' gestures, which will be described in section 4.6.4.

### 4.5.3 Conventionalization of ideophones

As was mentioned in section 4.2 above, many ideophones in Awetí seem to be conventionalized, i.e. they are invariantly used by different speakers in the same contexts and also identified without a context. This could be confirmed at a relatively early stage of the documentation work by counterchecking a list of  $70^{511}$  randomly chosen ideophones from part of the corpus with a group of four trained Awetí speakers, who managed to give the same meanings for 39 of them without knowing the context.<sup>512</sup> Some further 20 ideophones were partially identified, i.e. a related meaning or – in the case of ideophones with various meanings (interpretations in context) – only one of them was given. Only for nine of the ideophones the informants either gave a different meaning, or the item was declared to be heavily context-dependent and/or an ad-hoc creation of the speaker.

At a later stage of analysis, however, the results of the test had to be revised, because it became increasingly clear through systematic comparison of corpus examples that most ideophones have an 'image schematic' meaning, i.e. they depict salient features of bodily experience or orientation in space which may characterise a variety of activities. Therefore the ideophones need to be interpreted in context. In addition, the "meanings" originally

<sup>&</sup>lt;sup>511</sup> The list also contains six items later classified as interjections.

<sup>&</sup>lt;sup>512</sup> See Appendix II.

listed for the ideophones encountered in a more restricted corpus turned out to represent only part of the possible interpretations and the deviant "meanings" given by the consultants could all be admitted as interpretations in different contexts than the one(s) until then encountered in the data.

Those ideophones which unambiguously depict one specific event turned out to be the exception rather than the norm. Other ideophones, as also stated by the consultants during the test, were spontaneously created in certain contexts, usually to enhance the dramatic effects of a narrative performance, and did not occur anywhere else. These creatively combined different phonosemantic, prosodic and morphologically expressive features, as given in the examples in section 4.5.1.4.

In the following subsection 4.5.3.1 two of the relatively rare ideophones which each depict one specific event will be presented, and in 4.5.3.2 it will be illustrated by two ideophones that their 'image schematic' meaning allows for a considerable number of different interpretations in context.

#### 4.5.3.1 Conventionalized ideophones with one interpretation

Two Awetí ideophones which are clearly conventionalized in form and meaning are *lok* and *kutsu*.

The ideophone *lok* usually occurs only once and refers to an entity getting out or being pulled out of a hole or some other kind of place, by which it had been tightly enclosed. In the Awetí corpus this ideophone is only used by the two story-tellers, altogether 23 times, including one multiple use which is given in (22):<sup>513</sup>

(22) (kal kamukuaka4, 1568.722)

Okytãj-mut'yto tilok lok lok lok lok lok lok. $N\tilde{a}$ =por- izyk-(k)utinã.support.beam-NPST soEVID IDEO.get.out.of.hole3=ANTI-throw.vt-NOM EVID 3PRO

<sup>&</sup>lt;sup>513</sup> Note, however, that different from the ideophones in 4.5.3.2 the repetition here simply expresses that the same event occurred several times.

'So what used to be the beams to support the house lok lok lok lok lok lok lok (he pulled them out of their holes in the ground). He threw them in front of it (the monster-snake, to feed it with them).'

The ideophone *kutsu* only occurs repeatedly and is used altogether 12 times by 4 different speakers. It has the general meaning of rubbing liquid into the skin and is either used when referring to someone washing himself or another person with water, as in (23), or in the context of applying medicine to the body, as illustrated in (24):

(23) (tal\_mamuti\_3\_8, 0698.733)

Nã=te- kyzy-kyzy-ju -tu ti me, kutsu kutsu kutsu.
3= REFL-RED- wash-IMPF-NOM EVID PART IDEO.rub.in.liquid
'He was washing himself, kutsu kutsu kutsu.'

(24) (maw\_male\_recl, 0756.529)

Me'ym n=atit -(t)u, kyw kyw. Kutsu kutsu  $n\tilde{a}=potang$ .

right.after 3=scrape.vt-NOM, IDEO.scrape IDEO.rub.in.liquid 3= potion

'Right afterwards there was scraping (of the next person's skin) kyw kyw. Kutsu kutsu (he rubbed in) his (soothing) medicine.'

The existence of these context-independent ideophones alongside the 'schematic' ones described in the following subsection may be explained by different origins: While ideophones of the type described in 4.5.3.2 below are deeply rooted in the structure of the language, the ones considered here may have had their origins in verbs or been borrowed from related TG languages, where they belong to the category of verbs with concrete meanings.<sup>514</sup> Corroborative evidence for the first of these hypotheses may be the almost

<sup>&</sup>lt;sup>514</sup> Cf. the discussion of *kon* ('ingest') in section 5.1.

identical verb root *loge* ('get out of a hole') and a verb kyzy ('wash'), which – in comparison to the equivalents in TG languages – has undergone sound changes.<sup>515</sup> On the other hand one may argue that the meaning of the ideophone *lok* itself is image-schematic in that the release from a tight enclosure represents a basic bodily experience.

## 4.5.3.2 Conventionalized ideophones with different interpretations

In order to account for the schematic semantic structure of most Aweti ideophones, a quantitative corpus analysis was carried out for *pyw* and *tiw* which both occur in many different contexts throughout the corpus and are used by all speakers. For the analysis 49 annotated media files were investigated.<sup>516</sup> Each occurrence of the ideophone, either simple or repeated, was counted and listed under its respective interpretation in context. The presentation of the results was further divided into occurrences in 'narrative' and in 'non-narrative' texts, separating the discourse of the trained story-tellers from that of other members of the speech-community.

# The ideophone *pyw*

Probably the most common ideophone in Awetí is pyw which in the corpus occurs in its standard pronunciation ['p<sub>1</sub> $\upsilon$ ] but also as non-standard ['p<sup>S</sup><sub>1</sub> $\upsilon$ ].<sup>517</sup>

According to corpus examples and confirmed by Awetí consultants, *pyw* in its non-repeated form can depict the activity of getting up or stooping, of taking, lifting up or turning an entity over or around.

If it is used repeatedly, *pyw* can depict circulating movements, e.g. the rowing of a boat, the act of tying something flexible around an object or the reverse activity of unwinding something. Apart from these, there are a few other interpretations, as listed in table 4.11.

<sup>&</sup>lt;sup>515</sup> Cf. section 6.1.3, example (25) for an almost identical verb root *kusu* ('wash') in Emerillon, which may be realized with an affricate [ts] instead of a fricative. See also Drude (2006), who argues that [z] is an Awetí innovation which does not exist in TG languages.

<sup>&</sup>lt;sup>516</sup> See Appendix I.

 $<sup>^{517}</sup>$  See section 4.2.1.

Ideophone <i>pyw</i>	Narrative texts	Non-narrative texts
'get up'	19	9
'wake up'	2	-
'stoop'	2	-
'turn gaze'	1	-
'take sth.' 'lift up'	61	24
'turn over'(vertically)	20	-
'turn around' (horizontally)	4	1
'jump from a tree'	3	-
'bring'	-	2
'release'	2	-
Ideophone <i>pyw pyw pyw</i>	Narrative texts	Non-narrative texts
'row a boat'	5	1
'tie around'	11	1
'unwind'	4	-
'roll up'	1	-
'circulate'	4	-
'fly with difficulty (carrying sth. heavy)'	1	-
Total	140	38

Table 4.11: Distribution of the different usages of the ideophone *pyw* 

What joins the activities listed in table 4.11 is that each of them involves a turning or bending movement, either performed once or repeatedly.

The distribution of usages over both text genres shows that the most common interpretation of *pyw* is that of 'lifting something or oneself up', an activity which involves curving and straightening of the hands, arms or the whole body. The repeated form is most often used in the context of tying a rope around an object. The repeated forms are far less frequent than the single occurrences. Another feature of the ideophone revealed by its distribution is that the direction of the movement, whether performed horizontally up ('lift up'), down ('stoop'), sideways ('turn gaze', 'turn around') or vertically ('turn over'), does not seem to be a meaning component. Equally not part of the meaning is the number of

participants, whether it is just one agent ('get up', 'circulate/ spin') or an agent and a patient ('take sth.', 'row a boat'). The same ideophone can further be used to depict reverse activities ('tie around', 'unwind') which are performed with the same movements.

While in the non-narrative texts 36 single and two repeated forms depict only six different events with a concentration of 33 instances on the core interpretation(s),<sup>518</sup> the distribution in the narrative texts is more varied. Altogether nine different usages of the single form could be encountered in the texts as well as six usages of the repeated form. A reason for this variation may be seen in the creativity of the professional story-tellers, who use ideophones more freely than people without this special training in narrative performance.

Some of the usages of *pyw*, such as 'jump from a tree' in (25) or 'wake up' in (26), are more difficult to relate to the underlying 'image schema':

## (25) (kal\_awakap1, 0791.528)

*Mã tupene* ti nãpyangka katu nupejutu pe pyw риии mã utepe wene ti nã= pyangka katu n=up -eju -tu pe pyw puuu here IRR still EVID 3= fork.of.tree POSP right 3=be.vi-IMPF-NOM IDEO.jump.up IDEO.fly *wej-'apyratap in o-temantem tepe* ti o =tw -aw a'yn. 3- cross.over.vt there 3-escape.vi FRUST EVID 3coref=go.vi-GER PART 'If he had been directly at the fork of the tree, pyw (jumping up), puuu (flying) he would have crossed over (them) and managed to go there and escape.'

(26) (kal\_angut1, 1472.578)
Nã=mỹje -tu ti kitã me, pyw. O-mỹje ti a'yn.
3= wake.up.vi-NOM EVID DEM PART, IDEO.wake.up 3- wake.up.vi EVID PART
'He woke up, pyw. He woke up.'

The feature depicted by the ideophone in (25) is the bending of a flexible branch of a tree, which would have given the protagonist the impetus to jump a far distance over his

<sup>&</sup>lt;sup>518</sup> Since the number of participants does not play a role in ideophones (cf. section 4.5.5.2), 'getting up' and 'lifting something up' can in fact be summarized as one usage of *pyw*.

enemies waiting under the tree. The narrator, by choosing to produce this image, turns the attention of his audience towards a detail which creates suspense or empathy.

In (26) the usage of the ideophone pyw for 'waking up' implies the common interpretation of 'getting up'. The ideophone pyw is often used in the context of getting up from one's hammock, where one has been asleep, and in this case a shift to the immediately preceding event of waking up has occurred.

Another usage of the ideophone confirms Nuckoll's (1996: 14) observation that shared world knowledge is a prerequisite for the interpretation of ideophones and that this "world" is a socially constructed one which need not be the same for every community. This is illustrated by (27), where the repetition of *pyw* depicts the perceptually salient activity of tying something around an object which in the Xinguan culture characterizes the preparation of a witchcraft item:

(27) (kal\_kamukuaka6, 1434.447)

Nã=ti 'yto tsã=pytizyk -(k)u tsã=wetã'jat -ap ete ('yto) me 'e, 3= after then 3pl= chant.incantation.vi-NOM 3pl= revitalize.vt-NOMinstr POSP (then) PART PART mu'jẽ, pyw pyw pyw pyw pyw pyw.

ready IDEO.use.witchcraft

'After that then they chanted an incantation on a thing to revitalize them, (they) finished. Pyw pyw pyw pyw pyw pyw (tying something around an object).'

The verb *pytizyk* ('to chant an incantation') in the immediately preceding clause does not refer to the same activity but to a different shamanic technique, a vocal activity which is often accompanied by smoking. In the corpus the repeated usage of *pyw* occurs twice in this function and has been listed in the category of 'tying around'. The difference, however, between the ideophone in (27) and elsewhere is that a very specialized cultural knowledge is required for its interpretation, whereas in all other instances the interpretation depends on basic world knowledge and contextual information. The latter applies to the second example, presented in (28), where the ideophone is used to depict the same activity, but where at the same time contextual information is provided by explicit reference to the item (*tupiat*) and to its preparation by wrapping up (*atī*) leftovers of the person to be killed (*nemi'ũkangut*). The example is from a dialogue between two men, who talk about the death of a relative:

(28) (kal\_ama\_maw\_oldvillages, 0474.463, 0477.397)
"Tupiat ywo, pe'je?" "Tupiat ywo me.
witchcraft POSP PART witchcraft POSP PART
Wej-t- atĩ tsãn a'yn, pyw pyw pyw n=e-mi'ũkangut. [...]"
3- EPEN-wrap.up.vt 3plPRO PART, IDEO.tie.around 3=REL-leftover
""(It was) with witchcraft, wasn't it?" "(Yes, it was) with witchcraft. They wrapped it up, pywpywpyw his leftovers. [...]"

# The ideophone *tiw*

The ideophone tiw [<sup>t</sup>fiu] also has various contexts of use and mostly occurs in repeated form. It can depict a variety of events: reaping out plants, sweeping the ground, peeling manioc, carving wood or cutting hair or feathers. In its non-repeated usage it depicts the tearing of a manioc pancake into pieces.

Ideophone <i>tiw</i>	Narrative texts	Non-narrative texts
'tear apart manioc cake'	1	1
'tear off salt from a lump'	1	-
'reap out plant'/	10	-
'clear ground from weeds'		
'sweep ground'	5	-
'take off peel/ bark'	1	-
'cut arrow cane'	1	-
'cut hair'	-	1
'cut off wing of bird'	1	-
Total	20	2

Table 4.12: Distribution of the different usages of the ideophone *tiw* 

This ideophone occurs considerably less frequently in the corpus than pyw. A comparison of its different contexts of use reveals that the image schema here is characterized by the forceful separation of something from a whole, either with the hands or by means of an instrument. At the same time a specific sound quality seems to be associated with this activity, a feature which also often applies to the image-schematic ideophones analysed by Nuckolls (1996).<sup>519</sup> An associated sound component is evident in (29), where a person takes off a bit of vegetal salt from the lump it has been formed into:

(29) (tal\_kaminu, 0623.505)

**Tiw**. Tehehe ti [a'yn]. "Jo-'u etsan ne!"  $n\tilde{a}$ = 'e -tu [a'yn]. IDEO.take.salt INTERJ EVID IMP-eat.vi PART PART 3= say-NOM '(She took away some salt from the lump), tiw. (They say that) it was beautiful. "Eat it!", she said.'

A similar sound is audible when hair is cut with a razor blade<sup>520</sup> or (imaginable) when a small bird uses its beak to separate the feathers of a big bird's wings from the body, as in (30) from a mythological narrative:

(30) (kal\_tawozy5, 0439.981)

Nã=po- kytse-kytse-tu, nã=po- po'ingka-tu ti kitã nã me, tiw tiw tiw tiw.
3= ANTI-RED- cut.vt -NOM 3= ANTI-separate.vt-NOM EVID DEM 3PRO PART, IDEO.cut.feathers
'He (the hummingbird) was continuously cutting (it), he separated it, tiw tiw tiw.'

Most of the activities depicted by *tiw* involve the removal of dry leaves, bark or weeds, as shown in (31).

(31) (kal\_angut1, 1071.221) *Tiw tiw tiw tiw, wej-'apizyk ti 'op a'yn.*IDEO.sweep 3- sweep EVID leaf PART
'Tiw tiw tiw tiw tiw (sweeping), he swept (away) leaves.'

<sup>&</sup>lt;sup>519</sup> Cf. section 2.3 ex. (6).

<sup>&</sup>lt;sup>520</sup> This is the usual way Xinguans cut their hair.

This is also a characteristic of the related ideophone *tirik tirik* [tʃi'rik tʃi'rik] 'walking on dry leaves', as illustrated in (32).

(32) (tal\_kakaja, 107.117)
Nã=to-tu me, tirik tirik tirik tirik tirik.
3=go.vi-NOM PART, IDEO.walk.on.dry.leaves
'He went on, walking through the thicket.'

The ideophone in (32), for depicting an activity which is performed with contact to the ground, has a fortis plosive /k/ at the end, while in (31) the diphthong in *tiw* indicates that the activity does not have an abrupt end caused by spatial limitations.<sup>521</sup> Although we have here opted for one image-schematic meaning, under which the different interpretations in context can be subsumed, it is also possible to assume a case of polysemy for a lexical entry *tiw* with the two definitions given in (33):

(33) *tiw* 

1. to separate something forcefully from a whole by hands/ instrument

2. an idea of the sound made by a certain movement

By the assumption of polysemy it would be easier to account for the less typical activities, such as "sweeping the ground", arguing that in this case the ideophone has the second meaning. The other interpretations given in 4.12, however, could be subsumed under either meaning.

4.5.4 Ideophones and aspect

In section 3.4.2.1 it was shown that the grammatical marking of aspect distinctions in Awetí is not very elaborate. Morphological marking is mostly restricted to the imperfective suffixes -(e)ju and -(z)oko, which in combination with the lexical aspect of verbs express different states-of-affairs and at the current stage cannot be clearly functionally

<sup>&</sup>lt;sup>521</sup> Cf. section 4.5.1.1.

differentiated from each other.<sup>522</sup> Another morphological process is full reduplication of verb stems, which either expresses processual states-of-affairs ('event-internal verbal plurality') or the repetition of an event by one or by several participants ('event-external verbal plurality'), whereby the respective interpretation depends on the context.<sup>523</sup> Perfective aspect on ideophones can further be expressed by the particle *mu'jẽ* ('ready', 'finished').<sup>524</sup> The aspectual distinctions which can be provided by ideophones or their combinations, in comparison, are considerably more explicit. While in preceding subsections the respective semantic contributions of phonological, morphological and prosodic variation were discussed individually, <sup>525</sup> the creation of aspectual contours by various combinations will be presented here.

Nuckolls (2001), who noticed a relation between ideophones and aspect categories in Pastaza Quechua, offers the following explanation for this observation: "Aspect encodes temporal concepts such as momentaneousness, completiveness, and durativity. [...] The encoding of aspect expression is linked to spatial, perceptual experience. Ideophones assist in the expression of aspect because they encode ideas of perceptually salient experiences [...]" (Nuckolls 2001: 279).

4.5.4.1 Phonologically similar ideophones depicting aspectual contours of similar events

In Awetí there are phonologically similar ideophones referring to events which share certain semantic features. Their formal variation seems to correspond to differences in the aspectual contour of the similar events they depict.

As was outlined in section 4.3.2.2, it is not entirely possible to describe the relationship between related ideophones such as *kykyky*, *kyryryryry* and *kyryk kyryk*, given in the examples (34), (20) and (35) below, by morphological processes of reduplication, due to the absence of the respective base forms (i.e. *ky* or *kyry*) in the data. Nevertheless, they all

<sup>&</sup>lt;sup>522</sup> Cf. table 3.8 in section 3.3.4.2.1.

<sup>&</sup>lt;sup>523</sup> Cf. section 3.3.8.3.

<sup>&</sup>lt;sup>524</sup> Cf. section 4.4.6.

<sup>&</sup>lt;sup>525</sup> Cf. section 4.2.4, 4.3.2, 4.3.5.

have in common that they depict friction, i.e. the physical contact of a moving object against a rigid object or a surface.

The ideophone *kykyky* is used altogether six times by the older one of the two storytellers to refer to the movement of a hammock, when people lie down or have sex. The ideophone *kyryryryry* occurs, whenever long uninterrupted friction is involved in an event. This can be, when a fishing-net is moved through water, when a person slips down a tree stem or into a tunnel or when an object with a long shape is pulled out of a place or container. In the corpus it was used 44 times by three different speakers. *Kyryk kyryk*, finally, is used to depict events which involve friction when occurring in repetitive movements. The ideophone can be either repeated only once or multiplied. It occurs altogether twelve times, depicting events such as climbing up or down trees or ladders or rolling up hammocks.

While in *kykyky* in (34) and *kyryryryry* in (20) the friction is of a rope on a house beam, the ideophone *kyryk kyryk* in (35) depicts the friction of a body against a tree stem:

(34) (tal\_kujakyt, 2519.947) *Kykyky n=e'inĩ*.

IDEO.lie.down.in.hammock 3=REL-hammock 'She lay down in her hammock.' (lit.: 'Kykyky her hammock.')

(20) (tal\_kakaja, 529.968)

(35) (tal mamuti 2 8, 1212.749)

W-ekyptia'yn, kyryk kyryk kyryk kyryk tyk.3- climb.down.vi EVIDPART IDEO.climbIDEO.step'She climbed down, kyryk kyryk kyryk kyryk, (arrived on the ground) tyk.'

The ideophones differ with respect to the "temporal internal structure of an eventuality they select", as was also noticed by Kita (1997: 404) for variation within Japanese mimetics. While Kita classified 'adverbial mimetics' as combinations of Vendler's (1967) categories of state, activity, accomplishment and achievement, here the respective lexical aspect expressed by ideophones will be classified in terms of different states-of-affairs as proposed by Sasse (1991).

The ideophone kykyky in (34) consists of three identical short open syllables with a velar plosive in their onset. These depict the short and uniform back-and-forth movements with heavy friction performed by the rope against a house beam when a person lies down or moves around in a hammock. In addition the ideophone ends in a vowel and – unlike the ideophones depicting friction in (20) and (35) – is not followed by a monosyllabic ideophone with a consonantal coda referring to a punctual event. This indicates that the movement is continuous and does not have an end-point. In Sasse's terminology the ideophone thus expresses a processual state-of-affairs of the event.<sup>526</sup>

In (20), repeated from above, the ideophone *kyryryryry* with its multiple reduplication of the syllable /rt/ depicts a long uniform smooth movement by which the friction of a rope against a roof beam is characterized, when a cage hanging on it is gradually lowered to the ground. The ideophone is additionally uttered with a falling pitch, indicating a downward movement, and followed by another ideophone *tukyhy*, depicting forceful contact, i.e. an abrupt end of the movement. The event of lowering a cage as it is depicted by the sequence of these two ideophones can thus be described as a terminative state-of-affairs.

In example (35), finally, the repeated occurrence of *kyryk* signals regular sequences of interrupted friction which occur when a person climbs down a tree.<sup>527</sup> These come to an end when reaching the ground, as is signaled by the punctual ideophone *tyk* ('step'). The sequence, as the preceding one in (20), expresses a terminative state-of-affairs. In both cases the ideophones referring to friction express a process which is interrupted by a punctual event expressed in a second ideophone. A further difference in the contour of the depicted event of lowering a cage in (34) as opposed to the depiction of a person climbing down a tree in (35) can be perceived when taking into account the falling pitch

<sup>&</sup>lt;sup>526</sup> Cf. section 3.3.4.2.1.

<sup>&</sup>lt;sup>527</sup> See also table 4.9 and the discussion of examples of the type  $CV_{1f}V_1C$  in section 4.5.3.

accompanying the utterance of *kyryryryry* which already conceptualizes the prefinal stage of a gradually terminative state-of-affairs.

4.5.4.2 Identical ideophones depicting similar aspectual contours of different events

Some ideophones in Awetí can be formally identical but refer to different events with the same aspectual contour.

In example (36) an ideophone is illustrated, the usage of which seems to be little conventionalized in this context as it only occurs twice in the corpus with this specific interpretation and as it is not readily identified by Awetí consultants: <sup>528</sup>

(36) (kal\_awytyza1, 0968.026)

 $Ts\tilde{a}=pyryryge-tu$  watu ti o= ut -aw **purururururururur**. 3pl= shake.vi -NOM much EVID 3coref=come.vi-GER, IDEO.shake 'They arrived and shook (their bodies) a lot, purururururu.'

The ideophone *pururururu* in (36) depicts a ritual body-shake, possibly with a menacing function, performed by warriors in a village which is surrounded by the enemy. Although given by the consultants in the form captured in (36), it was uttered in the same text with and without a bilabial plosive at the onset of the first syllable, and towards the end of its utterance it was in both examples pronounced with voiceless bilabial fricatives [ $\phi$ ] replacing the alveolar flaps [r]. At its first utterance without the plosive it was not recognized by the two consultants, and neither was the clearly related verb *pyryryge* ('to shake'). At their second mentioning in the same text both elements were identified, whereby the possibility cannot be excluded that their meanings were inferred from contextual information.

The meaning of an ideophone can also be deduced by analogy, since the same forms in different contexts usually share a semantic aspect. An example, where the ideophone in

<sup>&</sup>lt;sup>528</sup> See also table 4.4 in section 4.3.5 and footnote 445.

another context was identified without any problem by the same consultants, is given in (37):

(37) (kal\_tawozy5, 0180.472)

"E=pywata-pywatan -eju -tu tut ne!". **Purururururu**.

2sg=RED- move.wings.vi-IMPF-NOM FUT PART IDEO. hummingbird.flying

"(You will) keep moving your wings!". Purururururu (the hummingbird vibrates its wings)."

Here there is no formal correspondence between the ideophone and the verb referring to the same activity. Rather, the ideophone is a variant of other ideophones depicting the manner of flying of different birds or in different situations, as listed in (14) above.

The ideophones in (36) and (37) thus do not depict the same event but a specific aspect which is identical in both activities: the rapid performance of an uncountable number of short movements, i.e. a processual state-of-affairs. This is signaled by the reduplicated form and by the intervocalic flap. This aspectual meaning can further be corroborated by a third example (38), where yet another event, running, is depicted by this ideophone, while a preceding ideophone *tuk* ('step') indicates inchoative aspect:

(38) (tal\_mamuti\_1\_8, 0187.82) *Tuk*, [e] o-tan ti kitã kaj= amũj Mawutini, purururururu.
IDEO.step 3-run.vi EVID TOP 1pl.incl=grandfather PropN, IDEO.run
'Tuk, our grandfather Mawutini (started and) ran, pururururu.'

### 4.5.4.3 Non-linguistic sound depicting aspectual contours of events

Finally, the aspectual contour of an event can be expressed by the utterance of nonlinguistic sound in a specific rhythm. These spontaneously created and semantically empty elements will not be considered as ideophones in this study, since they do not have the form of lexical words and their meaning is completely context-dependent. Such elements can be universally applied to convey an additional semantic effect of repetition which is expressed by prosodic means rather than by the form. Examples are given in (39) and (40):

(39) (kal sham1, 0986.522)

Kaj'a kitãmut kyzyjutu. kyzyjutu me. Kaj='a kyzy-ju-tu me. kitã-put kyzy-ju-tu, 1pl.excl=head wash.vt-IMPF-NOM PART, DEM-PAST wash-IMPF-NOM Kajtekarikarawut kvzvjutu tsãnemijungut kaj= tekarikat-ap -ut kyzy-ju-tu tsãn= emijung -ut 1pl.excl=adorn-NOMinstr-PAST wash-IMPF-NOM 3pl= REL-NOMpat-put.vt-PASS mh mh mh mh. kajete me. kaj=ete me mh mh mh mh

1pl.excl=POSP PART, IDEO.repeat

'They were washing our head(s), they were washing (off) that (former stuff). They were washing what had been our ornament (body paint) which they had put on us, doing mh mh mh all over.'

(40) (kal\_sham1, 1705.512)

A-'ok-eju nan=ete nã me, mh mh mh mh.
1sg-pull.out.vt-IMPF 3=POSP 3PRO PART, IDEO. repeat
'I went on pulling it (the spirit) out of her, again and again.'

In both cases the phonetically identical 'rhythmic articulation'<sup>529</sup> is not identified by the Awetí consultants as depicting a specific activity but as indicating that the activities referred to by the finite predicates *kyzyjutu* ('they continued washing it (off)') and *a'okeju* ('I went on pulling it out') are performed repeatedly. In (39) this interpretation is corroborated by co-occurring gesturing: while producing the utterance, the speaker passes over his whole body with his hand, and he continues doing so (on his lower legs), when uttering the 'ideophone'. Another interesting observation in this context is that in both examples the finite predicates are marked with the imperfective aspectual suffix -(e)ju

<sup>&</sup>lt;sup>529</sup> In (39) it is repeated slightly more rapidly than in (40).

which is preferentially combined with ACTI verbs to express progressive aspect.<sup>530</sup> The verb 'ok ('to pull out') in (40), usually expressing a TTER state-of-affairs, in this culture-specific context of pulling out spirits is also aspectually marked as referring to an ongoing activity. In both cases the aspectual marking cannot additionally express repetitiveness, an aspect which thus is provided by the unspecified 'rhythmic articulations'.

## 4.5.5 The meaning of ideophones compared to finite verbs

Apart from their general semiotic distinctiveness, ideophones in Awetí are similar in meaning to intransitive and transitive active verbs in that they depict events or salient features of these. In several respects, however, ideophones are semantically clearly distinct from verbs, as will be discussed in this subsection.

## 4.5.5.1 Semantic specificity of sequences of ideophones compared to finite verbs

Although most ideophones are schematic in meaning, sequences of two or three different ideophones can be considerably more precise than a finite verb referring to the same event or activity.

In an early article Derbyshire claimed that ideophones in the Carib language Hixkaryana are usually redundant when co-occurring with an inflected verb.<sup>531</sup> Ideophones in this language were described as "uninflected, onomatopoeic words carrying the meaning of an action which can also be expressed in an inflected verb" (Derbyshire 1977: 179). He illustrated this by the following example, in which ahpo is the ideophone:

## (41) (Derbyshire 1977: 178/9, (12))

Hawana me nomokyatxkonà, àhpo. Amna nomokno ketxkon ha.
Visitors as they-used-to-come, action-of-arriving. We-excl. have-come they-said emphasis
'They used to come as visitors, àhpo (arriving). "We've come," they said.'

In fact, in this and a second, very similar example provided by Derbyshire the ideophones seem to repeat the meaning expressed by the finite verb preceding it. Similar observations on ideophones in Apalai, also from the Carib family, were made by Koehn & Koehn

<sup>&</sup>lt;sup>530</sup> Cf. section 3.3.4.2.1, table 3.8.

<sup>&</sup>lt;sup>531</sup> Cf. section 1.3.

(1986), who added that ideophones in these syntactic environments only encoded meaning in a very basic way due to the fact that – in comparison to the finite verb – they did not provide any information on person or tense. However, neither in Derbyshire's nor in Koehn & Koehn's article information on prosody or performative features can be obtained, by which ideophones can often be distinguished from other words and which – as shown in section 4.2 and 4.6 – are non-verbal modalities carrying part of their meaning.

Kita's (1997) solution to this alleged "redundancy" problem of ideophones in Japanese is to assume that these imagistic elements, along with gesture and prosody, belong to an altogether different meaning dimension than ordinary words.<sup>532</sup> Unlike the linguists working on Hixkaryana and Apalai, Kita is a native speaker of the language he investigates and – already for that reason – may have been more sensitive with regard to such observations.

The following examples will show that the meaning of ideophones in Awetí can be much more precise than the meaning expressed by a finite verb in the same syntactic environment.

The examples (42) to (44) express complex events which are encoded in a verb as well as in a sequence of two or three ideophones. In (42), the two ideophones kyw and tak function as the predicate of the clause:

(42) (tal mamuti 4 8, 0125.9)

*O=pytã ti, jatã ti kyw tak, kyw tak, kyw tak, kyw tak, kyw tak, kyw tak.* 3coref=toenail EVID, DEM EVID IDEO.cut IDEO.loosen 'His toenails, he cut them (5x).'

(lit.: 'His toenails, these kyw tak (5x) (he cut and they broke off).')

The patient of the action is given by the demonstrative *jatã* ('this/ these'), made explicit by the left-dislocated NP *opytã* ('his toenails'). The agent is implicit but can be deduced from the preceding discourse environment. Compared to the English translation with a verb which only encodes the cutting component, the ideophones capture two components of the event: the cutting and the subsequent loosening or breaking off of the toenail. In addition,

<sup>&</sup>lt;sup>532</sup> Cf. sections 2.4 and 4.4.1.

the narrator utters this sequence exactly five times, which may indicate the exact number of events.

In (43) three ideophones depict an event referred to by the finite verb  $otylym\tilde{u}$  ('she spat') in the preceding clause:

(43) (tal mamuti 2 8, 0722.036)

*Me'ym ti Tanumakalu otylymũ ti a'yn,* right.after POSP PropN 3-spit.iv EVID PART,

puj puwu peek, 'y wo.

IDEO.spit IDEO.fly IDEO.hit.water-surface water POSP

'At that very moment Tanumakalu spat, (she) spat out, (the saliva) flew, landed in the water.'

Again, each ideophone depicts a component of the event which is divided into the act of spitting, the flying of the saliva through the air, and the landing on the water surface.<sup>533</sup> Thus, the event is evoked in its three (perceptually salient) phases instead of only one component of it or a reference to it as a unity as is done by the verb. A similar situation is given in (44):

(44) (kal\_awytyza1, 1253.683)

*"O-te- pykur- 'api a'yt ti nã=men", nã=pe kitã nã='e-tu me.* 3-REFL-tip.of.toe-knock.vt EMOT EVID 3=husband, 3=POSP DEM 3=say-NOM PART

"Tak popopopo tuu, o-'at".

IDEO.knock IDEO.stumble IDEO.fall, 3-fall.vi

"Her husband knocked himself on the tip of his toe", he thought about him/ her. "(He) knocked (himself), stumbled and fell, he fell"."

<sup>&</sup>lt;sup>533</sup> Note that the syntactic and the semantic division of the utterance do not match: While syntactically there are two clauses with a clause-boundary indicated by the particle a'yn (cf. section 4.4), semantically the information 'y wo ('into the water') is absent in the first clause but already encoded in the ideophone *peek* of the second clause (cf. sections 4.2 and 4.5.7). Therefore the string of ideophones on semantic grounds can be interpreted as an insertion in the utterance with a finite verb and a right-dislocated adjunct.

The example contains three ideophones, but only the meaning of the first and the third one are encoded by finite verbs in the immediate context. These are *tak* ('to knock'), also represented in the first clause by the more explicit *otepykur'api* ('he knocked himself on the tip of his toe') with an incorporated object, and *tuu* ('to fall'), encoded in *o'at* ('he fell'), the predicate of the last clause. The stumbling, intervening between the acts of knocking oneself and falling, is depicted by the ideophone *popopopo* but not by a verb.<sup>534</sup>

The following example (45) shows that ideophones expressing a complex event need not form a sequence. In (45) the activity of unfastening a leg ornament is described by one lexical verb *otezap* ('he unfastened himself'), accompanied by three different ideophones to specify parts of the event – *kyw kyw kyw* ('undoing the knot'), *pyw pyw pyw* ('unwinding the cotton thread from the leg') and *zyzyzyy* ('rolling up the thread into a ball'):

(45) (kal\_kamukuaka5) (0514.82)

3coref=REL-leg-ornament-NPST IDEO.roll.up

'So kyw kyw (he undid the knot), untied it, untied it thoroughly, pyw pyw (unwound it), untied it thoroughly (from the leg) and zyzyzy (rolled up) what had been his leg ornament (in a cotton-ball).'

Neither the ideophone *kyw kyw kyw* ('undoing the knot'), signaling the first phase, nor the ideophone *zyzyzy* ('roll up the thread'), which depicts the final phase of the event, have a verbal counterpart in the utterance.

In expressing various facets of one complex event and not displaying verbal morphology the sequences of ideophones in (42) to (44) have characteristics of serial verb constructions.<sup>535</sup> The depiction of an event by ideophones further resembles Pawley's

 $<sup>^{534}</sup>$  The combination of *popopo* and *tu* to depict the event of stumbling and falling could be encountered several times in the Awetí corpus.

<sup>&</sup>lt;sup>535</sup> Cf. Pawley (1993: 95); Payne (1997: 307).

(1993) description of event representation in the Papuan language Kalam. According to Pawley (1993: 87), "Kalam speakers are markedly more analytic and explicit than speakers of European languages in their reporting of the action components of events". In Kalam the phases of an event can be represented by a combination of bare verb stems in a serial verb construction which – unlike in Awetí – is concluded by an inflected verb with a very general meaning. A conventional Kalam expression, according to Pawley, is given in (46):

(46) (Pawley 1993: 88, (1)) *pk wyk d ap tan d ap yap g-* 'to massage'
strike rub hold come ascend hold come descend do

Pawley states that, although verbs in Kalam form a closed class of about 100 words of which 35 have a fairly general meaning, speakers can be very precise in combining them to strings as the one outlined in (46). In addition, the order of the verbs in these serial verb constructions normally matches the temporal order of the described acts in the same way as this happens in the sequences of ideophones illustrated in (42) to (45).<sup>536</sup> Similar to the completive function of a punctual ideophone when following a processual one in Awetí,<sup>537</sup> Kalam verbs, too, can have an aspect-marking role when concluding a serial verb construction, as e.g. in (47):

(47) (Pawley 1993: 103, (24))

a. *tb* **ask**- 'cut sth. free' cut free

b. *tb lak yok-* 'split sth. off'

cut split displace

Pawley points out that the mechanisms of discourse structure in Kalam are very different from European languages in that "subject and object nominals are generally dispensable" (1993: 112), while "reporting complex events in terms of component events is often necessary" (1993: 112). Both principles are also observable with regard to Awetí

<sup>&</sup>lt;sup>536</sup> Cf. Pawley (1993: 119).

<sup>&</sup>lt;sup>537</sup> Cf. examples (20) and (35) in section 4.5.4 above.

ideophones, even though here they seem to have the special function of dramatizing or highlighting an event in discourse. The principle of doing without any participant-marking elements in events represented by ideophones will be explored in the following subsection.

## 4.5.5.2 Event focus of ideophones versus agent focus of finite verb

For ideophones all over the world it has often been reported that they conceptually encode the action rather than the participants. Kita (1993: 15, 1997: 406) noticed for Japanese 'mimetics' that the event representation they stand for does not include agentivity or causality which are concepts of the 'analytic dimension' of meaning representation he postulates for all other words in the language: "In the affecto-imagistic dimension, different facets of an experience are represented. These include the affective, emotive, and perceptual activation of an experience but do not include the rational construal of it based on such things as agentivity and causality" (Kita 1997: 387).<sup>538</sup>

Moore (2002: 149/150) perceived a tendency for ideophones and uninflecting verbs in various Tupian languages to occur without explicit participants. In this context he cites an idea communicated by Gildea that uninflecting verbs focus on the action and not on the relation between participants which is expressed by verbal morphology. Similarly, Rose (2003: 578) observed that arguments in the context of Emerillon ideophones are often either given contextually or by surrounding verbs. She states that these elements refer to a general concept of activity, not being modifiable with regard to the organization of semantic, syntactic and pragmatic roles. According to her analysis, "l'idéophone met l'accent sur l'action en elle-même, sans vraiment tenir compte des participants de cette action" (Rose 2003: 581).<sup>539</sup>

This may explain why identical ideophones in Awetí can express the same event which in one case is referred to by an intransitive, in another case by a transitive verbal predicate in an adjacent clause. This is illustrated by the ideophone *pok* ('put down', 'sit down', 'give') in combination with the intransitive verb *tige* ('sit') in (48)(a) and the transitive verb *jung* ('put down') in (48)(b):

<sup>&</sup>lt;sup>538</sup> Cf. section 2.3.

<sup>&</sup>lt;sup>539</sup> "The ideophone places emphasis on the action itself without actually considering the participants of that action" [my translation].

(48) a. (tal\_mamu\_2\_8, 0586.201)

'Up 'apo pok. O-tige ti Tanumakalu Pirekytang 'up 'apo a'yn.
lap on IDEO.sit 3-sit.vi EVID PropN PropN lap on PART
'Pok (she sat down) on the lap. Tanumakalu sat down on the Pirekytang's lap.'

b. (kal\_ta\_wat, 0495.486) *Pok, wej-jung ti 'ywy'a 'apo [a'yn].*IDEO.put 3- put.down.vt EVID termite on
'Pok, he put him down on the termites(' nest).'

Likewise, ideophones can combine with verbs in a non-derived and in a causative form, i.e. a form where the syntactic and semantic roles have changed, as shown in (49)(a) and (b):

(49) a. (kal\_sham\_myth, 0603.995) *Pyw, o-'a'am ti a'yn.*IDEO.get.up 3- get.up.vi EVID PART
'Pyw, he got up.'

b. (ula\_seasons, 0814.884) *Pyw,* wej-mo- 'a'am, o-ut 'yto a'yn.
IDEO.get.up 3- CAUS-get.up.vi, 3-come.vi then PART
'Pyw, she makes her get up. Then she returns.'

While the activity in (49)(a) is performed by an agentive subject, in (49)(b) a causer performs it on a causée.

Examples (50)(a) and (b), both containing clauses in which *pyw pyw pyw* ('tie') functions as a predicate, suggest that ideophones do not assign semantic roles to the arguments like verbs do, but that in fact any kind of participant involved in the event can occur in the same clause:

(50) a. (kal\_ama\_maw\_oldvillages, 0477.397)
Wej-t- atĩ tsãn a'yn, pywpywpyw n=emi'ũkangut.
3- EPEN-wrap.up.vt 3plPRO PART, IDEO.tie 3=leftover
'They wrapped it up, pywpywpyw his leftovers.'

b. (kal awakap1, 0826.745)

Pywpywpyw'yzapakuty-putpywpyw, wej-t-atītsāna'yn.IDEO.tiebow.string-NPSTIDEO3-EPEN-wrap.up.vt3plPROPART'Pywpywpyw, (with) what used to be a bow string. They wrapped him up.'

While in (50)(a) the argument *nemi'ūkangut* ('a rest of his food') with the semantic role of a patient occurs in the clause with an ideophone as its predicate, in (50)(b) the argument *'yzapakutyput* ('a (former) bow-string') has the semantic role of an instrument, by means of which the activity is performed.

That the ideophone pywpywpyw ('tie') conceptualizes the event in a different way than the verb  $at\tilde{i}$  ('wrap up') can be observed in (51), where the verbal predicate also has an explicitly given argument to which the semantic role of an instrument, marked by the postposition *ywo*, is assigned:

(51) (ti\_a\_autobiogr, 0288.975)
Wej-t- atĩ ta'i mõj pi -put ywo.
3- EPEN-wrap.up.vt 3FplPRO snake skin-NPST POSP
'They wrapped him up (i.e. they bewitched him) with the skin of a snake.'

A correlation between ideophones and gesture on the one hand, and verbs and gesture on the other, which corroborates the hypothesis of an event-centrality expressed by ideophones, will be described in section 4.6.3. Further arguments for the hypothesis will be discussed in section 5.3, where a possible grammaticalization path for ideophones will be sketched.

#### 4.5.6 Summary

There are several sound-meaning correspondences in Awetí ideophones on the level of individual phonemes, phoneme clusters or syllable structures. The meaning of Awetí ideophones can best be described as "image-schematic" in the sense outlined by Johnson (1987) and Lakoff (1987). The onomatopoeic group II ideophones imitate sounds produced by animate beings or elements of nature, the more conventionalized ideophones of group I depict perceptually salient components of activities which are grounded in basic bodily experiences such as containment or boundedness.

Ideophones are conventionalized to differing degrees, and some can be created on the spot, only having a meaning in context. Ideophones usually express the temporal contour of an event by displaying certain morphological shapes and/ or phonosemantic features.

There are rather few conventionalized ideophones which depict specific events. The majority, due to their image-schematic semantic structure, can depict components of a variety of events and must be interpreted in context. With regard to complex events a sequence of ideophones can be further more precise than a semantically corresponding verb, in depicting several components of the event. In this respect Awetí ideophones resemble verbs in the Papuan language Kalam, as described by Pawley (1993). Ideophones do not focus on the participants involved in an event in that they do not possess any means to distinguish between concepts of agentivity or causality.

#### 4.6 Interaction between ideophones and gesture

Ideophones in Awetí seem to be nearly always accompanied by gestures and/or by gaze. The term "gesture" here roughly refers to what by Haviland (2005: 4) is described as characterizing "gesticulation", i.e. "well-formed but non-conventionalized or spontaneous movements of the body, apparently closely synchronized with talk, and seemingly linked expressively to what speakers are saying". One restriction, however, needs to be made with regard to this definition in that gestures of this type may in fact be conventionalized, as has been pointed out by Kendon: "[...] it is far from being the case that gestures that are always associated with speech are less conventionalized than those that are not" (2004: 106). With this statement he critically refers to a model termed "Kendon's continuum" which was suggested by McNeill in 1992 and also seems to underlie Haviland's above definition. At one end of this continuum there are the co-speech gestures at issue here which, according to this model, are idiosyncratic in form and performed with a low level of speaker awareness, while the other end is occupied by fully-conventionalized gestures which are produced consciously and without speech.<sup>536</sup> As will be shown by the examples discussed in this section, gestures synchronizing with a specific class of ideophones are "recurrent", i.e. they occur repeatedly and identical in form with the same ideophones.<sup>537</sup> Therefore one needs to assume that they are at least partially conventionalized and that they are in a close relationship with the corresponding ideophone.

This aspect of ideophones has not been studied to great extent yet<sup>538</sup>, even though it was already observed by Schlegel (1857: 114) for the Gbe language (Niger-Congo) Ewe in the mid 19<sup>th</sup> century: "The Ewe language – as mentioned before – has developed an almost inexhaustible number of adverbs of this type. The reason for this phenomenon is [...] that the Ewe people tend to illustrate their terms in any thinkable modification [and that]

<sup>&</sup>lt;sup>536</sup> Cf. McNeill (2000: 4/5).

<sup>&</sup>lt;sup>537</sup> See Fricke, Mittelberg & Teßendorf (2008: 2) for a general definition of 'recurrent gestures'.
<sup>538</sup> Kita's (1997) semantic investigation into the 'affecto-imagistic dimension' of Japanese

<sup>&</sup>lt;sup>338</sup> Kita's (1997) semantic investigation into the 'affecto-imagistic dimension' of Japanese sound and manner mimetics – standardized ideophones which syntactically fall into two groups – is the first study to take gesture into closer consideration. In a recently published field manual Dingemanse (2010: 25) has emphasized the importance of gesture for the study of ideophones across languages: "It is especially important to capture gestural behaviour, as its importance to ideophonic performance has long been noted but not adequately studied."

thinking needs to find correspondence in the outward manifestation of an action and in its gesturing which is accompanied by characterizing and corresponding linguistic expressions [...]".<sup>539</sup> For Xinguan languages, too, the co-occurrence of both ideophones and gestures was described early by Steinen (1894: 71), as illustrated by his description of the "stone axe pantomime", even though he does not point out any interrelation of the two phenomena as explicitly as Schlegel.<sup>540</sup>

One obstacle of investigating the interaction between ideophones and gesture was the nature of the data corpora which only recently – with the emergence of large-scale language documentation on audio and video – have started to provide the appropriate material for this kind of analysis. Furthermore, the study of gesture in general could only fully establish as a field of linguistic enquiry with the development of new representational techniques.

Recent approaches based on empirical evidence from micro-analyses of their interaction consider gesture and speech as two aspects of one process that underlies the production of utterances (Kendon 2004: 76). Kendon considers co-speech gestures as much part of an utterance as verbal expressions in making their own contributions to the overall meaning. He lists several different functions of co-speech gestures (Kendon 2004: 161):

- 1. They provide a parallel expression to the meaning which is conveyed verbally.
- 2. They refine, qualify or restrict the meaning conveyed by words.
- 3. They provide aspects of reference which are not present in the verbal components, e.g. spatial and orientational information.
- 4. They create an image of an object that is the topic of the spoken component.
- 5. They provide a dimension of visual animation to an account to convey a much richer sensory experience to the interlocutor.

<sup>&</sup>lt;sup>539</sup> "Wie bereits bemerkt, so hat die Eve-Sprache einen fast unerschöpflichen Reichthum an Adverbien dieser Art entfaltet. Der Grund dieser Erscheinung liegt darin: einmal, daß der Eveer alle denkbaren Modifikationen der Begriffe anschaulich zu machen pflegt, dem Denken muß auch die Aktion in der äußeren Erscheinung und den Geberden entsprechen, welcher hinwiederum die Sprache in bezeichnenden und entsprechenden Ausdrücken folgt [...]". <sup>540</sup> Cf. chapter 1.

Examples from Awetí will confirm that gesture and speech are interrelated with regard to ideophones but that the type and shape of the gesture co-occurring with an ideophone also seems to be determined by other factors, such as the degree of syntactic integration of the ideophone or its prominence in discourse. Consequently the multi-modality of any specific ideophone does not, in principle, include gesture as an invariant component. A certain autonomy of the meaning-bearing types of gesture is also pointed out in Güldemann's (2008: 277) mimesis approach, according to which ideophones and representational<sup>541</sup> gestures are both "mimetic signs" of semantic representation, which due to the fact that they are produced by different mediums (speech organs, body) - can but need not occur simultaneously. In Awetí discourse other elements of speech are also gestured, but not as systematically as ideophones. Verbs of motion, for example, are most often accompanied by a gesture, while verbs of other semantic classes are only occasionally gestured. Participants, when introduced in the discourse, are often gesturally depicted in size, height, width or shape. Other gestures seem to have the function of highlighting the intonation structure of the utterance. Furthermore speakers vary with regard to the frequency of gesture production. Another noteworthy observation is that co-speech gestures are abundantly used in narrative discourse. As a possible explanation it was suggested that gestures serve the story-tellers as a technique of memorizing long narratives.<sup>542</sup>

In order to get a clear picture about the mechanisms underlying the production of cospeech gestures in Awetí discourse, further research, including detailed descriptions and quantitative analyses, will be needed. However, with regard to ideophones and gesture certain recurrent patterns could be observed which will be presented in this section.

Most of the video recordings from the Awetí Dobes-corpus<sup>543</sup> used for this investigation are from non-narrative genres such as descriptions of tasks, places or rituals, and explanations. Further there are two autobiographical narratives, a myth and the first

<sup>&</sup>lt;sup>541</sup> Representational gestures are defined as "controlled and mostly spontaneous kinetic signs of the human body which illustrate, supplement, or even exclusively establish mimetically the representation of a context-specific state-of-affairs" (Güldemann 2008: 278).

<sup>&</sup>lt;sup>542</sup> This suggestion was made by Prof. R. Posner and other participants of the Semiotics Colloquium at the Technical University Berlin, summer term 2011.

<sup>&</sup>lt;sup>543</sup> Not all video material in the corpus is suitable for the analysis of gesture which requires that a person is filmed in totality, i.e. with the articulators clearly visible.

part of a longer second myth. These texts, spoken by eight men and four women, have an overall duration of 4 hours and 9 minutes.<sup>544</sup>

Although the documentation project did not aim at collecting data on ideophones and/ or gesture, the available material allows some hypotheses about the ways ideophones of different types may interact with gesture. Gaze as a component of gesture production can only occasionally be taken into account since the recording situation is not very natural. Especially younger female speakers do not feel comfortable in front of a camera and tend to avoid looking at the non-indigenous male recorder who at the same time functions as their interlocutor. Another aspect which distinguishes the recordings analysed here from the material used in studies investigating in the use of gesture in natural discourse is the fact that the interlocutor gives no or only a minimal response by occasionally signaling that he understands what is being said. During the filming of part of the material other people from the community as well as a second researcher were present. However, no interaction took place in order not to diminish the quality of the recording destined for archiving.

Other studies, focusing on the interaction of specific aspects of language and cooccurring gestures, are mostly based on data elicited by a stimulus, e.g. a cartoon or a sequence of pictures describing an event, producing narratives and descriptions by various speakers who are exposed to the same experimental settings.

In order to be able to draw any general conclusions from the heterogenous Awetí corpus data about how ideophones and gesture interact in communication, identical and similar ideophones as well as those occurring in comparable syntactic and discourse contexts were chosen to be described in detail together with their accompanying gestures and contrasted with each other. Due to the heterogeneity of the data from narrative and descriptive discourse no attempt was made to include any quantitative analyses in this section. All ideophones looked at in this section belong to group I, i.e. they are non-imitative of sounds emitted by humans or animals and mostly conventionalized.

Not all types of gestures are relevant for the analysis of ideophones. McNeill (1992) differentiates between imagistic gestures and non-imagistic ones.<sup>545</sup> Imagistic gestures

<sup>&</sup>lt;sup>544</sup> See Appendix I for details.

<sup>&</sup>lt;sup>545</sup> This is the classification adhered to in this study. Other researchers classify gestures differently, see e.g. Kendon (2004: 159-161) who in the group of "referential gestures" makes a basic functional distinction between "representation" and "pointing". Within

depict the shape of an object, display an action or show the pattern of a movement. They are further subdivided into iconic gestures, which depict aspects also referred to by speech, and metaphoric gestures which display images standing for abstract concepts. Non-imagistic gestures subsume pointing gestures which are deictic in nature and so-called "beats", rhythmic movements that do not convey any discernible meaning but have the function of either marking out discourse segments or the rhythmic structure of speech.

As will be shown in the following examples, gestures co-occurring with specific types of ideophones seem to be either iconic, depicting activities, or deictic, or a mixture of both types. In addition iconic gestures can display iconicity to varying degree, depending on the information structure of the accompanying discourse.

According to Kendon (2004) a 'gesture unit' can be divided into three different phases: the 'preparation', the 'stroke' and the 'recovery' phase. The term 'stroke' refers to the "phase of the movement excursion closest to its apex" (Kendon 2004: 112) or to the phase where the 'expression' of the gesture is accomplished, while the 'preparation phase' is the movement leading to the stroke. Together these two phases constitute a 'gesture phrase' (Kendon 2004: 115). The individual gesture phases in the examples of this section are represented in an extra-glossing line with "~" symbolizing the preparation and "\*" the stroke. The recovery sets in when the articulator, i.e. the hand, relaxes or is withdrawn. This phase is represented by "-.-". In examples where two individual phases cannot be distinguished from each other these are glossed by mixed symbols, either by "\*~\*" (preparation/ stroke) or by "\*-.\*" (stroke/ recovery). A hold during a gesture phrase is indicated by an underlined symbol "<u>\*\*</u>".

#### 4.6.1 Disambiguation of ideophones by gesture

Iconic gestures may be used to specify the meaning of ideophones which otherwise would allow different interpretations. Finite verbs referring to the same event, when uttered in the direct environment of the ideophone, often serve this function, but - as shown in

representational gestures, which roughly correspond to McNeill's imagistic gestures, he distinguishes 'modelling', 'enactment' and 'depiction', referring to the respective technique of representation the gesturing body part is engaged in. In this study with its more restricted focus these will not be further differentiated.

section 4.4 – ideophones do not necessarily co-occur with finite predicates and may occupy this function themselves.

Example (1), repeated here for convenience, contains various ideophones referring to more general concepts. One of them is pyw which – depending on the context – may signify e.g. 'to grab something', 'to pick up something', 'to get up', 'to turn around' or – when used repeatedly – 'to row a boat', 'to tie around'. The general concept underlying all these different events is a bending or turning movement.<sup>546</sup> Another ideophone of this type is *pok* which depicts any event containing a change of position of an object where the resulting position is characterized by touching a surface to a greater extent than before. This may more specifically be e.g. 'to sit down', 'to lie down', 'to put something down' or 'to give'. A third ideophone which here occurs twice depicting two different events is *kyryryry*. Generally this ideophone depicts events where the rubbing of one object against a surface or another object is involved. The forth ideophone *kon* unambiguously depicts the swallowing of something big (mostly performed by a monster), and *aka* is an expression of fear or pain which occupies an intermediate position between ideophone and interjection for having properties of both classes.<sup>547</sup>

(1) (tal_kamu_kwat1, 0628.839)						
Kyryryryry <sup>5</sup>	<sup>548</sup> kamir	u'at pyw,	aka aka aka aka,	pok-yhy		
1	2	3	4	5		
~~~~****** <u>-</u> .	~~~~~	~** <b>-</b> ************	<*************~~~~~~~~~~~~~~~~~~~~~~~~	~~*****		
			(facial expression)			
IDEO.drag	boy	IDEO.grab	INTERJ.cry.with.fear	IDEO.put-INTENS		
mõj watu kyty, kyryryry kyryryry, kon						
		6	7			
**********************************						
snake big	for	IDEO.ingest	IDEO.swallow			

<sup>&</sup>lt;sup>546</sup> Cf. section 4.5.2.

<sup>&</sup>lt;sup>547</sup> See section 3.3.7.3.

<sup>&</sup>lt;sup>548</sup> The two instances of the ideophone *kyryryryry* are transcribed here in a standard orthography given by Awetí consultants. Phonetically they differ from the standardized form and from each other in that the pronunciation of the first one approximates ['w<sub>1</sub>:] and of the second ['kn: 'kn:].

'He dragged along a boy who was crying, holding him by the wrist. He threw him to the ground for the big snake to fetch him. The snake ingested and swallowed him.'

The utterance in (1) contains five ideophones and an interjection but no finite verb form to refer to a sequence of dramatic events in a narrative, in which a protagonist is forced to sacrifice his people to a monster-snake ( $m \delta j$  watu) with an enormous appetite. Each of the ideophones as well as the patient participant of the first and the second event, kaminu'at ('boy'), are accompanied by gestures which are captured in pictures 1.1 to 1.7 and occur completely synchronous with the utterance of the corresponding words as indicated in example (1).

Picture 1.1 of the gesture stroke co-occurring with the first ideophone *kyryryryry* shows how the narrator puts both hands together in a 'pulling' movement. Thus, the meaning of the ideophone which generally depicts any kind of movement involving friction is narrowed down to the dragging of a heavy or – if animate – reluctant object. This object, the patient of the activity, is introduced by the following word which is accompanied by the deictic gesture captured in (1.2), showing with both hands held up, palms facing downwards, the size of the person referred to by *kamin'at* ('boy').



Picture 1.1: Gesture 'drag'

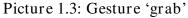


Picture 1.2: Gesture 'boy'

In picture 1.3 the speaker grabs his left wrist with his right hand in a position slightly to the left side of his body while uttering the ideophone *pyw*, thus giving precision to its more general meaning, turning it into 'to grab someone (by the wrist)'. During the utterance of

*aka aka aka aka* the speaker's face – as shown in picture 1.4 – adopts a painful or fearful expression while the previous gesture is held.







Picture 1.4: Facial expression 'cry'

While uttering the last repetition of *aka* the speaker moves his hands to a position in front of his body and separates them, 'throwing' them forward at uttering *poky*, thus signaling a forceful placement of an object (the boy) to the ground. This is shown in picture 1.5. Then the hands are withdrawn to the speaker's knees where they rest during the utterance of  $m\tilde{o}j$  watu kyty ('for the big snake'). In picture (1.6) another instance of the ambiguous ideophone kyryryry, which in fact during the transcription of the sound file without the video was interpreted by Awetí consultants as indicating the crawling of a snake on the ground, is accompanied by a disambiguating gesture. It shows a movement of the hands towards each other while the arms are lifted, approximating the speaker's face level where the hands meet and are held together, depicting the slow ingestion of the boy by the snake.



Picture 1.5: Gesture 'throw down'

Picture 1.6: Gesture 'ingest'

When the last ideophone *kon* is uttered, the speaker moves his hands from the face-level position downwards, leading them closely along his body, as captured in picture 1.7. This indicates that the boy has completely disappeared in the snake's throat and is swallowed.



Picture 1.7: Gesture 'swallow'

As could be shown, four of the ideophones used in the sequence – both instances of kyryryry, pyw and pok – have a general meaning and may thus depict a variety of events which have certain elements in common. These are disambiguated by simultaneous gestures. In addition, both instances of kyryryry are pronounced in a non-standard way and can thus only be clearly identified by the narrative context in combination with a gesture.

Gestures, however, also accompany the non-ambiguous ideophone *kon* ('to swallow') as well as the interjection *aka aka* ('cry with fear') and the noun *kaminu'at* ('boy') referring to the patient. With regard to these, the gestures may intensify the dramatizing effect already conveyed by the ideophones. In the narrative this utterance represents an important scene: after having given all objects to the voracious monster-snake, the main character sacrifices the first human being. Afterwards he feeds nearly all the inhabitants of his village to it before thinking of a way to stop this process. Since the event was once depicted in all detail, its repetition can be shorter and finally only alluded to in order to evoke the same scene in the interlocutor. The narrator, therefore, at each of his several repetitions of the scene presents a shorter version, as can be illustrated by (2), the utterance which immediately follows the above sequence:

(2) (tal_kamu_kwat1, 0636.267)	(2) (tal	_kamu_	_kwat1,	0636.267)
--------------------------------	----------	--------	---------	-----------

Pyky,	momo ti,	aka aka aka,	, pok.	Pyky,	momo ti,	aka aka a	ka, pok.
(facial expression) (facial expression)					ession)		
~~******		*****	***	~~*****	*****	<u>*</u> ~~~~~~~	~~~~**~~
1		2	3	4			5
IDEO.grab another X <sup>549</sup> , INTERJ IDEO.put, IDEO.grab, another X, INTERJ, IDEO.put					IDEO.put		
Pyky, pyv	v, m	omo ti, pok,	п	10mo ti, mom	no ti, momo i	ti, momo ti,	momo tiii.
(crescendo)							
~~~~****	*~~~~~~	~~~~~****~		,	*~*~*~*~*~*	~*~*~*~*~*	~**
6		7		8	9		

IDEO IDEO.grab another X IDEO.put another X

'He took another one who was crying, gave him (to the snake). He took another one who was crying, gave him. He took and took another one, gave him, another one (5x), (for a long time).'

Of the five ideophones and the interjection used in utterance (1) the narrator in (2) repeats only the interjection referring to the crying of the victim ( $aka \ aka$ ) and the

<sup>&</sup>lt;sup>549</sup> The function of *ti* in this context is not completely understood. It may be the evidential particle used in narratives where it usually occupies the second position in a clause, but it may also be part of the preceding pronoun *momo*.

ideophone depicting the activity of putting it in front of the snake (*pok*). Instead of *kyryryry* and *pyw* he uses *pyky*, a combination of *pyw* with the intensifying suffix -*y* depicting the action of forcefully grabbing or pulling up an object. After the second repetition the sequence is further shortened to the activity of grabbing someone or something and putting him or it somewhere. Finally, *momo ti* ('another') becomes the only element to refer to the event. It is uttered five times with a crescendo and a rising pitch, followed by a falling pitch on the last *ti* which is pronounced with a prolonged vowel to indicate extension in time.

The gestures co-occurring with utterance (2) are also less pronounced than in (1), as illustrated for the first three gestures by pictures 2.1 to 2.3. One noticeable difference, compared to pictures 2.1, 2.4 and 2.5, is that they are performed with the left arm only. Until gesture seven, however, these gestures are still distinguishable from each other: Picture 2.1 captures the stroke of a pulling gesture co-occurring with *pyky*, picture 2.2 shows a crying face and a holding gesture synchronous with *aka aka*, and picture 2.3 a throwing gesture accompanying the first *pok* in the sequence.



Picture 2.1: Gesture 'pull'

Picture 2.2: Facial expression 'cry'

With the pronunciation of each *momo ti* towards the end of the sequence, the activity of pulling up something is increasingly adumbrated, while the speaker moves his hand from his left side towards the space in front of him, as is exemplified by picture 2.4.



Picture 2.3: Gesture 'throw down'

Picture 2.4: Gesture 'pull up'

This part of the sequence does not only indicate that both, ideophones and gesture, interact with information structure in being more precise when providing new and less when depicting given information. It additionally shows that gesture may co-occur with elements of speech without conveying the same meaning. Thus a multimodal utterance can be produced with each component providing a different piece of the information. In this specific case the speech refers to the patient (*momo ti* 'another one') while the gesture depicts the action, a pulling movement, in which the patient is involved.



Picture 2.5: Increase of abstractness



Picture 2.6: Recovery phase

The level of abstraction of the gesture reaches its peak in picture 2.5, at the last utterance of the first syllable of *momo*, when the hand has additionally been lifted to head level and drawn towards the speaker. This is annotated as a hybrid gesture phase nine  $(\sim^* \sim^*)$  in the text example. At this point the gesture is not recognizable as a pulling movement any more and must therefore be analysed as a simple beat. In the final picture 2.6 the withdrawal of the articulators in the recovery phase is captured.

4.6.2 Correlations of form and functions of grammatical morphemes and particles used with ideophones

Gestures provide further evidence for the analysis of the morphemes -y and -yhy as intensifying suffixes which combine with ideophones ending in /k/, depicting punctual events.<sup>550</sup> This is illustrated by examples (3) and (4), taken from a narrative text, where the intensification is expressed by forceful movement and change of gaze.

This mythological narrative about the origin of manioc describes that girls in puberty seclusion did not only stay in the house for many months, as is still the custom, but were additionally kept in a cage which was pulled up to the ceiling by a rope – apparently a common practice among Tupian people in the past (cf. Daniel 2004: 271).

(3) (tal\_kakaja, 529.968) Kyryryryryryryryryryryry tuk-yhy.

IDEO.come.down IDEO.meet.the.ground-INTENS,

W-ekyp okywã na'yn.

3-come.down girl.in.seclusion PART

'(He made) the cage (with the girl) come down, it met the ground forcefully. The girl in puberty seclusion came down.'

As indicated by the annotation in (3), the performance of the gesture as a whole, i.e. the gesture unit, is completely synchronous with the two ideophones. The preparation phase of this gesture is very short, since it directly departs from a preceding gesture. It is captured in

<sup>&</sup>lt;sup>550</sup> Cf. section 4.3.

picture 3.1, showing how the left hand is moved to a position which then is held during the gesture stroke performed by the right hand. This occurs during the remaining part of the ideophone *kyryryryryryryryryryryryryryryryryryry* ('to come down'), depicting the friction of a rope on a roof beam<sup>551</sup> when lowering a cage which was hung up there, and is illustrated by picture 3.2.



Picture 3.1: Preparation phase

Picture 3.2: Gesture 'lower cage'

The speaker makes a broad arc-shaped gesture with his right hand from above his head to a position next to him, which he indicates by gaze. At the moment when he utters the following ideophone *tukyhy* ('to meet the ground'), he reaches the end of the arc – and the end of the stroke – and turns his gaze towards the interlocutor (the linguist collecting the data), as shown in picture 3.3. The left hand, which starts out from the same position as the right hand, i.e. above the speaker's head where it was engaged in a preceding gesture, is lowered to breast-level at what is interpreted as the preparation phase of the gesture.<sup>552</sup> Thumb and forefinger are opposite each other as if holding a small object, i.e. the rope fastened to the cage. In this position the hand is suspended until, in a next movement, the speaker puts both hands forcefully and with his fingers spread on his knees as shown in picture 3.4. These may be interpreted as symbolizing the ground, which is met by a heavy object with a flat surface, and thus depict the end of the movement. At the same time this is the recovery phase of the gesture in which the hands are withdrawn to a position of relaxation.

<sup>&</sup>lt;sup>551</sup> Cf. section 4.3.

<sup>&</sup>lt;sup>552</sup> In fact, it is difficult to decide in this example whether there is a preparation phase at all, because the arc-shaped movement of the right hand already sets in during the movement of the left hand to a position which then is held until both hands withdraw to a rest position.



Picture 3.3: Turn of gaze

Picture 3.4: Recovery phase

Only thereafter the speaker continues talking. Compared to the gesture of the following example (4) the gesture accompanying the utterance in (3) is iconic, i.e. it bears resemblance to aspects of the depicted event (lowering a cage).<sup>553</sup>

In (4) again two adjacent ideophones are accompanied by gesture.

3-go.vi EVID PART, 3=go.vi-NOM PART, IDEO.walk.through.thicket IDEO.catch.sight,

ka'awatu tup-u ti nã.

forest see.vt-NOM EVID 3PRO

'He went away. He went on, walking through the thicket, and (suddenly) saw a (good) forest.'

In this example the production of *tirik tirik tirik tirik tirik tirik* is accompanied by a pointing gesture of the right hand whereby the arm is gradually lifted.<sup>554</sup> The hand points at a place somewhere in front of the speaker to the right. His gaze is turned into the same direction. At the gesture stroke the first syllable of the ideophone *tykyhy* is uttered. This is illustrated by picture 4.1. Immediately after this the speaker turns his head, looking to the interlocutor

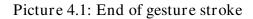
<sup>&</sup>lt;sup>553</sup> Cf. Özyürek et al. (2005: 200/1).

<sup>&</sup>lt;sup>554</sup> See also section 4.6.1.3 for an analysis of the pointing gesture accompanying this first ideophone.

at his left side, and withdraws his hand, placing it next to the other in his lap, as shown in picture 4.2. In the narrative the protagonist suddenly reaches a clearing from where he has a wider view, so that the change of gaze may also be interpreted as indicating the transition from one physical environment to another.







Picture 4.2: Turn of gaze

When comparing the two instances of intensified ideophones depicting punctual events or – in Sasse's terminology – encoding totally terminative states-of-affairs, it can be observed that *tukyhy* as well as *tykyhy* set in at the stroke of the gesture accompanying the preceding ideophone, that both are accompanied by a change of gaze and directly followed by the recovery phase of the gesture.

Contrasting with (3) and (4), the following example (5) illustrates that an ideophone encoding a punctual event without being extended by an intensifying suffix does not trigger any information on forcefulness or suddenness.<sup>555</sup>

(5) (tim\_salt, 0186.468)

Pok, azoj-moto ta'i=kyty mijõ e-py-zan.

~~~~~\*\*\*------ ~~~~\*\*\*------

IDEO.give 1pl.excl-give.vt 3pl=POSP shell REL-payment-ATT

'Pok, we give (it) to them for shells as a payment.'

(lit: 'We give (it) to them in the function of the shell's payment.')

<sup>&</sup>lt;sup>555</sup> The syntactic position of the ideophone in front of the finite verb referring to the same event may also contribute to this reading.

The ideophone *pok* with its general "change-of-position" meaning<sup>556</sup> here depicts the placing of an object into another person's hand, an interpretation which is confirmed by the co-occurring gesture and by the semantically more restricted finite predicate *azojmoto* ('we give (it)') in the immediately following clause. The preparation phase of the gesture starts with the utterance of the ideophone and the stroke is reached shortly afterwards at the second syllable of the finite verb (*zoj*), captured in picture 5.1. The right hand is lifted, turned to the left side of the speaker and makes a short movement in that direction, while the left arm is flexed and the hand held forward, palm facing upwards. Both hands can be interpreted as imitating the two components of the event "giving", i.e. handing over and receiving.

The recovery phase of this gesture, a slow down-movement of the right hand towards the left hand, extends to the first syllable of the postposition *kyty* ('to', 'for') when the right hand is placed over the left hand on the speaker's thigh, as shown in picture 5.2. This is different from the previous two examples where the recovery phase is very short and thus conveys the information of something happening unexpectedly or forcefully.

The same gesture is repeated when *mijõ epyzan* ('in the function of the shell's payment') is uttered to indicate that the giving also occurs in the other direction, i.e. that objects are exchanged between two persons.



Picture 5.1: Gesture 'hand over'



Picture 5.2: Recovery phase

<sup>&</sup>lt;sup>556</sup> Cf. section 4.6.1.

For ideophones without a /k/ in the coda of the last syllable or for any ideophone depicting repeated action and not an activity repetitive in itself there is a syntactic means to express perfective or more specifically conclusive aspect, as was described in section 4.4, by adding the particle  $mu'j\tilde{e}$  ('ready', 'finished', 'enough'). This analysis is equally corroborated by accompanying gestures, as can be illustrated by example (6) from a task description.

(6) (mop manioc, 0365.826)

*Azoj-ty* 'ok ĩ me, tsu tsu tsu tsu mu'jẽ.

1pl.excl-pour.out.vt 3PRO PART IDEO.pour ready

'We pour it out, tsu tsu tsu tsu, (until it's) empty.'

The ideophone tsu ('to pour') in this utterance depicts the same activity as referred to by the verb ty'ok ('to pour out') in the immediately preceding clause. Only its repetition provides new information on the manner the activity is performed, indicating that the liquid was poured out little by little. Interestingly, the gesture accompanying the clause with the finite predicate and the ones co-occurring with the ideophones in the following clause are not identical. While the gesture produced with the first clause depicts the activity of holding a vessel in a sloping position in order for the liquid to come out, as shown in picture 6.1, the gesture accompanying each instance of tsu depicts the gushing out of liquid. This is illustrated by 6.2.

As indicated by the arrows, the speaker directs her right hand, palm facing upwards, diagonally down towards her right knee and up again (as a preparation for the next gesture), while uttering the first clause.



Picture 6.1: Gesture 'hold vessel'



Picture 6.2: Gesture 'gush out'

At each repetition of tsu the speaker describes a little arc with her right hand, starting out with the palm showing upwards and finishing with the palm turned downwards. It can further be observed that the gesture stroke with each repetition becomes less defined. The particle  $mu'j\tilde{e}$  is uttered in the recovery phase of this repeatedly performed second gesture, indicating that the action is finished.

# 4.6.3 Gesture and degree of grammaticalization of ideophones

An interesting correlation between several parameters – morphological structure, prosody and gesture – could be observed with regard to the ideophone  $pu pu^{557}$  ('to cook with steam coming out'), uttered on four occasions by a female speaker when describing the preparation of manioc.

| (7) (mop_manioc) |                    |                 |     |
|------------------|--------------------|-----------------|-----|
| a. (0331.084)    |                    |                 |     |
| "Ри ри ри"       | e'i a'yn, i'agut   | akyj wurejat    | ne. |
| pu pu pu         | e'i a'yn, i'ak-put | akyj wure-ju-at | ne  |
| ~**~~**~~**      |                    |                 |     |

IDEO\_steam.coming.out 3say PART, poison.of.manioc-NPST TOP fly-IMPF-NOMag PART 'Pu pu pu it makes. The former poison of the manioc (is the one that) evaporates.'

<sup>&</sup>lt;sup>557</sup> One instance of pu is not a complete ideophone in this case.

b. (0336.682)

Pu pu i = e-zoko-tu me, o-kypa'yn. ~~~~\*\*\*\*\*\*\*\*\* -.-.-. IDEO 3=say-IMPF-NOM PART, 3-cook.vi PART 'Pu pu it usually does (when) it cooks. c. (0342.718) I = kyp - uakvj nje, an pupu e'i-ka a'yn. ~~\*\*\_\_\_\_ ~~~~\*\*\*\_\_\_\_\_ 3=cook.vi-NOM DEM PART, NEG IDEO 3say-NEG PART 'It cooks (until) it does not make pu pu (any more).' d. (0961.937) I=tsu wezanu "pu pu pu" i=e-tu me. ~~\*\*~~~ ~\*\*~~\*\* ~~\*\* \*\_ \_ 3=like again IDEO 3=say-NOM PART 'Like that again it makes pu pu pu.'

The ideophone denoting steam coming out of a cooking vessel in each of the four examples is accompanied by an inflected light verb 'e, which in (7)(a) and (c) is a finite verb, in (b) and (d) an action nominal. Thus the ideophone in each case can be regarded as the uninflected component of a complex verb phrase which functions as a predicate. A difference can be observed with regard to the morphological structure of these complex predicates: in (a) and (d) the ideophone is uttered three times, and the light verbs e'i and i'etu, apart from the person marker, do not have any additional affixes. This feature makes them formally similar to quotatives, which is indicated by quotation marks framing the ideophone.<sup>558</sup> In (7)(b) and (c) the ideophone is only repeated once, so that the form resembles a reduplicated verb,<sup>559</sup> and the inflected part of the complex predicate is in both cases morphologically more elaborate, having an imperfective suffix *-zoko* in (b) and being embedded in a verbal negation *an -ka* in (c).

<sup>&</sup>lt;sup>558</sup> Cf. section 3.3.7.2.1 for the quotative form used in the male variety of Awetí.

<sup>&</sup>lt;sup>559</sup> Cf. section 3.3.8.3.1.

At the same time the examples (7)(a) and (d) are prosodically more marked than (b) and (c), as they are uttered with longer intervals between the ideophones.<sup>560</sup> The third ideophone in (7)(a) is additionally produced with rising pitch, and in (7)(d) the ideophones are uttered with a decrease in volume, corresponding to a decrease in air pressure of the speech signal. This is visualized by the oscillograms showing waveform and pitch of the sound signals of examples (7)(a) and (d) in figure 10 and 11, contrasted with the oscillograms of the prosodically unmarked utterances (9)(b) and (c) in figure 12 and 13.

When looking at the gestures, another correlation can be observed between the less morphologically complex and prosodically marked forms in (7)(a) and (d) on the one hand, and the prosodically unmarked morphologically complex forms in (7)(b) and (c) on the other: while the former are both uttered with the same depictive gestures, the latter are not. In (7)(a) and (d), captured in pictures 7.1 and 7.2, the speaker, when beginning the clause, alternatingly and repeatedly raises her hands, palms turned upwards, from their rest position on her legs, up to breast-level by flexing the elbow. Each of these gestures is linked to the syllable structure of the speech in being produced approximately synchronous with the utterance of any individual pu. In both utterances the recovery phase of the gesture sets in at the utterance of the light verb, but while in (7)(a) the hand is withdrawn to a rest position, in (d) it is held in an intermediate position, and another gesture, co-occurring with a following verb, develops from it.

<sup>&</sup>lt;sup>560</sup> For the Amazonian language Tsafiki Dickinson (2002) draws a distinction between prosodically marked free 'ideophones' and prosodically unmarked 'coverbs', i.e. noninflecting elements occurring in a predicative construction, many of which are formally identical to 'ideophones' or – as stated by Dickinson (2002: 144) – which may "function as ideophones". It seems that whenever an ideophone occurs in a predicative structure formed with different kinds of 'generic verbs', it is prosodically unmarked and thus considered a 'coverb', except for a certain type of construction with the generic verb *ti* ('say') which permits prosodically marked 'ideophones' (Dickinson 2002: 192, 195).

Figure 10: Waveform and pitch of example (7)(a)

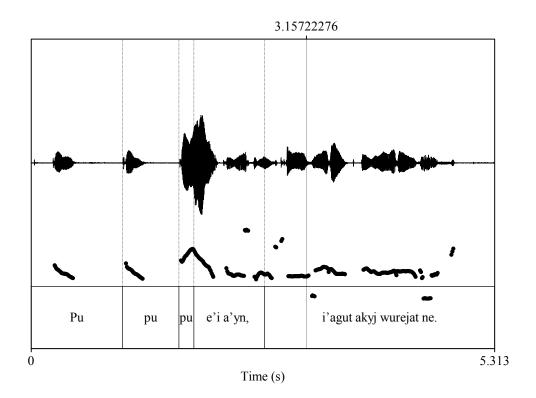
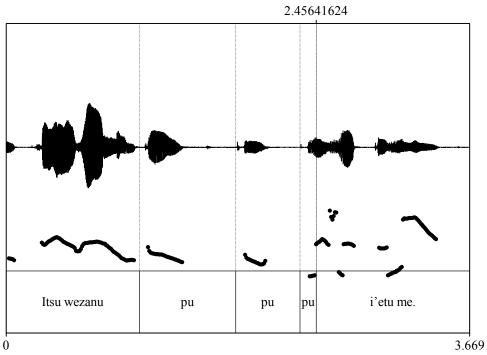


Figure 11: Waveform and pitch of example (7)(d)



Time (s)

Figure 12: Waveform and pitch of example (7)(b)

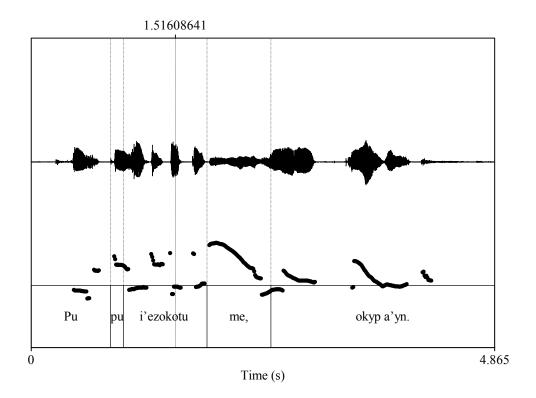
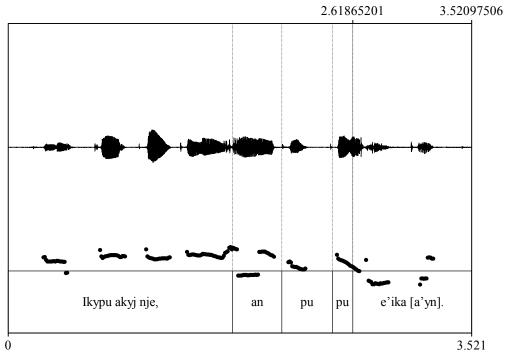
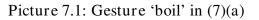


Figure 13: Waveform and pitch of example (7)(c)



Time (s)







Picture 7.2: Gesture 'boil' in (7)(d)

In (7)(b) and (c), captured in pictures 7.3 and 7.4, the speaker uses her hands to depict something round-shaped and flat, possibly a cooking vessel, in front of her, slightly above the level of her knees. In (7)(b) the preparation phase of this gesture only sets in after the utterance of pu pu, reaches its stroke at the second syllable of the light verb, and is repeated with another stroke at the second syllable of the finite verb okyp. In (7)(c) the same gesture is produced with the nominalized form ikypu of the same verb and held until being renewed when the complex verb an pu [pu e'ika] is uttered.



Picture 7.3: Gesture 'vessel' in (7)(b)



Picture 7.4: Gesture 'vessel' in (7)(c)

These latter observations suggest that the gesture depicting an object, which is produced during the utterances of (7)(b) and (c), does not only co-occur with the more

grammaticalized "ideophonic verbs"<sup>561</sup> but also with ordinary finite verbs denoting the same activity. The gestures accompanying the ideophones in (7)(a) and (d), by contrast, depict an activity and not an object. These ideophones are less morphologically integrated in the clause than (7)(b) and (c), i.e. in (a) and (d) the ideophones appear as instances of quoted speech, while the reduplicated ideophones with their inflected light verbs in (b) and (c) formally approximate reduplicated finite verbs. At the same time they are uttered without any prosodic markedness, a feature also characterizing ordinary finite verbs.

| Example | Form             | Marked  | Further gram-   | Gesture depic- | Gesture depicting |
|---------|------------------|---------|-----------------|----------------|-------------------|
|         |                  | prosody | matical marking | ting activity  | shape of object   |
| (7)(a)  | "pu pu pu" e'i   | +       | _               | +              | _                 |
| (7)(b)  | pu pu i 'ezokotu | -       | +               | _              | +                 |
| (7)(c)  | an pu pu e'ika   | -       | +               | _              | +                 |
| (7)(d)  | "pu pu pu" i'etu | +       | _               | +              | _                 |

Table 4.13: Correlations between gesture, prosody and grammatical marking cooccurring with ideophones

The correlations are summarized in table 4.13. This regularity observed in the speech of the female speaker which is illustrated in pictures 7.1 to 7.4, however, does not permit the general hypothesis that gestures depicting actions are only used with ideophones which are little grammaticalized or that inflected verbs are accompanied by gestures depicting objects rather than actions. This is shown by the following example where the same gesture which is used with the less grammaticalized ideophonic structures of examples (7)(a) and (d) cooccurs with a fully lexicalized middle verb *pupure* ('to boil').<sup>562</sup> It is used by a male speaker who describes how the pequi-fruit is cooked by women as well as by a female speaker talking about the same activity. This is illustrated in examples (8) and (9) and their respective pictures. Although the gestures here depict the same activity in the same way, there is a difference in quality. While in the examples (7)(a) and (d) the gesture stroke cooccurs with the utterance of each individual pu, the gestures in the examples (8) and (9) do

<sup>&</sup>lt;sup>561</sup> Cf. section 4.4. <sup>562</sup> Cf. section 5.3.

not correlate in rhythm with the utterance of the verb. Moreover, the gestures contrast with those illustrated in pictures 7.1 and 7.2 in that both hands are in the air at the same time, as is clearly visible in picture 8 and 9. Therefore the alternating movement of the articulators in these examples cannot be analysed as representing individual gestures with several strokes but is transcribed as a single gesture. The verbs, unlike ideophones, are also not uttered with marked prosody.

womenfolk SUBJ-light.fire.vt-NOM 3PRO PART, 3-boil.vi-IMPF so PART 'The womenfolk light a fire, so it keeps boiling (on it).' (lit: 'The womenfolk fire-light it, so it keeps boiling.')

(9) (ula\_seasons, 0319.91) *O-pupure-eju watu me. O-kyp peti'a. I=kyp-u me. \*\*\*\**3-boil.vi-IMPF INTENS PART 3-cook.vi pequi 3=cook.vi-NOM PART
'It keeps boiling for a long time. The pequi is cooked. It is cooked.'



Picture 8: Abstract gesture 'boil'



Picture 9: Abstract gesture 'boil'

In example (9) finite forms of the verb kyp ('to cook') occur twice after the verb *pupure*, and, similar to the examples (7)(b) and (c), the gestures co-occurring with these

forms depict the shape of an object which, however, seems to be bigger than the one used in the situation referred to by examples (7)(b) and (c).

On the one hand the correspondence between gestures used with ideophones and with finite verbs which are similar in form is clear evidence for a historical relation between the two of them. On the other hand it shows that verbs which may have had ideophones as their source have a somewhat hybrid character in grammatically and prosodically corresponding to verbs and performatively retaining features of the ideophones.

A further example in this context shows a related ideophone *pupupupupupupupu* ('to simmer') which is used without being morphologically integrated in the clause. As shown in (10), it forms, together with the particle  $mu'j\tilde{e}$ , adding perfective aspect, a clause by itself.<sup>563</sup>

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(10) (ary fem recl, 0076.436)
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 $I = po - m\tilde{o}j - tu \qquad azo = kyty me, \quad pupupupupupupu mu'j\tilde{e}.$ 

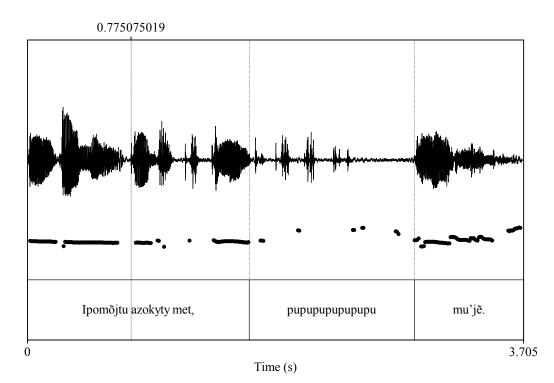
3=SUBJ-cook.vi-NOM 1pl.excl=for PART, IDEO.simmer ready 'She cooks them for us, pupupupupu (until it's) ready.'

While syntactically not linked to the action nominal *ipomõjtu* ('she cooks it') which constitutes the predicate of the first clause of the utterance and refers to the same event, the existential clause consisting of an ideophone and a particle semantically adds information on a physical quality of the unexpressed patient participant, i.e. the liquid boiling in the vessel, or on the manner component of the event.

Unlike the ideophones in (7), the one in (10) does not depict the boiling of a thick manioc soup which forms big bubbles. Instead, it describes the simmering of a liquid which consists primarily of water with specific roots in it from which an extract is drawn. This is expressed by the speaker's increased speed and little pitch variation when producing the syllables of the ideophone, as shown by the oscillogramm in figure 14.

<sup>&</sup>lt;sup>563</sup> Cf. example (6), section 4.6.1.1.

Figure 14: Waveform and pitch of example (10)



When uttering the finite predicate, the speaker enters the preparation phase of a gesture which depicts the shape and size of a cooking vessel. This object (*tawytu'jyt* 'pan') is referred to in a preceding clause where it is accompanied by an identical gesture.

The gesture stroke is reached at the utterance of the last syllable of *ipomõjtu*. This moment, when the vessel shape is clearly visible, is captured in picture 10.1. The duration of the stroke also includes the first two syllables of *azokyty* ('for us') when both hands are slightly lowered, presumably to indicate the depth of the vessel, as in picture 10.2.



Picture 10.1: Gesture 'vessel'

Picture 10.2: Gesture 'simmer'

This is followed by a second preparation phase ending at me, when the hands are raised again to a slightly higher level than in picture 10.1. The immediately following ideophone is accompanied by two little beats of the right forefinger, corresponding to the rhythm of the ideophone, while the speaker continues holding both hands in the shape of a vessel. The last syllables of the ideophone fall into the recovery phase of the gesture. Before  $mu'j\tilde{e}$  ('ready') is uttered, both hands retreat to their rest position in the speaker's lap.

In comparison to the ideophones of the preceding examples the co-occurring gesture in (10) is very short and hardly visible, possibly due to the high speed in which the ideophone is uttered, and it is questionable whether what is signaled by two little movements of a finger still depicts some aspect of the event or is simply a beat, marking the rhythmic structure of the ideophone. The fact that the gesture co-occurring with the ideophone in (10) is not as well-defined as those accompanying the "ideophonic" verb phrases in (7) or the formally related verbs in (8) and (9), may not only be attributed to its lack of grammatical integration but is possibly also related to the respective level of importance information conveyed by individual clause units is given in a discourse.<sup>564</sup> While the preparation of food is the central information in all other examples from descriptive texts focusing on food processing and tasks performed during different seasons, in (10) the preparation of different activities happening during female puberty seclusion.

Although several hypotheses have been formed from the observations with regard to the correlation between gesture and the ideophone depicting the boiling or simmering of liquid, its different levels of grammaticalization, the formally related verb *pupure* and unrelated finite verbs (*kyp*,  $m\tilde{o}j$ ) with similar meanings, these will need corroboration by further data and in-depth discourse analyses. The tendency, however, to depict the action in gestures accompanying ideophones or complex predicates involving (prosodically marked) ideophones and to depict the shape of a vessel whenever a finite verb refers to the same event is rather striking because it corroborates the general hypothesis that ideophones – unlike finite verbs – have their focus on the action.<sup>565</sup>

<sup>&</sup>lt;sup>564</sup> The importance of information structure for the gestural encoding of aspects of a motion event is shown in Chui (2009) and also briefly discussed in sections 4.6.1 and 4.6.4. <sup>565</sup> Cf. section 4.5.5.

4.6.4 Gesture and ideophones depicting manner of (loco)motion

Recent research focusing on the insights gestures may offer into the mental conceptualization of motion events (McNeill & Duncan 2000, Özyürek et al. 2005, Chui 2010) suggests that a number of factors such as the lexical and grammatical encoding of meaning components of the event, structuring of information in discourse or even cultural differences in patterns of movement may influence the way motion events are gestured in different languages. According to Talmy (2007: 70/71) the prototypical 'internal' components of a motion event<sup>566</sup> are a 'figure', i.e. an object which moves or is located relative to another object constituting the 'ground'. Further there is a 'path' and a 'motion', referring to the presence of motion per se in the event. In addition, a motion event can have an external 'co-event' associated with it, having a 'manner' or 'cause' relation to it. Both external components are exemplified in (11)(a) for 'manner', and (b) for 'cause':

(11) (Talmy 2007: 71, ex. (4))

- a. The pencil rolled off the table.
- b. The pencil blew off the table.

While the lexical verb *roll* in (11)(a) encodes motion together with its manner, a rolling movement, the verb *blow (off)* in (11)(b) has an additional component of causation, i.e. the wind which causes the movement. Verbs and other elements in different languages encode information on motion, manner and path to different proportions: In English motion and manner are encoded in a verb and path in an adjunct, as shown in (11)(a). In Spanish, by contrast, an adjunct, often consisting of a gerund form, provides information on the manner of motion, while the verb encodes motion and path. An example is given in (12):

(12) (Slobin 1996, cited in Özyürek et al. 2005: 200) *Sale volando*.

<sup>&</sup>lt;sup>566</sup> I have excluded here the 'continuation of a stationary location' which Talmy (2007: 70) together with motion subsumes under a 'Motion event' since it is not relevant for the analysis presented in this section. Therefore the semantic components, which only refer to the parts of an event actually involving motion, are not written with a capital letter as in Talmy's terminology.

'He/she/it exits flying.'

McNeill & Duncan (2000) in their comparative study of English, Spanish and Mandarin established specific regularities for the interaction of language and gesture with respect to motion events for each of the languages and drew conclusions for a respective cognitive conceptualization. Chui (2009), pointing out several shortcomings in McNeill's and Duncan's analysis, presents an in-depth analysis for Mandarin based on 245 instances of motion events from elicited cartoon narrations, of which nearly two thirds were gestured. These 245 instances were analysed with regard to their linguistic and gestural encoding of various motion-event components. Chui divided the motion verbs into various types with regard to their encoding of the components manner and path and found out that 81.6 percent encode manner to some proportion, while 63.6 percent are single manner verbs. In addition, manner information in Mandarin can be provided by adverbial and phrasal expressions. Single path verbs are extremely rare. Gestures, by contrast, encode path information (77.8 percent) considerably more often than information on figure (9.8 percent), ground (9.2 percent) or manner (7.8 percent).<sup>567</sup> Chui further investigated the parameter of information state (given vs. new information) as another factor which may influence the gestural representation. He showed that this does not play a role for the gestures depicting manner and path.<sup>568</sup> However, the high proportions of gestures depicting figure and ground in comparison to their low overall linguistic representation, with participants retrievable from the context, suggest that these components may be constrained by information state, occurring mostly when being introduced as new information.<sup>569</sup> From the fact that manner is predominantly encoded by linguistic means, i.e. in the lexical verbs, but that gestures depict a path component Chui concluded that the latter must be most salient in the conceptualization of motion events.<sup>570</sup> This applies not only to Mandarin,

<sup>&</sup>lt;sup>567</sup> Cf. Chui (2009:1770, table 1). The figure given for combined manner and path gestures (4.6 percent) has been added to each of the figures for individual manner and path gestures. <sup>568</sup> Cf. Chui (2009, table 3 and 5).

<sup>&</sup>lt;sup>569</sup> 21.6 percent of all motion events contained ground information which was gesturally represented in 26.4 percent of these instances. Figure information was given in 27.3 percent of the motion events and represented in 22.4 percent of these (cf. Chui 2009, table 6).

<sup>&</sup>lt;sup>570</sup> A prerequisite for this hypothesis is that he assumes gesture to be closer to the cognitive conceptualization of an event in the human brain than language structure. For Chui (2009:

where single path gestures are predominant, but also – according to the results of the study by McNeill & Duncan (2000) – to English and Spanish.

The center of interest in this section is not on cognitive processes which may be revealed by gesture but on their communicative function. It is also not on motion events in general but on the components provided by ideophones and synchronous gesturing. Therefore, the following analysis of a number of representative examples focuses on the interaction between motion verbs, ideophones and gesture.

Awetí motion verbs such as *to* ('to go (away)'), *ut* ('to come'), *'ajpok* ('to return'), *tem* ('to go out') behave like Spanish verbs in containing information on motion and path, while ideophones, occurring outside the clause, provide information on motion and on the manner of movement.<sup>571</sup> The latter includes factors such as suddenness, rate, force-dynamics or terrain. Most of the ideophones, in addition, carry information about the 'figure', the moving object, in that they can be attributed to human or non-human motion (e.g. *tyk tyk tyk* 'person walking' vs. *tiriririririri*<sup>572</sup> 'lizard moving').

Motion events in Awetí – expressed by finite verbs, ideophones or both – seem to be systematically accompanied by gesture whereby this observation applies to narrative as well as non-narrative texts and also to those speakers who tend to use gesture only sparingly. Gestures occurring with motion verbs are – unlike those accompanying ideophones – not necessarily synchronized with speech. They are deictic, having the speaker as the origo or the reference object<sup>573</sup> from where the motion departs or where it is directed to. Consequently the gestures are normally pointing gestures. In addition, a motion event is almost always accompanied by gaze, which is directed to the outside source or goal of the movement.

With regard to the ideophones which most often occur with the motion verb *to* ('go (away)'), it can be observed that these, too, are not accompanied by depictive gestures, like

<sup>1775)</sup> evidence is provided by the fact that gestures produced with typologically different languages depict identical components of a motion event.

<sup>&</sup>lt;sup>571</sup> There are further motion verbs like *eko* ('walk') or *wure* ('fly') encoding manner and path, but these are considerably less frequent in discourse than 'path' verbs and rarely occur with ideophones.

<sup>&</sup>lt;sup>572</sup> Cf. tal\_mamuti\_4\_8, 0659.336 and section 4.4.2.

<sup>&</sup>lt;sup>573</sup> This corresponds to the "ground" in Talmy's (2007) terminology regarding motion events.

those in the previous sections, but by the same pointing gestures that are used with verbs. Thus, unlike in the examples where ideophones depict events other than motion, the prominent semantic contribution of these gestures is not included in the meaning of the ideophones. Where this information seems to play a role in discourse, manner, mostly restricted to rate (i.e. speed of motion), can also be gesturally expressed.

With regard to ideophones depicting human motion events pointing gestures correspond to the path or the direction of the movement encoded in the meaning of the respective verb they accompany (e.g. to – away from the speaker, ut – towards the speaker). This is exemplified by (13) with the verb to ('go (away)') and the ideophone *tirik* ('person walking on dry leaves (in the forest)') in comparison to (15) with the verb ut ('come') and the ideophone *tyk tyk* ('person walking (on the path)').

3=go.vi-NOM PART IDEO.walk.through.thicket IDEO.catch.sight-INTENS

ka'awatu tup-u ti nã.
forest see.vt-NOM EVID 3PRO
'He walked through the thicket and (suddenly) saw a (good) forest.'



Picture 13.1: Gesture 'go' with ideophone Picture 13.2: Gesture stroke at tykyhy

As already briefly mentioned in section 4.6.1 when discussing the ideophone *tykyhy* ('catching sight', 'stop walking') in the same example, the preparation phase of the gesture sets in with the utterance of the action nominal *nãtotu* ('he went'), and a clear stroke coincides with the first syllable of *tykyhy*, as represented by picture 13.2. The recovery phase is concluded with the utterance of the remaining syllables of this last ideophone.

During what is marked as a phase, where it is difficult to decide whether it is still part of the preparation of a gesture or its stroke, the arm moves slowly upwards, as shown in picture 13.1, rhythmically accompanied by several repetitions of *tirik*. Syntactically, the ideophones occur after the clause-final particle *me*, so that they form two independent clauses (for the two distinct events walking and stopping). The gesture unit, however, extends over the clause boundary of the utterance. That the gesture expresses two semantic components, path as well as manner, becomes obvious when comparing it to the pointing gesture accompanying the finite verb *oto* ('he went') in a preceding clause without any modifying element:



Picture 14.1: Gesture 'go' with verb

The gesture, as shown by its phases indicated in example (14) and by the picture of the stroke in 14.1, does not have a component of an arm gradually lifted but is performed rapidly, whereby the stroke coincides with *to*, the second syllable of the finite verb which also receives primary stress in the utterance.

In (15) the motion verb *ut* ('to come') is used together with a corresponding pointing gesture of a specific type, shown in picture 15.1.

(15) (tal\_kakaja, 0576.926) *O-ut ti n=atitoza a'yn, tyk tyk.*\*\*\*\*-----3-come.vi EVID 3=mother.in.law PART, IDEO.walk

'His mother in law came, walking tyk tyk.'





Picture 15.1: Gesture 'come' with verb

Picture 15.2: Gesture 'come' with ideophone

The speaker lifts both hands rapidly from his lap before he starts talking and reaches the stroke, i.e. the moment when the pointing gesture towards himself as the deictic origo is clearly visible, at uttering the verb. The recovery phase ends after the first syllable of *natitoza* ('his mother in law'), when the hands are again positioned in the speaker's lap. As indicated by the second underlining in example (15) and shown in picture 15.2, the gesture is repeated, when the ideophone is produced. After that, without a recovery phase, a different gesture follows to depict another event.

Although the gesture used here cannot as readily be identified as a pointing gesture as the one in (13) where the index finger points into a specific direction, it is still deictic in

having the speaker himself as the origo.<sup>574</sup> The gesture in (15) unlike the one in (13) is produced in a very rapid manner, and the fact that it is repeated, when the ideophone is uttered, permits the hypothesis that the same co-speech gesture is used for both verb and ideophone. Unlike the interaction between the ideophone *tirik* ('person walking in the forest') and the gesture in (13), there is no correspondence in rhythm or rate between this gesture and the ideophone *tyk tyk* ('person walking (on the path)'). One reason may be that the ideophone used in (15) is less marked with respect to manner than the one in (13), since *tyk tyk* generally depicts walking (of a person) and has the additional manner component 'on the path (on clear ground)' only when contrasted with *tirik tirik*.

Another hypothesis, for which there is also evidence in the following example (16), may be that the manner information is not a central piece of information in the respective discourse context. The example suggests that in gestures co-occurring with ideophones depicting motion events the manner component is only expressed when this information plays a role in the development of the narrative. The speaker describes how men, when they go fishing, set out in their canoes to reach the place where the fish are caught. But although one would expect the paddling of a canoe to be marked with regard to manner of locomotion, it is not additionally depicted by gesture. This may be due to the fact that the utterance is immediately followed by a longer sequence in which the speaker focuses on the topic of fishing, describing and gesturally depicting the killing of different types of fish with various methods.

<sup>&</sup>lt;sup>574</sup> There are various modes of pointing. See e.g. Fricke (2007:105ff.) who – in German gesturing – distinguishes a "raumpunktdeiktische Geste", performed with an index finger, from a "richtungsdeiktische Geste", performed with a "flat" hand. In Awetí a further mode of performance can be observed in picture (19.1), where an elbow functions as the pointing articulator.

When the speaker utters the action nominal *ozototu* ('we went'), the pointing gesture, performed with his left arm, has already reached its stroke position, as indicated in picture 16.1, and the hand is immediately withdrawn to a rest position on the speaker's knee, as illustrated in picture 16.2. This movement is concluded with the utterance of the third syllable of the action nominal.

The second pointing gesture sets in at the clause final particle *a'yn*. The stroke, captured in picture 16.3, is at the last syllable of the reduplicated ideophone *pywpywpyw*. The arm is slightly withdrawn before the next word, as shown in picture 16.4, and the utterance of *pira'yt* ('fish') is accompanied by another beat or stroke, after which the hand is lowered to its rest position.



Picture 16.1: Gesture stroke 'go' in verb



Picture 16.2: Recovery phase



Picture 16.3: Co-speech gesture pywpyw



Picture 16.4: Co-speech gesture pira'yt

Both gestures, the one co-occurring with the action nominal and the one with the ideophone, are identical, depicting the path component of the motion event.

In an earlier sequence from the same descriptive text about fishing practices, given in (17), pointing gestures accompanying motion events are combined with pointing gestures towards the position of the sun, where they have the function of specifying the deictic adverb  $m\tilde{a}$  ('now').<sup>575</sup> In addition, manner of motion, slow walking versus fast bicycleriding, plays a role in this sequence and consequently is depicted by gesture.

(17) a. (awu fishing, 0353.113) *Mã azo=[tem-pu]* tyk tyk tyk tyk tyk tyk-tyk. 2 1 now 1pl.excl=go.out.vi-NOM IDEO.walk 'At this time (early) we went out, walking tyk tyk tyk tyk tyk tyk tyk. b. *Mã azo=totem-pu* tam vwo me. mã katu me. 3 now 1pl.excl=arrive-NOM village POSP PART now INTENS PART 'At this time we arrived in the village, at this very moment.' c. Mã itã jatã pisikleta 'apo tyry, 4 5 \_\*\*\*\* (not visible) ~~~~\*\*\*-.-.-~~~~ now TOP DEM bicycle on IDEO.ride.bike

<sup>&</sup>lt;sup>575</sup> Cf. Kendon (2004: 175) who describes in more detail this latter function of gesture used as an object of reference of an otherwise incomplete deictic sentence. Kita (2001: 427) states that demonstratives (or deictic adverbs, as in this case) are communicatively highly dependent on pointing gestures, while a mimetic (i.e. ideophone) accompanied by an iconic gesture is not. In situations, where the gesture is communicatively not necessary, Kita assumes a cognitive motivation for its production and suggests an inherently imagistic semantic representation for ideophones co-occurring with iconic gestures (Kita 2001: 428).

```
'Now it is on bicycle, tyry(ry).'<sup>576</sup>
d.
Mã [we]ne totem[-pu]
                           tyryry,
                                         me.
                           7
6
                           ******
*****
             arrive.vi-NOM IDEO.ride.bike PART
now still
'Now one still arrives (at midday), tyryry.'
e.
Nã=tsue'vm mote wian ne.
8
****************
3=like-NEG
            long.ago still
                         PART
'It wasn't like that in the past.'
```

The sequence contains three instances of two ideophones, one to depict the motion event of walking (*tyk tyk tyk*), the other two the bike-riding (*tyry, tyryry*). In addition there are three instances of action nominals, functioning like finite verbs, which refer to motion events (*tempu* 'go out', *totempu* 'arrive'). In two cases these have a relation to the directly following ideophones, analysed as constituting separate clauses,<sup>577</sup> which add a manner component similar to adverbs in English (in utterance (17)(a) and (d)). In one case the action nominal is the predicate of a clause without an ideophone in the immediate syntactic environment (in utterance (17)(b)).

Altogether eight visible gestures, as marked in a separate glossing line, occur in the sequence. In (17)(a) the speaker, with his left hand, points up at  $m\tilde{a}$  ('now') to indicate by the angle of his arm the position of the sun at the time, when people were leaving the village to go fishing. The pointing is reinforced by a gaze in the same direction, as captured in picture 17.1. The same hand then describes a slow, arc-shaped movement towards a point in front of the speaker, depicting the movement of the sun together with the slow movement of the people who take a long time walking. Although it departs directly from the pointing gesture indicating time, this movement is analysed as a second gesture –

<sup>&</sup>lt;sup>576</sup> *Tyryry* is the standardized ideophone given by Awetí consultants during the transcription. In the recording itself only two syllables of the ideophone are audible. 577 Cf agetion 4.4.2

<sup>&</sup>lt;sup>577</sup> Cf. section 4.4.2.

completely synchronous with the ideophone – which combines manner and path of a motion event.





Picture 17.1: Gesture 1 (sun position)

Picture 17.2: Gesture 3 (sun position)

The ideophone *tyk tyk* is formally the same as in example (15), depicting human beings walking on a path, but it is marked in discourse by being repeated several times, indicating that the walking is extended in space or time, and by being contrasted with *tyryry*, an ideophone for bike-riding, two clauses later.

When uttering the second  $m\tilde{a}$  ('now'), the speaker accelerates his movement for a short moment to perform another pointing gesture, shown in picture 17.2, and then holds the hand at this position for the remainder of utterance (17)(b). This third gesture again makes a different semantic contribution to the utterance than the second gesture in pointing to the (low) position of the sun at the time when people traditionally came home from fishing. This gesture clearly provides spatial information not given by the deictic adverb  $m\tilde{a}$  ('here', 'now'), while the hold depicts the path of the motion event referred to by the verb *totem* ('arrive'). In utterance (17)(c) there are two visible gestures. The first is prepared from the second syllable of *jatã* ('this'), reaching its stroke at the first two syllables of *pisicleta* ('bicycle'). This gesture, an arc-shaped movement to the left, provides a path component to a motion event not otherwise referred to in the non-verbal clause, in which the postpositional phrase *pisicleta 'apo* ('on bike') expresses a manner component. The stroke is captured in picture 17.3.



Picture 17.3: Stroke of gesture 4



Picture 17.4: Stroke of gesture 6

Another stroke occurs during the utterance of the ideophone tyry, at which the speaker points upwards, shortly holding his left arm in a right angle. By drawing his arm to the centre above his head he develops the sixth gesture in utterance (17)(d), which indicates the highest point of the sun at midday. The stroke at  $m\tilde{a}$  ('now') is shown in picture 17.4. The following motion verb totem ('arrive') is uttered during the recovery phase of this gesture. During his utterance of the ideophone tyryry the speaker draws a full circle in the air, as indicated by the arrow in picture 17.5. This gesture depicts by its circular movement the wheels or movement of a bicycle, i.e. the motion and the manner component. When uttering *natsue'ym* ('not like this') in (17)(e) the speaker describes another arc-shaped movement to the left. Although it departs directly from the circle-shape, it is analysed as an eighth gesture, since it is not the depiction of a shape any more but the indication of a smooth movement, whereby the hand gradually opens, palm turned to the observer. After the stroke, extending to the first syllable of *mote* ('in the past'), the hand is completely opened and a turn of gaze follows, as can be seen in picture 17.6. This gesture is different in function, since it provides manner and path information not given by the deictic element nãtsu.<sup>578</sup> During the recovery phase the hand is withdrawn to its rest position on the speaker's thigh.

<sup>&</sup>lt;sup>578</sup> This postpositional phrase can be used anaphorically, referring to information given in the preceding discourse, or it can – as in this case – have the function of introducing gesture into discourse structure (cf. section 5.3.3.1).



Picture 17.5: Gesture 7 ('bike-riding') Picture 17.6: Turn of gaze after stroke of 8

The sequence indicates that the encoding of a manner component together with or even without the usual path component in a motion gesture occurs when this information is central in discourse. In this case the speaker compares the slow walking of earlier times (gesture 2) to the riding of bicycles nowadays (gesture 4+5), by which the duration of the fishing trip can be considerably shortened. This corresponds to the slow motion of the gesture accompanying the repeated ideophone *tirik* in example (13), where walking for a long time through the thicket until reaching an open space also plays an important role in the narrative. In (17)(d), bicycle-riding as a modern technique is further put into focus by an iconic gesture depicting the shape of a wheel, which co-occurs with the ideophone *tyryry* ('bike-riding').

The following two examples (18) and (19) illustrate that the manner component in discourse-prominent ideophones may not only be gesturally depicted in terms of speed but also include the dimension of terrain. In both cases the pointing direction of the gestures co-occurring with ideophones which depict the flying of a bird is upwards, so that the depicted aspect of the manner of movement here is the information "in the air". A contrasting example (20) illustrates that gestures accompanying motion verbs without ideophones do not depict any manner component.

The utterance in (18), unlike previous examples, does not contain a motion verb in the clause preceding the ideophone. Only the ideophone *popopopopopo* conveys information on the flying event.

As can be seen in picture 18.1 the first clause with the action nominal *mo'egetu* ('to make') is accompanied by a depictive gesture. Picture 18.2 captures the moment before the ideophone *popopopopopo* is uttered. The speaker has withdrawn his hands to a rest position and directs his gaze upwards. With this gaze the preparation phase of the following gesture sets in.



Picture 18.1: Gesture 'make'

Picture 18.2: Gaze preceding *popopo* 

When starting to utter the ideophone, he 'throws' his right arm upwards in a pointing gesture performed with a 'flat' hand, as shown in picture 18.3. Picture 18.4 shows the stroke of a third gesture, when the second ideophone *pok* ('to land') is uttered. This gesture is analysed as iconic whereby the hand seems to represent the bird setting its claws on a surface.<sup>579</sup>

<sup>&</sup>lt;sup>579</sup> In the narrative the bird flies up to the ceiling of a house and sits down on a wooden beam.



Picture 18.3: Gesture 'fly up'

Picture 18.4: Gesture 'land'

Contrasting with (18), example (19) is an utterance with a motion verb *atap* ('cross sth.') and an ideophone, depicting by its rhythm the manner of flying of a specific species of bird in the immediately following clause.

(19) (tal\_kakaja, 0456.181) Wej-t-atap ti me, jatã takururu,

3-EPEN-cross.vt EVID PART DEM speech.of.woodpecker

*popopopo popopopo popopopo popopopo popopopo popopopo.* [...]

IDEO.flying.of.woodpecker

'It crossed (the field), this (one which makes) takururu, (flying) popopopo popopopo.'

The repetition of an unusual number of ideophones, in addition, indicates duration, signaling that the bird in the narrative flies for a long time (and still does not reach the end of an enormous field planted with manioc).  $^{580}$ 

Picture 19.1 shows the end position of the preparation phase of what is interpreted as a special type of pointing with the elbow.<sup>581</sup> This end position is held during the whole clause that precedes the ideophone.

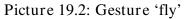
<sup>&</sup>lt;sup>580</sup> Cf. example (33) in section 4.2.5.2.



Picture 19.1: End of preparation phase

Only when the speaker starts to utter the ideophone with its multiple repetitions the stroke of the gesture occurs. It consists of an arc-shaped movement with the left hand, index finger pointing, from a position near the right shoulder to the left side of the speaker. The highest point of the movement is captured in picture 19.2, the moment, when a following clause sets in, in picture 19.3. The fact that the arc-movement has not yet reached its end-point corresponds to the information conveyed linguistically that the bird only flies until the middle of the field, where its wings become lame.





Picture 19.3: End of gesture

In order to confirm that the gesture co-occurring with the verb *atap* ('cross sth.') includes both components, pointing with the elbow as well as pointing with the index

<sup>&</sup>lt;sup>581</sup> Cf. McNeill (2000: 6/7) who states that pointing gestures across cultures can have different standardized forms. The gesture may additionally have an iconic component since the verb, too, does not only indicate the direction of a movement but its relation to a 'ground'.

finger, and that the slow arc-shaped movement semantically corresponds to the ideophone, an example from an autobiographical narrative with the same verb but without an ideophone is given in (20).

(20) (kup autobiogr, 1159.328)

Itopa(zoko)tu, ipeput atatap mejka 'ẽ. \*\*\*\*\* I= topat -oko -tu, mejka i=pe-put a-t-atap 'ẽ. 1sg=be.lost.vi-IMPF-NOM, 1sg=path-NPST 1sg-EPEN-cross.vt EPIST PART 'I was getting lost. I crossed my former path without perceiving it.'

The gesture which co-occurs with the utterance containing the finite verb *atatap* ('I crossed sth.') starts as shown in picture 20.1. Similar to the gesture accompanying *atap* ('cross') in picture 19.1 the elbow of the left arm points to the left side, while the outstretched hand is positioned at the right side. However, unlike in (19) the gesture stroke sets in immediately, as illustrated by picture 20.2, in that the left hand moves rapidly in a horizontal line in front of the body to the left side, ending with a pointing of the index finger into that direction. With the following clause the speaker withdraws his hand to a rest position.



Picture 20.1: End of preparation phase Picture 20.2: Gesture stroke 'cross'



The last three examples illustrate that pointing gestures when accompanying ideophones depicting motion may differ from the pointing gestures co-occuring with motion verbs in conveying manner information with regard to the terrain the motion takes place in. When comparing the utterance containing an ideophone but no motion verb in example (18) with the utterance with the reversed parameters in (20), the two co-occurring pointing gestures differ in that the one in (18) is performed upwards and in a 'throwing' manner, while the performance of the one in (20) only gives information on the path. This is additionally confirmed by example (19) with the same motion verb *atap* ('cross sth.'). Here the ideophone provokes a modification of the gesture in being performed slowly, synchronously with the ideophone and in an arc-shaped movement. In (18) as well as in (19) the ideophones are prominent in the discourse: in (18) due to the fact that there is no other linguistic means to express the motion event and in (19) conveyed by multiple repetition and prosodic markedness. The different correlations between motion event, gesture type and discourse prominence are summarized in table 4.14.

| Ex.    | Motion event        | Meaning                | Meaning depicted     | Information   |
|--------|---------------------|------------------------|----------------------|---------------|
|        |                     |                        | by gesture           | status        |
| (13)   | to (V)              | ʻgo'                   | path                 | not prominent |
|        | tirik tirik (IDEO)  | 'walk through thicket' | path, manner (slow)  | prominent     |
| (14)   | to (V)              | ʻgo'                   | path                 | not prominent |
| (15)   | ut (V)              | 'come'                 | path                 | not prominent |
|        | tyk tyk (IDEO)      | 'walk'                 | path                 | not prominent |
| (16)   | to (V)              | ʻgo'                   | path                 | not prominent |
|        | ружружруж           | 'paddle'               | path                 | not prominent |
|        | (IDEO)              |                        |                      |               |
| (17)a. | tem (V)             | 'go out'               | (time), path         | not prominent |
|        | tyk tyk (IDEO)      | 'walk'                 | (time), path, manner | prominent     |
|        |                     |                        | (slow)               |               |
| (17)b. | totem (tam ywo)     | 'arrive' (at village)  | (time), path         | not prominent |
|        | (V (+PP))           |                        |                      |               |
| (17)c. | pisicleta 'apo (PP) | 'by bike'              | path, (manner)       | prominent     |
|        | tyry (IDEO)         | 'move smoothly'        | path                 | not prominent |

Table 4.14: Correlations between motion event, gesture type and information status

| (17)d. | totem (V)       | 'arrive'           | (time)                  | not prominent |
|--------|-----------------|--------------------|-------------------------|---------------|
|        | tyryry (IDEO)   | 'circulate'        | manner                  | prominent     |
| (17)e. | nãtsu (PP)      | '(move) like this' | path, manner            | prominent     |
| (18)   | popopo (IDEO)   | ʻfly'              | path, manner (in the    | prominent     |
|        |                 |                    | air)                    |               |
| (19)   | atap (V)        | 'cross sth.'       | path (partially iconic) | not prominent |
|        | popopopo (IDEO) | 'fly'              | path, manner            | prominent     |
| (20)   | atap (V)        | 'cross sth.'       | path (partially iconic) | not prominent |

The examples in this section have shown that there is a consistent relation between the shape of deictic gestures co-occurring with ideophones of motion events and the respective discourse prominence of the ideophone in that a manner component is only depicted if the ideophone is focused on. If this is not the case, path gestures - the gesture type also used with motion verbs – are produced. Similar observations have been made by Chui (2009) who found out that almost 75 percent of Chinese motion events expressed by verbs are accompanied by a path gesture, and that figure and ground – components which are not often expressed verbally - are often depicted when they convey new information and are thus prominent in discourse. Unlike in Awetí, where manner information is predominantly encoded in ideophones,<sup>582</sup> which are considerably less frequent than finite verb forms, Chinese speakers primarily encode manner linguistically by motion verbs and only marginally express this component by gesture. On the other hand, although there are few single path verbs in Chinese, path is also very often encoded linguistically by means of manner-path deictic verbs and prepositional phrases and at the same time it is the component most often conceptualized by gesture. The same applies to English for which McNeill (2005: 185) came to the following result: "Adults, when they describe [...] motion events, typically produce gestures showing only path [...] or gestures showing in a single gesture both manner and path [...]. Manner without path, however, rarely occurs". Awetí in this respect behaves similarly in that it also most often encodes path linguistically and by gesture, and manner gesturally only in combination with path. From the correspondences

<sup>&</sup>lt;sup>582</sup> The two other possibilities to encode manner are postpositional adjuncts (e.g.  $n\tilde{a}tsu$  'like this' in (17)(e), cf. section 5.3.3.1) in combination with a gesture and – to a lesser degree – gerund forms of specific motion verbs (e.g. *wekwaw* 'walking').

between Chinese and English Chui (2009: 1775) concludes "that 'path' is the most salient component in motion-event conceptualization".

#### 4.6.5 Summary

A vast amount of video data from the Awetí corpus, of which only a few examples have been discussed in this chapter, confirms that ideophones in Awetí are consistently accompanied by gesture and that this does not apply to other words (e.g. verbs or nouns) where gestures co-occur less systematically and to a much lesser degree.

It could be shown that ideophones and gestures are completely synchronous in that the gesture stroke usually falls on the ideophone. This correlation had already been noticed by Kita (1997: 392, 2001: 425) with respect to Japanese adverbial ideophones. Kita, who investigated in the interaction between ideophones, spontaneous co-speech gestures and expressive prosody, further found out that prosodic peak, if existent in an utterance, also falls together with the utterance of the ideophone, a feature which for Awetí was already pointed out in section 4.2.5.3.

With respect to gesture, a distinction needs to be drawn between ideophones depicting motion events, typically occurring in syntactic structures as outlined in 4.4.2 where their meaning combines with that of a verbal predicate, and ideophones expressing other activities. The semantic difference between these two types is also reflected in the co-occurring gestures: while the former are accompanied by deictic gestures, partially with descriptive components, the latter are entirely iconic in nature.

Gestures accompanying other ideophones than those of motion events depict movements characterizing the activity referred to, whereas gestures, produced together with verbs referring to the same activities, often depict objects, i.e. participants of the event referred to. Gestures co-occurring with ideophones of this type further vary, depending on the importance of an ideophone in discourse or on the degree of syntactic integration of an ideophone.

In motion events ideophones depict the 'manner' component, while the co-occurring gestures encode the 'path' component. This path information conveyed by gesture depends on the path which is lexically encoded in the motion verb of an adjacent clause associated with the ideophone or by other means, e.g. by a locative adjunct. While most motion verbs

in Awetí encode the motion and the path component of a motion event and provide information on the figure by grammatical structure, an ideophone encodes motion, manner and information on the figure. Both, ideophones and lexical verbs, can refer to a motion event by themselves or in combination, occurring in adjacent clauses. Since gestures synchronizing with ideophones depicting motion events always encode a path which is not encoded in the ideophone, they vary with the respective verb or other element they relate to. If the manner component, depicted by the ideophone, is a central piece of information in discourse, it can additionally be depicted by the co-occurring gesture.

Finally, ideophone-accompanying gestures in Awetí are highly conventionalized and this apparently not only in narrative discourse, where they may be part of a learned repertoire of narrative techniques. This is another piece of evidence against McNeill's hypothesis that co-speech gestures are generally produced with a low level of speaker awareness.

5 Historical developments involving Awetí ideophones

As could be shown in the preceding chapter, ideophones in the Awetí language, depending on their respective function in the utterance, may display great differences with regard to their morphological and syntactic behaviour. Some are phonologically and syntactically marked as independent units, others are syntactically independent but semantically linked to the predicate of the preceding or following clause, adding a manner component to the event. Some ideophones constitute the predicate of a clause in their invariant form. Others occur as the uninflecting part of a complex predicate formed by a light verb. Finally, ideophones may be formally identical with verb roots.

All these observations give rise to speculations about possible historical developments and processes of grammaticalization involving ideophones and lexical verbs, whereby such processes in Awetí seem to be restricted to the conventionalized ideophones of group I. Grammaticalization is understood here as a process involving a grammaticalizing element (gram) and its constructional context.<sup>583</sup> This grammaticalization process, according to Himmelmann, can more specifically be characterized as context-expansion, which may take place on three different levels and is schematized as follows:

(1) (Himmelmann 2004: 33; 2005: 82)

 $(X_n)$  An B | Kn  $\rightarrow$   $(X_{n+x})$  A<sub>n+x</sub> b | K<sub>n+x</sub>

where *A* and *B* represent full lexical items, *b* a grammaticized element and the following three types of contextual changes occur:

- a. host class formation:  $A_n \rightarrow A_{n+x}$
- b. change of syntactic context:  $X_n \rightarrow X_{n+x}$
- c. change of semantic-pragmatic context:  $K_n \rightarrow K_{n+x}$

On a first, construction-internal level a "host class", i.e. a class of elements the gram enters in construction with, may form or expand. On a second level the syntactic context of the "grammaticalizing construction" (consisting of the gram and its host) can broaden. On a third level the semantic-pragmatic context, i.e. the semantic and pragmatic conditions which determine the use of the grammaticalizing construction, can expand.

<sup>&</sup>lt;sup>583</sup> Cf. Himmelmann (2004: 31).

Even though he states that in grammaticalization processes typically all three contexts change, Himmelmann (2005: 83) points out that it is the third level which is most important to define a process as grammaticalization.

Problematic for an investigation into historical processes in Awetí is the general absence of a diachronic dimension in the data so that any proposal of a development sketched in this chapter must remain hypothetical. However, synchronic variation in Awetí can be considered as an indicator of diachronic change, 584 and – as will be outlined in chapter six - cross-linguistically, too, in various related languages certain construction types and usages can be observed which provide clues for possible developments. In addition, the research results regarding ideophones in other languages of the world make some diachronic pathways of change more likely than others.

In the following sections empirical synchronic evidence, favouring or discarding different historical scenarios as cross-linguistically proposed for the development of ideophones, will be presented. It is generally assumed that ideophones have entered the language at different stages and through different processes. Their further development also seems to depend on individual formal and semantic characteristics.

# 5.1 Ideophones as stable vocabulary

Several researchers studying ideophones in different parts of the world claim that these belong to the vocabulary of a language which is less likely to undergo phonological change. Empirical evidence for this hypothesis was given by Mithun (1982), who showed for several Iroquoian languages that vocabulary items from this class of words had a more symmetric phonological system than the rest of the lexicon, i.e. marked gaps in the inventory are filled by phonemes which only occur in these words.<sup>585</sup> She further found out that while vowels in 'expressive vocabulary' (subsuming ideophones and interjections) tend to shift along over time with the rest of the lexicon, this does not apply to consonants. Mithun used her comparative data on ideophones as well as the results of a comparison between the sound inventory of ideophones and that of the rest of the lexicon in each of the

<sup>&</sup>lt;sup>584</sup> Cf. Labov (1994: 20ff.).
<sup>585</sup> Cf. Mithun (1982: 53/54) and section 1.3.2.

languages as a basis for historical reconstruction and for establishing levels of genetic relations between the individual Iroquoian languages.

More evidence for the hypothesis that ideophones or closely related elements are less affected by sound change than other words is given by Langdon (1994), who describes the phonological features of so-called "noise words" in Paraguayan Guaraní, a Tupian language with a high proportion of Spanish loanwords. These Guaraní "noise words" differ from Awetí ideophones in that they are inflected when functioning as predicates and are used as modifiers of nouns when occurring in their bare form.<sup>586</sup> With regard to their syllable structure, their morphology and semantics, however, they are partially identical with some of the ideophones in Awetí. Langdon (1994: 95) observed: "the initial consonant [of a noise word] is never one of the consonants which cannot be initial in native Guaraní words [...], nor can it be one of the sounds borrowed from Spanish". From this and other phonological regularities and from the fact that for the meanings of these words it is difficult to find exact Spanish translation equivalents she concluded that "noise words" belong to the native lexical inventory of the language.

In Awetí, too, ideophones show a different behavior with regard to phonological change than other words. It has been attested for other words in the language that a phonological change occurred from /t/ and /c/ to /z/ in intervocalic position and that this change did not affect the closely related TG-languages or Sateré-Mawé.<sup>587</sup> Drude (unpubl.) hypothesizes that the retroflex fricative was only recently introduced to the Awetí system as a result of a language contact not further specified which in the same way also affected the neighboring Arawak language Waurá. One argument in favor of a recent change from /c/ to /z/ is the fact that in two word lists collected by the German explorers Steinen (1894: 535-537) and Schmidt (1905: 441-446)<sup>588</sup> there are lexical items containing /c/ which in current language use are pronounced with /z/.<sup>589</sup> Examples are given in table 5.1.

<sup>&</sup>lt;sup>586</sup> Cf. Langdon (1994: 100/1) and section 1.3.3.

<sup>&</sup>lt;sup>587</sup> Cf. Drude (2006: 35/36).

<sup>&</sup>lt;sup>588</sup> Both authors documented the Awetí words in a German-based orthography. Steinen (1894: 523/524), who collected word lists in the whole Upper Xingu area, did not explicitly mention a phoneme /z/.

<sup>&</sup>lt;sup>589</sup> Cf. Drude (unpubl. a: 8).

| Current Awetí                      | Steinen (1894) | Schmidt (1905) | Meaning       |
|------------------------------------|----------------|----------------|---------------|
| <i>ite'yzapat</i> [ite?+za'pat']   | rapat          | irapat         | 'my bow'      |
| <i>muzak</i> [muzak <sup>¬</sup> ] | mura           | murak          | 'harpy eagle' |
| tawozy [tawɔ'zɟ]                   | tavarü         | tauarí         | 'turtle'      |
| taza [ta'za]                       | tara           | tará           | 'fire'        |
| uzuapiryt [uzua'pirit']            | -              | turuapírit     | 'vulture'     |

Table 5.1: Recent phonological change from /r/to /z/t in Awetí

Intervocalic /z/ is the only retroflex phoneme in the Awetí language and at the same time, together with /y/ and /h/, it belongs to a group of three fricatives which are all considered to be marginal to the system and newly introduced as the result of language contact. While /h/ is only found in ideophones of the sound imitating type (group II), /y/ does not occur in ideophones at all. The phoneme /z/ is established in the lexicon, but in ideophones it only occurs in one conventionalized form /kuzuk/ which, on the other hand, is relatively frequent. Examples of the form *kuzuk* ('insert (into a tight slot)'), and its less frequent variants, indicating sound change, are given in (1)(a) to (c):

## (1)a. (kal\_kamukuaka4, 1044.571)

N=atupytã -ju -tu watu, puuuu, kut, kuruk (11x), mu'jẽ a'yn.
3= open.mouth.vi-IMPF-NOM big.one, IDEO.throw, IDEO.swallow IDEO.squeeze ready PART
'The big one (i.e. monster) opened its mouth. He threw it, puuu, (into it). It swallowed it, kut, squeezing (and crushing) it, kuruk kuruk [...], until it was completely swallowed.'

b. (kal sham myth1, 0412.49)

Mã ti a'yn ne 'e. Wej-zo- itse ti n=ezut -aw kutuk, now EVID PART PART 3- COM-go.inside.vi EVID 3= bring.vt-GER IDEO.go.inside, Kwaza me, kuzuk.

Sun PART, IDEO.go.inside

'At that time he went inside together with it, bringing it, kutuk. Sun (went inside) kuzuk.'

c. (mop\_manioc, 0705.491)

*'Op watu me. Pururu i='ywypywo. Imuput akyj azoj-jung nge,* leaf big PART IDEO.put.down 3=POSP result.of.this TOP 1pl.excl-insert.vt PART *kuzuk kuzuk kuzuk.* 

# IDEO.insert

'The leaves are big. Pururu (they put them down) on the lower part of it (the bottom of a vessel to store manioc) on the outside. These (leaves) we insert, kuzuk kuzuk, (to form the sides of the vessel).'

*Kuzuk* belongs to the group of ideophones with an 'image schematic' meaning that may be a characteristic feature of various events<sup>590</sup>. It depicts events which share as a component that an object is inserted in a place. While the form *kuruk* in (1)(a) only occurs once in the corpus with this specialized meaning of squeezing something in order to fit in its destined place, *kutuk* appears in (1)(b) as an alternative to *kuzuk* which in current language use is the most common ideophone referring to the entering of a house. In (1)(c) a related meaning of *kuzuk*, the insertion of leaves in a structure to form the sides of a storage vessel, is presented.

In ideophones with multiple reduplication of the structure  $C_1V_1r V_1 [rV_1]^n$  variation between /r/ and /z/ frequently occurs. An example is given in (2):

(2)a. (kal awakap1, 0438.811)

Kyryryryrytuk,mojtewatutin=ekyp-(p)u.IDEO.climb.quickly IDEO.reach.ground, immediately big.one EVID 3= climb.down.vi-NOM'Kyryryryryry tuk, the big one climbed down immediately.'

b. (kal\_kamukuaka5, 0258.682)

*Kyzyzyzyzy watu, w-ekyp tut a'yn.* IDEO.climb.quickly big.one, 3-climb.down.vi FUT PART 'The big one kyzyzyzyzy, (it) will climb down.'

<sup>&</sup>lt;sup>590</sup> Cf. section 4.5.3.2.

Another observation favouring the hypothesis that Awetí ideophones belong to the part of the lexicon which is not very likely to change over time is the fact that Emerillon, a Tupí-Guaranian language spoken in French Guyana, has a number of cognate forms with Awetí, as illustrated in table 5.2. Other parts of the Emerillon lexicon – judging from the examples given in Rose (2003) – do not seem to be very similar to the corresponding Awetí words. Since the Emerillon speakers have never been in contact with the Xinguan group, it can be concluded that similar ideophones have already existed in a common ancestor language.

| Awetí                      | Emerillon <sup>592</sup>         | Meaning                          |
|----------------------------|----------------------------------|----------------------------------|
| fu                         | <i>fu</i> (170)                  | 'blow'                           |
| kyryk kyryk                | $k^{w}$ ələg $k^{w}$ ələg (1455) | 'climb up/down'                  |
| kutsu kutsu <sup>593</sup> | kosokosog (798)                  | A: 'wash', E: 'get out of water' |
| polok                      | ponoŋ (1494)                     | A: 'jump out', E: 'get outside'  |
| pok                        | pug (1505)                       | 'put', A: 'sit down'             |
| tsu                        | so (816)                         | 'pour water'                     |
| tsuruk <sup>594</sup>      | sulug (787)                      | 'get inside the house'           |
| tuu                        | tou (1498)                       | 'fall from great height'         |
| tyk(y)                     | dilig (1500)                     | 'look'                           |

Table 5.2: Cognate ideophones in Awetí and Emerillon<sup>591</sup>

An argument against the hypothesis of ideophones always belonging to the "older", native part of the lexicon, however, is that some ideophones found in Awetí are also found in other, not related languages of the Upper Xingu area. Examples encountered in the

<sup>&</sup>lt;sup>591</sup> The Awetí affricate /ts/ corresponds to /s/ in Emerillon which may be realized as a fricative [s] or an affricate [ts]. The consonant /l/, corresponding to /r/ in Awetí, is realized as [l], [r] or [I], the preferred variant being the flap [r] (Rose 2003: 643/644).

<sup>&</sup>lt;sup>592</sup> The number in parentheses indicates the example number in Rose (2003).

<sup>&</sup>lt;sup>593</sup> Note that the related verb root is  $/k_{\pm}z_{\pm}/$  ('to wash'), showing the innovative Awetí consonant /z/ in the place of the 'old' /ts/ as well as a change in vowel quality.

<sup>&</sup>lt;sup>594</sup> The ideophone *tsuruk* is in fact a loanword from Kamaiurá (cf. section 5.2).

limited data sources available for Kamaiurá, for the Carib language Kalapalo and the Arawakan language Waurá are listed in table 5.3.

| Awetí                         | Kamaiurá             | Kalapalo <sup>596</sup>    | Waurá          |
|-------------------------------|----------------------|----------------------------|----------------|
| <i>fuu fuu</i> 'blow'         | -                    | <i>fuu fuu</i> 'blow'      | -              |
| kut kut kut 'drink'           | -                    | <i>kui kui kui</i> 'drink' | -              |
| <i>pii pii pii</i> 'sow corn' | -                    | -                          | ры ры ры       |
|                               |                      |                            | 'throw powder' |
| pok 'put', 'sit               | <i>mbuk</i> 'fall to | bok, puk, pokï 'put',      | pakı 'put'     |
| down', 'give'                 | ground'              | 'give'                     |                |
| popopopo 'fly'                | -                    | pupupupu, bu bu bu         | -              |
|                               |                      | ʻfly'                      |                |
| popopo 'stumble               |                      | bobobobo 'fruit            |                |
| and fall'                     | -                    | falling and rolling        | -              |
|                               |                      | around' 597                |                |
| руж руж руж                   | -                    | pupupupu 'paddle'          | -              |
| 'paddle'                      |                      |                            |                |
| <i>tiw tiw</i> [t∫iʊ]         | -                    | <i>tsiuk tsiuk</i> 'cut    | -              |

Table 5.3: Correspondences between ideophones in Awetí and other Xinguan languages<sup>595</sup>

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<sup>&</sup>lt;sup>595</sup> The examples are from Seki (2000: 104ff.), Basso (1995) and Richards (1977, 1988). The pronunciation of the grapheme <i>in Kalapalo is described as "middle open" [ə] (cf. Basso 1995: xv). The orthography of Waurá is phonemic, i.e. <i>corresponds to /i/ which is realized as <y> in Awetí and Kamaiurá. According to Guirardello (p.c.) there are also correspondences between ideophones in Trumai and Kamaiurá as well as in Awetí. <sup>596</sup> Recent open access data from the Kuikuro DoBeS-corpus confirm that ideophones are also a common phenomenon in this Cariban language which is closely related to Kalapalo (cf. http://corpus1.mpi.nl/qfs1/media-archive/dobes\_data/Kuikuro/Data/ Linguistic/Natural-Use/Monological/Recorded/Explanation/Annotations/Honey.eaf). Since these data were not yet available at the time of the analysis, they could not be taken into account in this comparison between Xinguan ideophones. Two important observations, however, could be made: 1) Kuikuro ideophones are time-aligned with representational gestures. 2) The available video recordings of older and younger Kuikuro speakers suggest that ideophones and gestures primarily occur in the discourse of older people.

| 'cut arrow cane'               |                           | arrow cane'                           |                 |
|--------------------------------|---------------------------|---------------------------------------|-----------------|
| tak 'cut', 'get loose'         | tak tak tak 'take off'    | -                                     | -               |
| tok tok 'club to               | -                         | tok tok/ tuk tuk                      | -               |
| death'                         |                           | 'club to death'                       |                 |
| tom/ tum 'fall into            | -                         | tom/ tum 'dive into                   | -               |
| water', 'dive'                 |                           | water'                                |                 |
| <i>t(s)irik t(s)irik</i> 'walk | -                         | <i>tsïgï tsïgï tsïgï</i> 'walk        | -               |
| on dry leaves'                 |                           | on dry leaves'                        |                 |
| <i>tsok</i> 'hit with arrow'   | -                         | <i>suk, tsoki</i> 'hit with           | -               |
|                                |                           | arrow'                                |                 |
| (tsuruk/ kuzuk)                | tsuruk 'enter',           | <i>tsoduk</i> 'pierce' <sup>598</sup> | -               |
| 'enter', 'insert'              | 'insert'                  |                                       |                 |
| <i>tsy tsy tsy</i> 'inhale     | -                         | tsi tsi tsi tsi 'inhale               | -               |
| smoke'                         |                           | smoke'                                |                 |
| tsyk tsyk tsyk 'dig'           | -                         | -                                     | tt tt tt 'dig'  |
| <i>tutututu</i> 'run'          | -                         | <i>tututu</i> 'run'                   | -               |
| <i>tyk tyk tyk</i> 'walk'      | <i>tyk tyk tyk</i> 'walk' | <i>ti ti ti '</i> walk'               | tititititi 'go' |
| <i>tyky</i> 'arrive', 'meet'   | <i>tyky</i> 'arrive'      | tiki 'arrive', 'reach',               | -               |
|                                |                           | 'meet'                                |                 |

As shown by the table, not only ideophones of the related language Kamaiurá resemble Awetí ideophones, but also ideophones of the two other languages which belong to different language families. Especially the numerous correspondences with the Carib language Kalapalo, of which more data was available than of the other two languages, are rather striking since there are no close ties between the Awetí and the Kalapalo group. Moreover, Kalapalo is not spoken by any current member of the Awetí community according to a sociolinguistic survey carried out between 2002 and 2007.<sup>599</sup> This implies that the ideophones which are shared by both language communities are well established and must have at some time in the past entered one of the languages as loanwords.

<sup>&</sup>lt;sup>598</sup> See footnote 594.

<sup>&</sup>lt;sup>599</sup> Cf. Reiter (2010: 134, table 3).

Considering the strict language policy in the Upper Xingu system which has restricted lexical borrowing to a few words referring to elements of a common culture, this is rather surprising. An explanation may be found when considering Mithun's (1982: 55) observation regarding the use of expressive vocabulary in bilingual Iroquoian-English community according to which monolingual English children of Iroquoian-English bilinguals were using Iroquoian ideophones and interjections<sup>600</sup>, unaware that these were not English words. Since ideophones and interjections are marked in various respects and mostly not integrated into the syntactic structure of a language, it is possible that they escaped the active control of a fluent bilingual Xinguan who tried to keep his two languages apart and thus found their way from the mother's to the father's language or vice versa.

A different contact situation is given for Awetí and Kamaiurá. As was outlined in section 1.4.1, most Awetí have an active or a passive competence of Kamaiurá, and nearly all current members of the Awetí community are of mixed Awetí-Kamaiurá ethnic origin with a Kamaiurá in the parents' or grandparents' generation. One may hypothesize that with more data on Kamaiurá ideophones more cognate or even identical forms will be found.

With regard to Kalapalo and Waurá one can state that the forms are similar but mostly not identical, possibly due to an adaptation to the phoneme inventory and phonotactics of the respective language. A quantitative analysis based on large corpora of data from the different Xinguan languages would be a prerequisite for determining the linguistic origin of each individual form which may have entered the common 'pool' from one language or the other, possibly through fluent bilinguals. The general outline of the Upper Xinguan cultural system in which features from different cultural and linguistic groups found their way into the common pool supports the hypothesis that similar ideophones used in the different languages have not one language or language family as their common origin. Since the mythological narratives are also shared by all ethnic groups forming part of the system, they can be seen as an ideal platform for the borrowing of ideophones: on the one hand

<sup>&</sup>lt;sup>600</sup> There are correspondences between interjections in various Xinguan languages.

ideophones are claimed to be more frequent and more diverse in oral narratives, on the other hand competent story-tellers are often fluent in several Xinguan languages.<sup>601</sup>

Güldemann (p.c.) has suggested that shared ideophones in this multilingual environment, where each individual is only entitled to speak the language(s) of his parents and grandparents, may contribute to a system of non-verbal intercultural communication.<sup>602</sup> Such a system of intercultural communication, based on ideophones and possibly on accompanying gesture,<sup>603</sup> would have the function to let people with a different linguistic background participate in everyday-conversation or in story-telling events.

Not enough cross-linguistic data was accessible in order to determine whether a specific usage pattern of ideophones in the Upper Xingu area qualify them as an areal phenomenon.<sup>604</sup> While in Kamaiurá, ideophones can apparently be used in the same way as in Awetí,<sup>605</sup> not much information could be obtained about structural features of the ideophones in Kalapalo and Waurá. As shown by the analyses of various Carib languages, of Pastaza Quechua, Tsafiki and Yuracaré presented in section 1.3, ideophones in the Amazonian lowlands can differ considerably with regard to the semantic domains they encode and the derivational processes they permit. Awetí in this respect is not very elaborate, and a comparison of these features with those of the other Xinguan languages could be a profitable future endeavour.

## 5.2 Ideophones as loanwords

As suggested by the correspondences in table 5.2, the hypothesis that a number of ideophones in Awetí may have entered the language as loanwords from one of the surrounding languages in the multilingual setting is not unlikely. The term 'loanword' is used here in the sense defined by Haspelmath (2009: 36) "as a word that at some point in the history of a language entered its lexicon as a result of borrowing". 'Borrowing' is used

<sup>&</sup>lt;sup>601</sup> Cf. section 4.1 and see e.g. Silva (1970), Basso (1995).

<sup>&</sup>lt;sup>602</sup> Non-verbal communication plays a major role in interethnic ritual contexts in the Upper Xingu (cf. Basso 1973).

 $<sup>^{603}</sup>$  Cf. section 4.6.

<sup>&</sup>lt;sup>604</sup> Cf. Güldemann (2005) who showed for a number of Northeast African languages with a good data base that complex predicates with a specific cluster of features have formed from ideophones and elements in combination with a light verb. These complex predicates are very similar to the ones described in section 4.4.4.

<sup>&</sup>lt;sup>605</sup> Cf. section 5.1.1.

in a restricted sense as referring to the adoption of a foreign term into a speaker's native language (Thomason & Kaufman 1988: 21).

Due to the absence of a historical dimension in the data, it is difficult to determine whether a lexical item in Awetí is a loanword or not. Much of the metadata regarded as relevant by Wohlgemuth (2006), e.g. lexical information on word pairs in two languages, cannot be obtained because not all Xinguan languages are sufficiently described and access to corpora is limited. Even the language contact situation is not entirely clear, since only the more recent contact following Steinen's (1894) first visit to the area in 1884 has been taken account of. Some information, however, is existent. The sociolinguistic situation and changes since Steinen's first contact have been documented by various authors visiting the area. A last survey regarding the specific sociolinguistic situation of the Awetí was carried out from 2002 to 2007.<sup>606</sup>

The earlier contact situation which led to the multiethnic system could be reconstructed by taking into account archeological studies. Older settlements were localized and could be attributed to specific ethnic groups by their structure and cultural objects (pottery) found there.<sup>607</sup> Records of some contacts with other peoples, which are partially extinct by now, can also be found in the historical narratives of the Awetí and of the other Xinguan groups. Linguistic information could be sporadically obtained from Awetí consultants, especially from the two story-tellers. In some cases consultants during transcription work identified a word as not belonging to the native vocabulary, while other words were considered to be 'ancient', i.e. of Awetí rather than of Enumania origin.<sup>608</sup>

Two of the ideophones in the corpus, *kon* ('devour') and *tsuruk* ('insert' or 'enter') were identified as belonging to the Kamaiurá language. Other ideophones do not bear any formal resemblance with a semantically corresponding verb root in Awetí but seem to be cognate with verb roots in a Tupí-Guaranian language. This could be explained by a process of verb borrowing. Since ideophones can also function as predicates,<sup>609</sup> develop into verb roots and refer to activities, a general scenario as outlined by Wichmann & Wohlgemuth (2005) for verb borrowing across languages is taken into consideration here.

<sup>&</sup>lt;sup>606</sup> Cf. Reiter (2010).

<sup>&</sup>lt;sup>607</sup> Cf. Franchetto & Heckenberger (2000); Heckenberger (2000) and section 1.4.1.

<sup>&</sup>lt;sup>608</sup> Cf. section 1.4.

<sup>&</sup>lt;sup>609</sup> Cf. sections 4.4.3 and 4.4.4.

According to the authors, there are four major patterns of loan verb integration: a 'light verb strategy', a strategy of 'indirect insertion', a strategy of 'direct insertion' and a 'paradigm transfer'. Languages usually have more than one strategy to accommodate loan verbs. In the remainder of this subsection the strategies will be described and related to Awetí data.

Candidates for a strategy of 'direct insertion' (of ideophones) are the two ideophones *kon* and *tsuruk* which have unanimously been identified by bilingual Awetí-Kamaiurá consultants as Kamaiurá words.

'Direct insertion' occurs when verbs are "plugged directly into the grammar of the target language with no morphological or syntactic accommodation" (Wichmann & Wohlgemuth 2005: 7).<sup>610</sup> The ideophone *kon* corresponds to a formally identical Kamaiurá verb stem *mokon* ('drink', 'swallow').<sup>611</sup> An example of its usage in Awetí as an independent clause which is semantically related to the predicate of an adjacent clause is given in (4):

(4) (tal\_mamuti\_3\_8, 0621.544)

*Kon, wej-mokure ti u'wyp tapwa a'yn.* IDEO.swallow 3- swallow.vt EVID arrow tip PART *'Kon, (they say that) she swallowed the tip of an arrow.'* 

The native Awetí ideophone, according to a consultant, would be *kut* which is formally similar to the Awetí verb stem *mokure*.<sup>612</sup> This ideophone is only used by the older one of the two story-tellers, who lexically differentiates between *kon*, which he uses altogether seven times to depict the act of swallowing or devouring, and *kut* which is only used for drinking. The younger story-teller uses *kut* for both activities, whereby 'drinking' is

<sup>&</sup>lt;sup>610</sup> Note that the authors, since their subject of investigation are loan verbs and not 'loan ideophones', refer to verb roots from another language. These are integrated into a target language without any modifications but with the verbal morphology of the target language attached to them.

<sup>&</sup>lt;sup>611</sup> Cf. Seki (2000: 462). The causative prefix *mo*- in Kamaiurá is cognate with the Awetí causative.

<sup>&</sup>lt;sup>612</sup> Cf. section 4.3.5 table 4.4.

depicted by repetition and 'devouring' by a single utterance of kut, as in (1)(a), repeated here:

#### (1) a. (kal\_kamukuaka4, 1044.571)

N=atupytã -ju -tu watu, puuuu, kut, kuruk (11x), mu'jẽ a'yn.
3= open.mouth.vi-IMPF-NOM big.one, IDEO.throw, IDEO.swallow IDEO.squeeze ready PART
'The big one (i.e. monster) opened its mouth. He threw it, puuu, (into it). It swallowed it, kut, squeezing (and crushing) it, kuruk kuruk [...], until it was completely swallowed.'

An example with the ideophone *tsuruk*, which also has a Kamaiurá origin, is given in (5). In the example *tsuruk* functions as a predicate and has the locative adjunct *nã 'apỹjkwat ywo* ('into his nostril') as its dependent:

### (5) (tal\_mamuti\_4\_8, 0942.893)

*Tin wej-pytyk a'yn, tin-'jyt, tsuruk*  $n\tilde{a}='ap\tilde{y}jkwat ywo, tsuruk n\tilde{a}='ap\tilde{y}jkwat ywo.$ fly 3- grab.vt PART fly-DIM, IDEO.insert 3= nostril POSP, IDEO 3= nostril POSP 'He grabbed a fly, a small fly, tsuruk, inserted it into his (the other person's) nostril, (another fly) tsuruk into his (other) nostril.'

The Kamaiurá element *tsuruk*, used 26 times by the older story-teller and once by the younger one, corresponds to a native ideophone *kuzuk* which is used abundantly by different speakers (33 tokens) and also once by the older story-teller. No information could be obtained as to the word status of the two elements in Kamaiurá. However, since Awetí consultants usually do not perceive correspondences between ideophones and lexical verbs, it can be inferred that in Kamaiurá, too, *kon* and *tsuruk* are used as ideophones.

Since both ideophones are predominantly (*tsuruk*) or even exclusively (*kon*) used by the older one of the two story-tellers who, at the time when the recording was made, had been living in a Kamaiurá village for more than two decades, there is reason to consider the two ideophones as single-word code-switches rather than loanwords. Haspelmath (2009: 40) characterizes 'code-switching' as "contact-induced speech behaviour" instead of "contact-induced language change", i.e. when speakers integrate elements from another language this is done spontaneously and not conventionalized in the speech-community. According

to Haspelmath (2009: 40), a reliable criterion for the distinction between loanwords and single-word switches is that loanwords are used in the speech of monolinguals. This is problematic with regard to the Awetí people because nearly the whole speech community and certainly the story-tellers are bilingual.<sup>613</sup> Since the process of a new word entering a language is always gradual, the two ideophones – even if not (yet) established in Awetí everyday communication for only occurring in narrative discourse and for being identified as non-native by fluent bilinguals – can alternatively be classified as "incipient loanwords", as suggested by Haspelmath (2009: 41). Another argument for this classification is that the speech of a story-teller who is considered one of the most proficient speakers of the language is very influential in the Awetí community.

Wohlgemuth (2006: 10), who also discusses the difficulty to distinguish between a process of borrowing and one of code-switching, points out that word level code-switching can nevertheless "provide insight into the processes of adapting foreign verbs into the recipient language". Corroborative evidence for the formation of independent ideophones from foreign elements is given by an observation made by Yvinec (2010) for Suruí, a Tupian language from the Mondé branch which is spoken in the Brazilian state of Rondônia. Yvinec (2010:188) reports that in Suruí chants foreign elements have the same invariant and repeated forms as ideophones: "Ces chants [...] incluent une quantitée importante d'idéophones, ou des termes "étrangers" utilisés syntaxiquement comme s'il s'agissait d'idéophones (i.e. absolument et de façon répétive)".<sup>614</sup>

Cross-linguistically the strategy of loan verb integration via a light-verb-construction seems to be a common means to introduce a root-like form of a non-native verb into a language.<sup>615</sup> The most common light verb across languages in this context has the meaning 'to do'. In Awetí ideophones can combine with the verb 'e ('say') in a light verb construction.<sup>616</sup> But this construction is not as frequent as the 'direct insertion strategy' of ideophones, and no non-native ideophone could be attested in the corpus which exclusively occurs in a light verb construction.

<sup>&</sup>lt;sup>613</sup> Cf. section 1.4.1, 1.4.2.

<sup>&</sup>lt;sup>614</sup> "These chants [...] include an important amount of ideophones or "foreign" terms which are syntactically used as if they were ideophones (i.e. without further morphology and repetitively)" [my translation].

<sup>&</sup>lt;sup>615</sup> Cf. Wichmann & Wohlgemuth (2005: 3ff.).

<sup>&</sup>lt;sup>616</sup> Cf. section 4.4.4.

A third loan verb integration strategy, the 'indirect insertion' pattern,<sup>617</sup> can arguably also be related to Awetí ideophones or, more specifically, to verb roots ending in  $\epsilon$ / which seem to have developed from ideophones and may also serve to integrate foreign elements. According to Wichmann & Wohlgemuth (2005: 6) the indirect insertion of loan verbs can occur via an affix which marks a particular verb class. Such an affix may be given by the final *-e* in verb roots derived from ideophones.

The Awetí examples of verbs with a formally corresponding ideophone have been summarized in section 4.3.5, table 4.4. All these verbs have an unstressed final syllable ending in  $\epsilon$ / which is preceded by a voiced consonant / $\chi$ /, /w/, a flap / $\epsilon$ / or a nasal /n/. Apart from these, there are several more of these verb roots without a formally similar ideophone in current language use. Examples are given in (6):

(6)a. (tal\_mamuti\_2\_8, 0398.882)

wage /'wayɛ/ 'to turn around' b. (tal\_kakaja, 0452.460) wure /'wurɛ/ 'to fly' c. (kal\_kamukuaka4, 0949.011) zymane /zɟ'manɛ/ 'to circulate'

Altogether verb stems of this structure are rare, mounting to approximately 40 in the corpus. They are intransitive or transitivized with a causative prefix *mo*- and can – with a few exceptions – be subsumed under the category of 'middle' voice in the sense that "the subject represents an affected entity or 'the locus of the principal effects of the verbally denoted action" (Shibatani 2004: 1149).<sup>618</sup>

<sup>&</sup>lt;sup>617</sup> Cf. Wichmann & Wohlgemuth (2005: 6/7).

<sup>&</sup>lt;sup>618</sup> Shibatani describes four modern interpretations of a middle form: (a) a reflexive, (b) a reciprocal, (c) a spontaneous and (d) a passive. In Awetí (a), (b) and (d) are expressed by verbal morphology, but the spontaneous interpretation in (c) applies to many of the occurrences with these specific verb forms.

While for some of the verb roots resembling ideophones intermediate forms have been found which suggest their development via a light verb construction,<sup>619</sup> one can hypothesize that verb roots like the ones in (6) could either have developed in the same way or be the result of an indirect insertion strategy of loan verbs into the 'e-marked class'. The fourth and cross-linguistically rare strategy of 'paradigm transfer'<sup>620</sup> is not attested in Awetí.

According to Wichmann & Wohlgemuth (2005: 12) there is a hierarchy of loan verb integration from a light verb strategy to indirect and from there to direct insertion. In the Awetí data the first two processes are barely visible, while for full verb integration no example can be given at this stage of diachronic research. There will, in addition, always be a missing link regarding the contribution of the Tupian languages which were spoken in the Xingu at some time and of which nothing more than the names – Apyap, Karayaya, Arupaci, Ka'atyp, Wyrawat – have remained. Even for Enumania, the language spoken by one part of the ancestors of the Awetí, it is difficult to obtain information. The only informant in this respect was the younger of the two story-tellers, who occasionally pointed out the Enumania origin of a word during narration or in a 100-year-old word list collected by the early German explorers of the area.<sup>621</sup>

## 5.3 From ideophones to lexical verbs via complex verb constructions

In a broad variety of languages ideophones can combine with finite light verbs to form predicative constructions (e.g. Alpher 1994, McGregor 2002, Dickinson 2002, Güldemann 2008, Tsujimura 2001). In section 4.4.4 this process has also been shown for Awetí, and in section 4.3.5 a formal similarity between some ideophones and a class of verb roots ending in *-e* was pointed out, whereby a process of verb derivation which can be deduced from these facts seems to be restricted to the highly conventionalized and less onomatopoeic ideophones of group I.

The analyses by McGregor (2002) on Australian verb formation from ideophones and by Güldemann (2008) on quotative markers in African languages which enter constructions with ideophones will be discussed in more detail in this section, because the processes

<sup>&</sup>lt;sup>619</sup> Cf. section 5.3.4.

<sup>&</sup>lt;sup>620</sup> Wichmann & Wohlgemuth (2005: 9).

<sup>&</sup>lt;sup>621</sup> Cf. Steinen (1894), Schmidt (1905).

described by the two authors share many features with developmental tendencies of Awetí ideophones. Both authors draw a distinction between conventionalized 'proper ideophones', here referred to as group I ideophones, and 'sound mimicking words' (McGregor 2002: 341) or 'non-linguistic sounds' (Güldemann 2008: 283) which for Awetí have been classified as ideophones of group II. After presenting the relevant features of development observed in Australian verbs and African quotative markers I will discuss the grammaticalization of the Awetí light verb 'e into a class marker for verbs that originate from ideophones.

5.3.1 McGregor's cross-linguistic scenario of verb class formation in Australian languages

McGregor (2001, 2002) is one of the first authors who have investigated historical processes involving ideophones. When discussing the possible historical development of Northern Australian compound verb constructions (CVCs), Mc Gregor (2002) states the hypothesis that the uninflecting parts of these constructions have originated from ideophones. CVCs are defined as consisting of two elements, an invariant uninflecting verb (UV) and a finite verb, inflected for TAM categories and in many languages also for person and number of the subject/ object.<sup>622</sup>

McGregor further provides structural as well as statistical evidence for the hypothesis that what in most of these languages is currently a CVC has the potential to fuse and become lexical verbs in which the finite elements of the CVC have developed into different verb class markers. Ultimately these verb classifiers may become conjugation markers, as has occurred in the Pama-Nyungan languages of Australia. McGregor (2002: 360) considers this development to be cyclical, i.e. a language which currently is at a stage with a high degree of grammaticalization of its inflected verbs tends to have a large number of ideophones and may subsequently restart the development with a new wave of CVCs. This can be observed in some Pama-Nyungan languages spoken in a border region with non-Pama-Nyungan languages.

Different grammaticalization cycles may further co-exist in one language, e.g. a language can borrow a CVC from a neighboring language, while still displaying relics of an

<sup>&</sup>lt;sup>622</sup> Cf. McGregor (2002: 25).

indigenous, highly grammaticalized CVC in its structure.<sup>623</sup> McGregor (2002: 351) attributes the current existence of CVCs in most Australian languages to areal diffusion.

As a starting point for his argumentation McGregor draws attention to the correspondences between ideophones and the uninflecting verbs in CVCs on various levels of description, more specifically with regard to their phonotactic, phonaesthetic, morphological and syntactic properties. He further points out that, according to several authors, UVs in some of these languages may be used independently as expressive elements (e.g. as ideophones), and in these cases are often uttered with marked prosodic features.<sup>624</sup>

UVs as well as ideophones in these languages are predominantly mono- and disyllabic, while other parts of speech to a much higher proportion have three or even four syllables. UVs and ideophones also have a different syllable structure than other parts of speech.<sup>625</sup> They may further show a tendency for phonoaesthesia and have little morphological potential, which is basically restricted to reduplication. Unlike ideophones, however, a UV is hardly ever used without an inflecting verb adjacent to it. In addition, in the three languages which McGregor describes in more detail<sup>626</sup> there are usually only between one and six inflecting verbs that are combinable with a specific uninflecting verb, the most frequent being one with the meaning 'say'/ 'do'. The collocational potential of nominals or particles with inflecting verbs, on the other hand, is much freer. Ideophones, for their part, do also show features that are not characteristic of uninflecting verbs, such as exhibiting phones that do not occur in any other word class or the potential of being uttered in an unusual voice register, i.e. being prosodically marked. McGregor (2001: 212) concludes that "it seems that phonetic and phonological regularization is concomitant with the reclassification of ideophones - or only the phonologically regular ideophones have become UVs". Although he emphasizes that not all uninflecting verbs in a language have their historical source in ideophones, but could alternatively be the result of borrowing, he assumes that "ideophones played a vital role in the early stages of development for CVCs" (McGregor 2002: 339).

<sup>&</sup>lt;sup>623</sup> Cf. McGregor (2002: 359/ 360).

<sup>&</sup>lt;sup>624</sup> Cf. McGregor (2001: 209/210).

<sup>&</sup>lt;sup>625</sup> Cf. McGregor (2001: 206, table 1/ 2002: 325, table 31).

<sup>&</sup>lt;sup>626</sup> Cf. McGregor (2001).

McGregor (2002: 341) proposes four processes as underlying the development from ideophones to uninflecting verbs in Northern Australian languages. These are partially independent and partially interrelated:<sup>627</sup>

- A. A reduction of inflecting verbs, which initially had been a large open class, to about a dozen.
- B. A significant expansion of the number of ideophones and ideophonic elements to the dimension of several hundreds.
- C. An expansion of the syntagmatic potential of these 'ideophone-like elements' to combining with a small number of inflecting verbs and
- D. an increase in usage of these new constructions, resulting in their conventionalization.

This scenario deviates in several respects from an earlier version (McGregor 2001: 214) consisting of different developmental steps the stages of which he had described as overlapping, feeding into and renewing one another. In the earlier version McGregor had assumed that ideophones first combined with inflected verbs of 'saying' and entered the language as alternative constructions to simple finite verbs in specific semantic contexts associated with sound, possibly due to their expressiveness. Subsequently the new expressions became more common than finite verbs to designate certain actions, and later verbs from other semantic classes – either by analogy or by reinforcement – were permitted as their finite components. The process had then resulted in a conventionalization of this alternative mode, giving up the original finite verbal expressions in these contexts.

While the earlier scenario did not provide any motivation for the collocation of the ideophonic elements with a wider range of inflected verbs, McGregor (2002: 334ff.) explains the newer one with a general tendency of "demonstrative-symbolic" elements to lexicalize into arbitrary symbolic ones. Ideophones gradually lose their affective value when they develop into ordinary denoting lexemes. In fact two processes occur: first a "demonstrating" ideophone within a CVC lexicalizes into a more arbitrary uninflecting

 $<sup>^{627}</sup>$  See also the schematic representation of these processes in McGregor (2002: 343, Figure 26).

verb: "The shift from ideophone to UV may be regarded as a process of lexicalization whereby [...] the word [...] comes to be used in an increasingly symbolic fashion" (McGregor 2002: 335). The UV can retain several of the ideophonic features, such as a marked voice register, for some time. At a later stage the inflected verb of the CVC grammaticalizes into a verb class marker.

He points out that there was no grammatical motivation for the development of this new system but that it mostly succeeded over the old one due to its initial "expressiveness": "The success of most developments was contingent on the novelty of the new way of saying old things, and the greater expressive potential afforded by the new fashions of speaking" (McGregor 2002: 350). While in some Australian languages a number of finite verbs with general meanings can form such complex predicates with ideophones, in others only one verb can function this way for which usually the meaning 'to say' is given.

In a critical evaluation of McGregor's historical scenario it must first be pointed out that the process of "lexicalization" which McGregor ascribes to the whole word class of ideophones when changing into uninflecting verbs is not captured by usual definitions of this term. While McGregor considers the derivation of a formally identical uninflecting verb from an ideophone as a process of lexicalization, Himmelmann only counts 'univerbation' and 'fossilization' as prototypical instances of lexicalization (Himmelmann 2004: 27, figure 3). These two processes are distinguished from 'splits', the process described by McGregor, in that their lexicalization involves a loss of productivity and transparency, while splits start out from a single unanalysable form which may continue to exist (cf. Himmelmann 2004: 30). The increase in "arbitrariness" which takes place when an ideophone turns into an uninflecting verb cannot be captured by a theory of lexicalization which only considers arbitrary words.

It appears to be more useful to consider the processes described by McGregor as stages in a process of grammaticalization the outline of which corresponds to the earlier<sup>628</sup> rather than to the later outlined scenario. The grammaticalizing element in this process is the verb with the meaning 'say'/ 'do' which combines with a host class of ideophones referring to sound events in order to form finite predicates. The finite element of this construction loses most of its lexical meaning, becoming a light verb, and the host class then expands to

<sup>&</sup>lt;sup>628</sup> Cf. McGregor (2001).

ideophones which depict other perceptions than sounds associated with an event. In the course of the development the ideophones, too, adapt to their "non-expressive" environment in losing their marked features. Further light verbs develop from other high-frequency verbs which are still in use in the language. They retain part of their original meanings and combine with the ideophones with which they share their semantic domains. A similar scenario for the grammaticalization of ideophones in Awetí will be outlined in section 5.3.4 after introducing the notion of 'mimesis', as developed by Güldemann (2008), in the following two subsections.

### 5.3.2 Güldemann's mimetic approach to African complex verb constructions

In Güldemann's analysis, complex predicates in African languages, which are formed from an ideophone and a finite light verb (a 'predicator'), are only one of several phenomena which he subsumes under the "mimetic" functional domain of language<sup>629</sup>. Güldemann criticizes the hypothesis which has repeatedly been proposed in the literature<sup>630</sup> that quotative markers as well as formally identical light verbs in complex predicates have both derived from canonical speech verbs. According to his analyses, based on contemporary and historical text corpora and comparative studies of 39 African languages, there is little empirical evidence for this claim.

Güldemann arrives at the conclusion that the original function of what synchronically is used as a quotative marker of direct reported discourse and as the inflected element, i.e. a light verb, in a complex verb phrase, used to be and still often is that of a general marker of mimesis. He further suggests that lexical properties of speech verbs can in fact develop from a grammatical construction of signaling quotes which would challenge the assumed unidirectionality of language change from lexical to grammatical elements.

Mimesis is a non-verbal representational skill to intentionally model the whole body in three-dimensional space.<sup>631</sup> It can account for the "analog mode[s] of representation"<sup>632</sup>, e.g. pointing by gesture and gaze or pantomime, which are used by humans as alternatives or supplements to language. Empirical evidence for such a mimetic function of language is

<sup>631</sup> Cf. Donald (1998: 49).

<sup>629</sup> Cf. Güldemann (2008: 264).

<sup>&</sup>lt;sup>630</sup> Cf. Güldemann (2008: 264ff.) for a summary.

<sup>&</sup>lt;sup>632</sup> Cf. Donald (1998: 60).

given by Donald (1998), who argues that it was prior to and a prerequisite for the development of speech.<sup>633</sup>

In his data corpus Güldemann encounters five different sources for markers of mimesis or 'quotative predicatives', a term which subsumes the two main functions (quotative index and predicator) of these grammaticalizing elements. Of these, the second source is predominant in his data corpus:

(13) (Güldemann 2011: 4)

- a. semantically generic verbs of equation, inchoativity, action, motion;
- b. markers of similarity and manner;
- c. quote-referring pronominals;
- d. markers of focus and presentation;
- e. speaker-referring pronominals.

The four different "mimetic signs" which these indicators of mimesis introduce into the discourse are (1) direct reported discourse as "enacted human verbal behavior", (2) non-linguistic sound which is imitated by the human speech organs, (3) ideophones and (4) representational gesture (Güldemann 2008: 276).

In several Bantu languages the marker of mimesis has derived from the common source of a manner deictic \*ti ('thus', 'like this'), which is reflected to differing degrees in current language use.<sup>634</sup> The following examples (14) and (15) are from Ganda, spoken in South-Uganda, and Lamba, a language of Zambia:<sup>635</sup>

(14) Ganda (Ashton et al. 1954 :35)

ki-buuka (bwe) ki-ti ...

7-jump:PRS MA 7-like.this

'It jumps like this ... (suiting the action to the word [by means of gesture]).'

<sup>&</sup>lt;sup>633</sup> See section 2.3 for a summary of Donald's approach.

<sup>&</sup>lt;sup>634</sup> There is an interesting correlation between this element and the element *-me* ('having the appearance of X') in the Carib language Trio which can be suffixed to ideophones to form manner adverbials (cf. section 1.3.1 and Carlin 2004).

 $<sup>^{635}</sup>$  In both languages there are other uses of the element *ti*, e.g. as invariable quotatives or complementizers, which are not relevant in this context.

(15) Lamba (Doke 1938: 306) *kumfwa ati putu*then MIM IDEO.snap
'Then it snapped.'

The examples illustrate that while in Ganda the element ti – inflected according to the noun class of the third person subject – in this usage retains the original deictic function which is further emphasized by a gesture, in Lamba it has developed into an invariant marker of mimesis, used with an ideophone to form an uninflected predicate.

All four functions of one 'quotative' verb *thi* can be illustrated by (16)(a) to (d) from the Southern Bantu language Xhosa, spoken in South Africa, Botswana and Lesotho:

(16) (Güldemann 2008: 276, (165)-(168), cited from Pahl et al. (eds.) 1989: 294-296)
a. *i-thi i-Bhayibhile {mthande ummelwane wakho}*9-QV 9-Bible {love your neighbor!}
'the Bible says love thy neighbor'

b. *in-komo i-thi {mhu-u-u} xa i-khala-yo*9-cattle 9-CV {ON} when 9-bellow-RL
'a cow says moo when it bellows'

c. lo m-hlaba u-the {tyaba:}
DEM:3 3-ground 3-QV:PFV {IDEO.be.flat}
'this ground is perfectly flat'

d. *in-doda en-kula i-thi xa i-hamba-yo*9-man RL:9-old 9-QV when 9-walk-RL
'the old man walks like this (the speaker imitates his manner of walking)'

According to Güldemann (2008: 276) the identical marking of these different functions can be observed all over the world. Güldemann (2008: 277, table 50) lists a considerable

number of languages from his corpus which show this identical marking, predominantly by a verb, whereby information on the introduction of representational gesture into language was mostly absent in the consulted literature.

Complex predicates have two constituents: a 'content sign' defined as "an initial linguistic sign that encodes the state of affairs, but which is not or not fully integrated in the clause from a morphosyntactic viewpoint" (Güldemann 2005: 134), and an adjacent finite form of a semantically generic verb, often based on a verb referring to a speech event. The 'content sign' may consist of ideophones, short quotes, loanwords or lexical items otherwise used as nouns, adjectives, verbs etc. The grammaticalizing element in the construction is the light verb. Güldemann (2005: 132, 135) considers the two functions of such elements, of being a marker of direct reported discourse and/ or the predicative element in predicate formation, as distinct outcomes of independent processes of grammaticalization.

His main argument for this hypothesis is that cross-linguistically there are also predicators without the same etymological source (e.g. English do), which at the same time do not play a role in reported discourse. A German example with the light verb *machen* ('do', 'make') and the uninflecting element *rumms*<sup>636</sup> is the following:

# (17) (DWDS corpus, 'Die Zeit', 22.10.2008)

Die Abwehr muss zum Zuspieler, der spielt zum Angreifer. Bestenfalls macht's

### dann **rumms**.

'The defence must (go) to the one who passes the ball. He passes to the attacker. Then, at best it does bang.' [my translation]

A second argument is that in contrast to exclamations, interjections or 'non-linguistic sounds', i.e. sound-imitating ideophones of group II, ideophones of group I cannot as readily be analysed as the quote part of reported discourse constructions due to the fact that they are not restricted to the depiction of auditory events.<sup>637</sup>

<sup>&</sup>lt;sup>636</sup> Since *rumms* is prosodically marked in speech it is an ideophone rather than the root of a sound verb *rumsen* ('to bang').

<sup>&</sup>lt;sup>637</sup> Cf. section 4.5.2.

#### 5.3.3 Markers of mimesis in Awetí

There are two different elements which introduce "mimetic signs", as listed by Güldemann (2008: 276), into Awetí discourse. One of them is the verb 'e ('say') which differs in several respects from other verbs in the language as will be outlined below. The other is a postpositional phrase formed from a demonstrative pronoun as the complement of a postposition tsu ('like') which has the syntactic function of a manner-indicating adjunct.

#### 5.3.3.1 The postpositional phrase **DEM tsu** ('like this/that')

This postpositional phrase can introduce representational gestures, ideophones, exclamations and interjections into the discourse. For gestures as mimetic signs two examples are given in (18)(a) and (b). While the PP in (18)(a) is the non-verbal predicate of the clause, in (b) it is a modifier to the adjective *watu* ('big') in an attributive clause:

(18) a. (tal\_kakaja, 0405.007)

Jatã tsu ti mani'yp me.

DEMprox like EVID manioc PART

'(Gesture indicating height of plant and width of field) like that was the manioc.'

b. (tal\_mamuti\_1\_8, 1129.027)

Jatã tsu watu ti mõj watu me. DEMprox like big EVID snake big PART 'Big like this (gesture) was the big snake.'

The examples (19) (a) and (b) illustrate the occurrence of the postpositional phrase DEM tsu with ideophones which are positioned in front of it, forming separate clauses. Corroborative evidence for the syntactic independence of the ideophone is given by the second position particle *ti* following the PP in (19)(a):

(19) a. (tal\_mamuti\_1\_8, 1695.52)
Wej-tap tok tok tok jatã tsu ti 'e.
3-cut.off.vt, IDEO.beat.at.tree DEMprox like EVID PART
'She cut it, tok tok tok tok (beating at the tree) like this.'

b. (kal awakap2, 1445.583)

*Uuuuu kujtã tsu zotsu watu ti a'yn.* IDEO.fly DEMdist like indeed big EVID PART '(He) flew indeed (a long distance) like that.'

In (20) the interjection *atsy* – again outside the clause – is introduced by the PP:

(20) (tal\_mamuti\_3\_8, 0081.547)

"Atsy **uja** tsu e=kozoko-tu, Itsumaryt",  $n\tilde{a}='e$  -tu ti me." INTERJ.disgust DEMprox like 2sg=be -NOM PropN 3= say-NOM EVID PART "You are atsy (disgusting) like this, Itsumaryt", she said."

Example (21) finally shows that exclamations, in this case the prolonged, high pitch utterance of a bilabial nasal indicating length of time, can also be embedded in the discourse structure by the PP:

(21) (tal\_mamuti\_3\_8, 1424.394) Nanype ti mẽpe'a wo mẽpe'a wo mẽpe'a wo.

there EVID calabash in calabash in calabash in  $Mmm jat\tilde{a}$  tsu ti n=up -u 'yto ti kitã me'ẽ. EXCL DEMprox like POSP 3=stay.vi-NOM then EVID DEM PART 'There (it was) in a calabash (3x). Mmm (for a long time) like that they stayed (there) then.'

Since it refers to mimetic signs, i.e. to events which are imitated at the moment of utterance, the PP in most cases is formed from a proximate demonstrative *jatã* (masc.) or uja (fem.). Another, discourse-internal usage of this PP formed with a demonstrative signaling intermediate distance can be observed in (22). In this case *kitã tsu* refers to what was said in the immediately preceding discourse:

(22) (ama\_dry\_seas, 0618.683)
Mote tsã=topytyg -oko -tu a'yn, toa'api-tu 'ytang kitã.
long.ago 3pl= practice.vi-IMPF-NOM PART, fight.vi -NOM before DEM

#### *Kitã tsu* tsãn=ekozoko-tu me, kwaza'jyt.

DEM like 3pl= live.vi -NOM PART recorder

'In the old days they used to practice, that was before fighting. They lived like that, recorder.'

In all these occurrences the mimetic element is inserted in the discourse without being syntactically integrated by the adjunct which constitutes the first element in the immediately following clause. The PP does not mark direct reported discourse.

### 5.3.3.2 Features and functions of the verb 'e ('say')

The second element, the verb 'e ('say'), which accommodates mimetic signs in Awetí discourse shows grammaticalization to different degrees. It is used to mark reported speech and as a light verb in a complex predicate. As the following discussion of its grammatical features will show, there is synchronic evidence to assume that 'e is not a canonical speech verb but may, as outlined by Güldemann for corresponding verbs in African languages, only have acquired its speech verb function at a later stage. An argument for its status as a speech verb, however, is that most Awetí ideophones which have entered this construction are either vocal imitations, i.e. belong to group II, <sup>638</sup> or refer to events which have a predominant auditory component.

The verb '*e* differs in several respects from other verbs and occurs in other functions than ordinary speech verb. Four different functions can be identified for '*e* ('say'):

- a. the introduction of reported discourse and short quotes;
- b. the identification of entities by their names;
- c. the introduction of ideophones;
- d. a (possible) foregrounding of states of affairs.

These functions will be discussed and illustrated after a specification of the grammatical properties of this element. On the synchronic level '*e* shares several of the characteristics pointed out by Güldemann for the specific type of African 'speech verbs' or quotative

<sup>&</sup>lt;sup>638</sup> Cf. table 4.6 in section 4.4.

predicatives. One of them is its minimal phonetic substance, which is possibly the result of an earlier reduction and which makes it prone to further grammaticalization processes. Another noticeable characteristic is its irregular paradigm – in fact the only irregular verb in Awetí – in having a deviant  $3^{rd}$  person form, as illustrated in table 5.4.<sup>639</sup>

| 1sg      | a-'e        |
|----------|-------------|
| 2sg      | <i>e-`e</i> |
| 1pl.incl | kaj-'e      |
| 1pl.excl | ozo-'e      |
| 2pl      | e'i-'e      |
| 3        | e'i         |

Table 5.4: Paradigm of 'e ('to say')

The other forms of the paradigm indicate that 'e belongs to the class of intransitive active verbs.<sup>640</sup> Consequently, the speech content in a construction as in (23) cannot be an argument of the predicate *i* 'etu ('I said') and – accordingly – is not a complement clause:

(23) (mamuti\_4\_8, 0794.07)
Mu'jẽ tepe i='e-tu "kware e=totu nã=tup-aw." already FRUST 1sg=say-NOM IMP.NEG 2sg=go.vi-NOM 3=see.vt-GER 'I (already) said in vain that you shouldn't go and see her.' (lit: 'I already said in vain: "Don't go and see her".')

The verb 'e ('say') cannot be negated like other intransitive verbs because a clause, consisting only of an inflected form of 'e, would be incomplete:

(24) \**An e'ika a'yn*. 'He didn't speak.'

<sup>&</sup>lt;sup>639</sup> This feature is shared by the cognate form in TG languages. Already in the first grammar of Tupinambá, written in the 16<sup>th</sup> century by the Jesuit Anchieta (1595: 55f.), this verb with the citation form  $a\hat{e}$  ('I say') is listed as particularly irregular.

<sup>&</sup>lt;sup>640</sup> Cf. section 3.3.4.1.

It also does not undergo any productive derivational processes, which, according to Güldemann (2008: 271), would be indicators for its status as an ordinary speech verb. It can neither be causativized by the prefix *mo*-, nor can it form any other nominalizations than main clause or subordinate action nominal constructions. Another intransitive speech verb *ti'ing* ('speak') does have all these features absent in *'e*.

### Introduction of reported discourse and short quotes by 'e

Awetí does not have any grammatical strategy to express indirect speech, i.e. typologically it belongs to the languages which do not employ complement clauses or any other complementation strategy for speaking verbs, as described by Dixon (2006: 10, 33-40). Instead, direct speech constructions are used. The form of the quotative verb in Awetí is in most of these occurrences an action nominal. As can be shown in (25), the action nominal can also be the predicate of a subordinate clause:

(25) (kal\_tawozy5, 0994.184)

| "Jarywytu                                                                            | wo   | eto | tu   |        | me",   | <b>ʻj</b> a | iw  | vut |          | tsoa    | zotsu     | a'yt  | ti    |
|--------------------------------------------------------------------------------------|------|-----|------|--------|--------|-------------|-----|-----|----------|---------|-----------|-------|-------|
| jarywytu                                                                             | wo   | e=  | to   | -tu    | me",   | ʻi          | -   | ap  | -put     | tsoa    | zotsu     | a'yt  | ti    |
| open.field                                                                           | POSP | 2sg | =go. | vi-NOM | I PART | , sa        | ıy- | NOM | loc-NPS' | T towar | ds indeed | d EMO | ΓEVID |
| o-to-zoko, jarywytu tsoa a'yn.                                                       |      |     |      |        |        |             |     |     |          |         |           |       |       |
| 3-go.vi-IMPF, open.field towards PART                                                |      |     |      |        |        |             |     |     |          |         |           |       |       |
| 'He went indeed towards where he had been sent, towards the open field.'             |      |     |      |        |        |             |     |     |          |         |           |       |       |
| (lit: "Towards the open field you go", indeed towards the (formerly) told (place) he |      |     |      |        |        |             |     |     |          |         |           |       |       |

towards the open field.')

A "demonstrative value" or mimetic aspect of direct quotation is especially transparent in Awetí because narrators, when using this technique, imitate the male or female variety to provide information on the sex of the referent. They even use the (foreign) language of a depicted protagonist, but due to the taboo in the Upper Xinguan society to use the language of the other ethnic groups this can only be done in a singing manner.<sup>641</sup>

went,

<sup>&</sup>lt;sup>641</sup> Cf. Franchetto (1993) who observed that chanting is a common strategy in ritual interethnic communication to overcome the cultural taboo. Examples in the Awetí corpus are an enchanted arrow (kal\_awytyza1, 0673.923 ff.), singing in the language of the

As mentioned in section 3.3.7.2.1, the action nominal in the  $3^{rd}$  person ( $n\tilde{a}$ 'etu), when occurring without any oblique argument marked by the postposition *pe* encoding addressee (goal) or theme<sup>642</sup>, is often reduced to  $n\tilde{a}$ 'e<sup>643</sup>, as in (26).

(26) (tal mamuti 3 8, 0440.003)

| "Atsy atsy atsy,                             | Itsumar | yt", <b>nã'e</b> . |  |  |  |
|----------------------------------------------|---------|--------------------|--|--|--|
| INTERJ.expression.of.disgust                 | PropN   | QUOT               |  |  |  |
| "How horrid (of you), Itsumaryt", she said." |         |                    |  |  |  |

This frequent use of the action nominal in this context which is accompanied by a phonological reduction is analysed as an incipient stage of grammaticalization towards a general quotative marker, i.e. in the definition of "grammaticalization" postulated by Himmelmann (2005: 82/ 83) the reduction of the word to  $n\tilde{a}$  corroborates its status as a 'grammaticalizing element' which only occurs with a specific 'host class' consisting of direct reported discourse. The Awetí data thus support Güldemann's hypothesis of two different outcomes of distinct grammaticalization processes in showing a tendency to formally differentiate between a developmental process towards a grammatical marker  $n\tilde{a}$  'e of direct reported discourse, derived from the action nominal in the 3<sup>rd</sup> person, and a second process, based on the impersonal nominalized form '*etu* of the same verb. The outcome of this process – the formation of a predicator '*e* and eventually a verb-class marking suffix -*e* or even a marker of discourse function – will be described below.

There are also a number of constructions like (27) and (28) in the Aweti corpus, where 'e is combined with a direct speech component such as an exclamation or a one-word utterance – pronounced with marked prosody – to form a complex verb with a conventionalized meaning:

Tonoly, the people he was produced by, or the trickster hero Awakapipytang (kal\_awakap1, 0972.542 ff.), who sings in his native language Kamaiurá.

<sup>&</sup>lt;sup>642</sup> Cf. section 3.3.9.2, (277) and (25) below for examples with an oblique argument.

<sup>&</sup>lt;sup>643</sup> Note that this process could only be observed for the men's variety. In female speech the  $3^{rd}$  person ANC of this verb is *i'etu*.

(27) (tal\_mamuti\_2\_8, 1826.94) *Kari'aw kitã an ehẽ e-'e-ka it-e= pe me?*why TOP NEG yes 2sg-say-NEG 1sg-EPEN=POSP PART
'Why didn't you accept me?' (lit: 'Why is it that you didn't say "yes" to me?')

(28) (tal\_mamuti\_2\_8, 0376.53)
An haj e'i-ka a'yn ne.
NEG exclamation 3.say-NEG PART PART
'She didn't answer (the call).' (lit: 'She didn't say "haj".')

Interjections can also be the direct speech component in such a short quote construction. Since, however, the 'speech verb' component is neither necessary,<sup>644</sup> nor necessarily adjacent, as shown in (26) above, these occurrences are classified as ordinary instances of quoted speech.

The occurrences of short quotes of the type shown in (27) and (28) are also listed by Güldemann (2005) as typical of African languages where the quotative element has derived from a source other than a speech verb. Güldemann (2005: 143) moreover proposes that this type of construction – in which the element is used as a support verb to use a pragmatically expressive sign predicatively – is a first step towards the development of a new inflection class.<sup>645</sup> In Awetí, the different stages of such a developmental process involving 'e can also be observed. It does, however, not depart from the type of construction just illustrated, which is relatively rare and can still be considered a regular quotation. The constructions which in Awetí lead to the development of a new verb class have an identical pattern but the 'mimetic signs' exclusively consist of ideophones of the group I type.<sup>646</sup>

<sup>&</sup>lt;sup>644</sup> Cf. examples in section 3.3.7.1.

 $<sup>^{645}</sup>$  This 'sign' – according to Güldemann – can also be a loanword, which corresponds to the hypothesis formulated by Wichmann & Wohlgemuth (2005) regarding the different stages of loan verb integration (cf. section 5.2).

<sup>&</sup>lt;sup>646</sup> See section 5.3.3.

Identification of entities by their names

This usage of 'e which is in line with the analysis of African quotative predicatives as general grammatical markers by which the interlocutor is "oriented towards the presence of an alienated text in the discourse" (Güldemann 2011: 1), in this case a sign which is not used in its referential function, is exemplified by (29) and (30):

(29) (kal\_ta\_wat, 0006.25)

Ta'wat 'e-tu $n\tilde{a}=pe$ a'yn. Mote $n=et^{647}$ zotsu kitã me.jaguarsay-NOM 3PRO=POSPPART ancient 3=name indeed DEM PART'It is referred to as "jaguar". That is indeed its old name.'(lit: "Ta'wat" one says to it. Its original name indeed is that one.')

(30) (mop\_manioc, 0997.697) *Ĩ=pe akyj azupi'a -zan 'e-tu me*.
3=POSP TOP frog.spawn-ATT say-NOM PART
'This is referred to as "azupi'azan (similar to frog-spawn)".'
(lit: 'To it it is that one says "in the role of azupi'a (frog-spawn)".')
(The speaker talks about a thick soup made of manioc which is referred to by this name.)

This referencing or naming function, which can also be expressed by an action nominal with a clitic pronoun, as in (31) or a noun (e.g. *Awytyza 'etu* 'the Awetí people refer to (as)') in the possessor position, can be analysed as an extension of the function of introducing short quotes:

(31) (kal\_makawaja, 0142.605)
'Ukakyt ozo= 'e -tu wezotsu a'yn.
rooster 1pl:incl=say.vi-NOM simply PART
'We simply call it 'ukakyt ('rooster').'
(lit.: ''Ukakyt (is) simply our saying.')

Unlike in quotes, the names referred to are not pronounced with marked prosody.

 $<sup>\</sup>overline{}^{647}$  The noun *et* ('name') may historically be a derivation of '*e(tu)*.

Foregrounding of states of affairs by 'e

A construction not yet fully understood which could point into the direction that 'e in one of its uses may emphasize or foreground a state-of-affairs, is given in (32). This function of a 'say' verb has been described for African languages,<sup>648</sup> and in related TG-languages there is also evidence for such a usage.<sup>649</sup>

(32) (kal awytyza2, 1573.028)

Tsã=te'ayka -zoko-tu 'e-tu-e'ym ti itã a'yza.
3pl= celebrate.vi-IMPF -NOM say-NOM-NEG EVID TOP EMOT
'Do you (by any chance) think that they celebrated?'
(Portuguese translation without negation given by Awetí consultant)

In this construction, of which only one instance has been encountered in the corpus, a complete ANC occurs in the position of a 'content sign' adjacent to the impersonal action nominal 'etu ('one says'). There is contextual evidence for the usage of 'etu here in the function of emphasizing the state of affairs referred to by the inflected action nominal. The narrator talks about his ancestors who, after discovering that all their relatives in another village have been killed by an enemy, take a year of mourning at the end of which they have a ritual bath – according to the Awetí consultant – to "wash away their grief". During this whole period of mourning they also do not celebrate any of their ritual feasts, an information which is introduced to the discourse in the immediately preceding clause and repeated in the form of a topicalized action nominal *tsãte 'avkazokotu* ('their habitual celebrating') in (32) which additionally seems to be emphasized by 'etu. Another noteworthy element in this example is -e'ym, the suffix of nominal negation which in action nominals normally is inserted between verb root and nominalizing suffix.<sup>650</sup> The change of the order in this example could further emphasize the different status of 'etu as a discoursepragmatic device. Semantically, the negation seems to add to the effect of irritation expressed by the emotive particle a'yza, which is directed towards the interlocutor. With

<sup>648</sup> Cf. Güldemann (2002: 263).

<sup>&</sup>lt;sup>649</sup> See section 6.1.2 where a similar phenomenon is described for the TG-language Kayabi.

<sup>&</sup>lt;sup>650</sup> Cf. section 3.3.8.1.1.

ideophones it appears that such a negated form is not possible at all, since in examples with a negative reference *'etu* does not have a negative marker.<sup>651</sup>

A further example for this highlighting function may be the form *nã tylymutylymũ 'etu* ('she made spit-spit') in (33)(b), even though it differs from the form in (32) in not having a separate nominalizing suffix on the action nominal (i.e. \**nã tylymutylymũtu 'etu*):

(33) a. (tal mamuti 3 8, 0163.605)

 $N\tilde{a}$ =tylym $\tilde{u}$ -tu ti,  $n\tilde{a}$ =tylymu-tylym $\tilde{u}$ -tu ti  $n\tilde{a}n$ =ete, 3=spit.vi-NOM EVID, 3= RED- spit -NOM EVID 3PRO=POSP kit $\tilde{a}$  kuj $\tilde{a}$  ete me, Tanumakalu ete me.

DEM woman POSP PART, PropN POSP PART

'She spat out, she spat out repeatedly because of her, because of that woman, because of Tanumakalu.'

b. (tal\_mamuti\_3\_8, 0213.858)

Nã tylymu-tylymũ 'e-tutime, [an ti,] nã=po-kwakuw-e 'ym ywo me,3RED-spit.visay-NOMEVID PART3=SUBJ-like.vt-NEGPOSP PART

o=mẽpyt aty-zan ne.

3coref=child wife-ATT PART

'She spat out repeatedly because she didn't like her to be her son's wife.'

(lit: 'She made spit-spit because of her<sub>i</sub> not liking (her) as her<sub>i</sub> son's wife.')

The foregrounding analysis combines with the discourse context of the Awetí narrative in which the mother of a chief complains about the woman her son has chosen for a wife. In (32)(a) three different adjuncts are added to the clause, referring with increasing specificity to the same participant: from the pronoun  $n\tilde{a}$  over the class member  $kuj\tilde{a}$  ('woman') to a person with a specific name. These constitute the central information, whereas in (32)(b) the information given by the verb constitutes a repetition of a passage (not given in the example) between (32)(a) and (b), which provides a detailed explanation for this behavior of the mother. The explanation – the mother does not consider the woman an appropriate

<sup>&</sup>lt;sup>651</sup> Cf. section 4.4, example (34).

wife for her son – is then summarized in a following adjunct clause *nãpokwakuwe'ym ywo* ('because she didn't like her') in (32)(b).

The last function of the verb '*e*, of introducing ideophones into the syntactic structure of the language, will be outlined in detail in section 5.3.4.

5.3.4 Synchronic evidence in Awetí for a grammaticalization process from ideophones to verb roots

In this section five stages, marked from A to E, of a possible developmental process in Awetí are described and illustrated by corpus examples:

Stage A: Ideophones form independent clauses<sup>652</sup> or function as uninflecting predicates in clauses with other elements in a clause (e.g. temporal or locative adjuncts, postpositional phrases, particles, noun phrases referring to participants). In this usage ideophones are prosodically marked and accompanied by gesture. This is illustrated in (34) where six ideophones constitute the predicates of six clauses. Two of these, *kyryryryr* and *pokyhy*, have further arguments, an object *kaminu'at* ('boy') and an oblique argument *mõj watu kyty* ('for the big snake') respectively:<sup>653</sup>

(34) (tal\_kamu\_kwat1, 0628.839)

Kyryryryry kaminu'at pyw,aka aka aka,pokyhymõj watukyty,IDEO.dragboyIDEO.grabIDEO.cry.with.fearIDEO.put.down snake bigforkyryryryryr, kon.kon.kon.kon.kon.kon.

IDEO.ingest IDEO.swallow

'(He) dragged along a boy (who was) crying. (He) put (him) down for the big snake (to fetch him). (The snake) ingested and swallowed (him).'

Stage B: Ideophones combine with a finite form of the verb 'e ('say'), which is used as a general indicator of mimesis, to form complex predicates. This stage of development is illustrated by (35) and (36):

<sup>&</sup>lt;sup>652</sup> Cf. sections 4.4.1 and 4.4.2.

<sup>&</sup>lt;sup>653</sup> Cf. section 4.4.3, example (12).

(35) (mop\_manioc, 0331.084)
"Pu pu pu" e'i a'yn.
IDEO.boil 3say PART
'It boils.'
(lit.: 'It says "pu pu pu".')

(36) (tal kaminu, 1422.746)

Tum $n\tilde{a}='jawut$ ypetepeti $n\tilde{a}ma'\tilde{e}ma'\tilde{e}tu$ titum $n\tilde{a}='j$ -putypetepeti $n\tilde{a}=ma'\tilde{e}-ma'\tilde{e}$ -tutiIDEO-fall.into.water3=say-NOMloc-NPST POSP FRUST EVID3=RED-look.vi-NOM EVIDn=ikat-awtepeti,kara'i.

3= find.vt-GER FRUST EVID, nothing

'(At the place) where she had made "tum" (i.e. where the woman had jumped into the water) he looked and looked in vain, trying to find her, (there was) nothing.'

Stage C: Multiple ideophones reduce to two instances, while further morphemes can be added to the inflected part of the 'grammaticalizing construction'.<sup>654</sup> This is illustrated by (37) as compared to (35):

(37) (mopot\_manioc, 0336.682) *Pu pu i='e-zoko-tu me, o-kyp a'yn.*IDEO 3=say-IMPF-NOM PART, 3-cook.vi PART
'Pu pu it usually does (when) it cooks.

In this usage the prosodic markedness of the ideophone is reduced and with time – and possibly with an increase in frequency of this form in discourse – will completely disappear.<sup>655</sup> The inflected part as the 'grammaticalizing element' can be combined with a 'host' which is not restricted to mimetic signs, i.e. in the definition of 'grammaticalization'

<sup>&</sup>lt;sup>654</sup> Cf. Himmelmann (2004: 31, 2005: 83).

<sup>&</sup>lt;sup>655</sup> Cf. Nuckolls (1995: 157) who observed for Pastaza Quechua the same loss of prosodic markedness in combination with a reduction of multiple repetition of ideophones to two instances and pointed out that in this usage the event is referred to and not simulated any more.

as outlined by Himmelmann (2005: 82) the host class is extended to elements such as ideophones without prosodic markedness or reduplicated active verb roots, as in (38) or (33)(b), repeated here fore convenience:

(38) (kal mene, 2026.372)

Nã=tsoapuza tejung-tejung- 'e-tu ti a'yn.
3=others RED- transform.vi-say-NOM EVID PART
'The others (one by one) transformed (into animals).'

(33) b. (tal\_mamuti\_3\_8, 0213.858)

*Nã tylymu-tylymũ 'e-tu ti me, [an ti,] nã=po- kwakuw-e'ym ywo me,* 3 RED- spit.vi say-NOM EVID PART 3= SUBJ-like.vt -NEG POSP PART  $o=m\tilde{e}pyt$  aty-zan ne. 3coref=child wife-ATT PART 'She spat out repeatedly because she didn't like her to be her son's wife.' (lit: 'She made spit-spit because of her<sub>i</sub> not liking (her) as her<sub>i</sub> son's wife.')

The reduplicated action nominals with clearly audible glottal stops are non-standard 'hybrid' forms in current language use. In addition, the form presented in (32)(b) is a variant of the form *nãtylymutylymũtu* ('she spat out repeatedly') in (32)(a) above with a standard reduplication pattern in which the verb base ending in a nasal vowel does not have the  $/\epsilon/$ .<sup>656</sup>

There are two possible explanations for the deviant forms in (37) and (32)(b). On the one hand they can be reflections of an earlier developmental stage, indicating that all instances of active verb reduplication, including the ones with a vowel in the coda of the verb root, originate in the same construction with '*e* which is also used to integrate ideophones into ordinary syntactic structure. This is plausible due to the fact that the strategy of active verb reduplication in comparison to imperfective aspectual morphemes is expressive and in fact iconic in signaling plurality of events by repetition of the verb root

<sup>&</sup>lt;sup>656</sup> Cf. section 3.3.8.3.1, table 3.17.

and thus resembles ideophones.<sup>657</sup> Note also that stative verb reduplication does not have the  $\epsilon$  and that the semantic contribution of this type of reduplication is not iconic, i.e. it does not indicate a repetition of the event, as in active verbs. This is illustrated by *tatykymatykym* ('it was a little bit dark') in (39) where the reduplication has an attenuating function:

### (39) (kal\_tawozy4, 0607.883)

T-atykym-(t)atykym wene, uuuupooooooo o-temwatu ti a'yn.3-RED-dark.ststillsound.of.monster3-come.outmonsterEVIDPART'When it was still a little bit dark, uuupooooo the monster came out.'

On the other hand, the variation with regard to the verb root  $tylym\tilde{u}$  ('spit') in (33) may signal that the marking with 'e(tu) can have a further function: one of pragmatically foregrounding the information. Some evidence for this latter assumption was given in section 5.3.3.2.

Stage D: The simple or reduplicated ideophonic element and the finite light verb 'e ('say') fuse into one syntactic unit, i.e. the  $|\varepsilon|$  after an elision of the initial glottal stop is reduced to an enclitic on the uninflecting element, and either a final voiceless plosive of the ideophone is lenited (/t/ to /r/, /k/ to /y/), or the phonemes /r/ or /y/ (after vowels) are added.<sup>658</sup> The same process occurs on reduplicated verb stems.

This process seems to occur first in action nominals, since in their impersonal usage these forms provide a perfect interface between a complex verb phrase and a fused expression. This is illustrated by the two forms in (40), the first being a complex verb phrase with an ideophonic element and a nominalized finite form of 'e ('say'), the second an action nominal:

<sup>&</sup>lt;sup>657</sup> See also the description of ideophones in Karo, summarized in section 6.7. In this language only ideophones but no verbs or other elements can undergo a process of reduplication.

<sup>&</sup>lt;sup>658</sup> Cf. section 4.3.5, table 4.4.

(40) (kal\_angut1, 0833.695, 0837.915)

Kyryryk kyryryk 'e-tutene ti[a'yn].  $N\tilde{a}$ =tsu wezanu tiIDEO.slip.downsay.vi-NOM simply EVID3=like alsoEVIDayte e-'ypatsam jungk -aw-ut. $N\tilde{a}$ =kyryryk-kyryryge -tu.man REL-beltfasten.vt- NOMcir-NPST 3=RED-slip.down.vi-NOM

'It simply continuously slipped down. Like that was also how the men's belts had been fastened. They continuously slipped down.'

(lit.: 'There was simply a continuous making (of) "kyryryk kyryryk". Like that was also the former fastening of the men's belts. There was their continuous slipping down.')

A person marker can be added in the form of a possessive pronoun, as  $n\tilde{a}$  in the second form in (40). It can, however, also be left unexpressed, as shown in (41):

(41) (kal\_makawaja, 1303.784) *Tyryk tyryk, e'i a'yt ti n=eko -tu a'yn. Tyryge-tu me.*IDEO.limp, 3say EMOT EVID 3= walk.vi-NOM PART limp.vi -NOM PART
"Tyryk tyryk", the poor (animal) does when it walks. There is limping."

A further observation which points in the direction that a combination with a nominalized *'etu* is prior to the combination with a finite verb form and less abstract than this latter one is the fact that 'ideophonic constructions' with action nominals, unlike those formed with finite verbs, cannot be combined with a negative marker.<sup>659</sup> The same applies to independent ideophones due to their 'expressive' function which implies that they exist at the moment of utterance and therefore cannot be negated, or, as pointed out by Jendraschek (2002: 50): "[...] die Motivation eines Sprechaktes ist der vom Ideophon wiedergegebene Eindruck selbst".

A further argument for the hypothesis that action nominals form the intermediate stage from ideophonic constructions to verb roots is their frequency of occurrence. In a representative sample verb reduplication occurs nearly twice as often in action nominals

<sup>&</sup>lt;sup>659</sup> Cf. section 4.4.7.

than in finite verbal forms.<sup>660</sup> This is seen as evidence for an extension of the reduplicative pattern from the nominalized to the finite verbal form.

Finally, both ideophones and action nominals can (at least formally) be regarded as event-central thetic structures, in which the participant is subordinated to the event.<sup>661</sup> This is especially valid for the impersonal form of the action nominal, for which no finite verbal counterpart exists: "Impersonal expressions are by definition those which lack grammatical subjects, and consequently they represent prototypical instances of thetic judgments" (Sasse 1987: 513).

Stage E. For some multiple ideophones which turn into reduplicated action nominals a simple action nominal form, as in (42) compared to (40), and finally a simple verb root can be derived, i.e. the grammaticalizing construction turns into a root of a class of intransitive verbs which are characterized by an unstressed final syllable ending in  $/\epsilon/$ .

(42) (kal\_ta\_wat, 0982.338)

O = po mo- kyryryge -tu ti nã n=eta 'ape 'apo 3coref=hand CAUS-slip.down.vi-NOM EVID 3PRO 3= forehead above 'He made his hand slip down above his forehead.'

Other ideophones lexicalize in their reduplicated form, e.g. (43) compared to (37):<sup>662</sup>

(43) (ula\_seasons, 0319.91) *O-pupur(e)-eju* watu me.
3- boil.vi -IMPF INTENS PART
'It keeps boiling for a long time.'

Non-reduplicated ideophones lexicalize into simple verb roots, as shown in (44):

<sup>&</sup>lt;sup>660</sup> Cf. 3.3.8.3.1, table 3.15.

<sup>&</sup>lt;sup>661</sup> Cf. section 3.3.9.3.

<sup>&</sup>lt;sup>662</sup> The /r/ in *pupure* (< pu pu + 'e) is one of two possible epenthetical elements which are inserted if the ideophone has a vocal coda (cf. table 4.4, section 4.3.5).

(44) (awu fishing, 0166.343)

*Ky'um, ky'um mo- wywe-tu tene ti wyw.* iron iron CAUS-bend.iv-NOM simply EVID IDEO.bend 'They simply bent iron, wyw.'

All these verb roots ending in  $|\varepsilon|$  with stress on the penultimate and not – as is the rule – on the last syllable<sup>663</sup> are intransitive.

For highly grammaticalized verbs of some Australian languages McGregor (2002: 212, 352), too, mentions such a correlation between specific formal characteristics and valency. Their membership in a specific conjugation class is morphologically marked by final consonants, and these different conjugation markers McGregor hypothesizes to be relics of the inflected verbs which in Australian compound verb constructions predominantly follow the uninflecting component. <sup>664</sup> This would be another argument for a fusion of the ideophone with the inflected light verb '*e* ('say') in Awetí which has thus retained the valency of the full verb.<sup>665</sup>

It must be emphasized that the successive phases from (B) to (E), as demonstrated here, are not necessarily undergone by all ideophonic elements. As suggested by the variation on the synchronic level, they apply to individual lexical items at different times. The possibility further exists that some of the ideophones do not go through the stage of a complex verb phrase but that a verb is directly derived by lenition of the plosive and addition of  $/\epsilon$ . Since the  $/\epsilon$ / in the construction has become semantically empty, the direct derivation may have established as an independent process which does not bear any restrictions initially imposed by the semantics of the finite verb 'e ('say'). This would in part explain why there are only very few occurrences of the complex verb phrase compared to the number of established lexical verbs following this pattern.

<sup>&</sup>lt;sup>663</sup> Cf. section 3.2.3.

<sup>&</sup>lt;sup>664</sup> Cf. section 5.3.1.

 $<sup>^{665}</sup>$  Since the verb 'e is mostly inflected like intransitive active verbs (see section 5.3.3) it is considered to be monovalent.

#### 5.4 From verb roots to ideophones

Since there is no diachronic dimension in the Awetí data the reverse process than the one outlined in section 5.3, a development from verb roots to ideophones, must also be taken into consideration. Cross-linguistically this process could be confirmed for a number of African languages and has also been claimed by other authors for Amazonian languages (e.g. Nuckolls 2001: 272). In the Mayan language Mam a high proportion of ideophones share their roots with verbs from which they partially seem to have derived. Others, according to England (2006: 158) are unclassified roots which can function as ideophones, positionals and verbs. For Upper Necaxa Totonac, an isolate language spoken in Mexico, a process of deriving ideophones from verbs by full reduplication of the verb root has been reported by Beck (2008:16). Crofts (unpubl., 1984) likewise claims for the Tupian language Munduruku that ideophones have developed from verb roots.<sup>666</sup>

In the Awetí data no direct evidence for such a process of verb roots developing into ideophones could be found.

#### 6 Ideophones and verbal complexes in other Tupian languages

More insight into the ongoing processes with regard to ideophones and verbs in Awetí as outlined in chapter five can be gathered by a comparison of synchronic data of a representative selection of related Tupian languages. Due to its classification as an independent branch within the Tupian family which – at the same time – shares many features with Tupí-Guaranian (TG) languages, it makes sense to compare Awetí to languages both from the TG branch as well as from other branches.<sup>667</sup>

The languages discussed in more detail in this chapter are Emerillon, Gavião, Kayabi, Kamaiurá, Karitiana, Karo, Mekens, Mundurukú, Sateré-Mawé, Sirionó and Yuki. Of these, Emerillon, Kayabi, Kamaiurá, Sirionó and Yuki belong to the Tupí-Guaranian branch. The other six languages each represent a different branch within the Tupian family. With the exception of Emerillon (French Guyana) and Sirionó and Yuki (both Northern Bolivia), all languages are spoken in different areas of Brazil.

<sup>&</sup>lt;sup>666</sup> Cf. section 6.6.

<sup>&</sup>lt;sup>667</sup> Cf. section 1.4.3.

With respect to the areal or family distribution of ideophones in Amazonian languages literature is scarce. A point of departure for the investigation was Moore's (2002) comparative survey on the phenomenon of 'uninflecting verbs' which included data from several Tupian languages of different branches (Gavião, Karo, Mekens, Sateré-Mawé, Xipaya). Moore (2002: 149) states that elements of this verb class are very similar to ideophones in their morphological simplicity and their semantics. He also noticed that in some of the languages both phenomena can be found, while in others there are only ideophones and no uninflecting verbs. His criteria for the classification as one or the other were based on observations regarding their syntactic distribution, as will be outlined further down.

The data consulted for the analysis presented in this section consisted primarily of grammars, in most cases of a recent date (i.e. published since 2000), and of individual articles. For some of the languages dictionaries and extensive text collections were available, in the case of Sirionó even from different periods within the last 60 years. For this language I also had the opportunity to watch a video recording of a short narrative, together with its complete annotation.<sup>668</sup>

The studies were based on different theoretical approaches, ranging from the attempt to follow a Latin model of grammar writing (Schermair 1949), over the tagmemic model<sup>669</sup> in the case of Priest & Priest (1967) to generative and functional-typological frameworks. Not all the texts were annotated, and some annotations lacked consistency. Therefore text examples were, wherever possible, adapted to the annotation conventions used for the Awetí examples. Another problem for a comparative analysis of ideophones and related structures in the different languages was that the terminology with regard to ideophones, if applied in a study, did not always correspond to the terminology established here. This will be clarified in the respective sections.

For each language discussed in the subsections of this chapter ideophones or closely related phenomena will be described with regard to their phonological, prosodic, morphological, syntactic, semantic and pragmatic properties, as these are outlined in the respective studies or can be deduced from the data. In addition, the related phenomenon of

<sup>&</sup>lt;sup>668</sup> The video and its annotation were given to me by Östen Dahl.

<sup>&</sup>lt;sup>669</sup> Cf. Pike (1954, 1955, 1960).

verb reduplication will be outlined wherever it has been described for a language. The results will be summarized at the end of each subsection. In a final subsection a synopsis will be presented and the results for each of the languages will be brought into a broader, cross-linguistic perspective. From this, conclusions will be drawn for the observable developments with regard to ideophones in the Tupian family.

# 6.1 Tupí-Guaraní branch

The TG languages have been grouped together geographically, starting with Kamaiurá and Kayabi, which are neighbouring languages of Awetí.

## 6.1.1 Upper Xingu: Kamaiurá

Kamaiurá is the only other Tupian language of the Upper Xingu cultural area apart from Awetí. It is currently spoken by 467 individuals in several villages located near a lagoon called Ypavu which is the place where the Kamaiurá originally settled, when they came to the Xingu area.<sup>670</sup> Like the other peoples in the reservation, the Kamaiurá have been exposed to bilingual education since the mid 1990s. Since their villages are situated in a central area, relatively close to a Brazilian health post, many Kamaiurá have a good command of Portuguese. Due to language contact within and between individuals of the two communities<sup>671</sup> it is not surprising that there are many parallels between ideophones in Awetí and Kamaiurá.

### 6.1.1.1 Ideophones

In her grammar, Seki (2000: 105) defines Kamaiurá ideophones as onomatopoeic elements expressing an activity usually referred to by a verb. Unlike most interjections which are partially identical with those in Awetí, ideophones are the only elements in Kamaiurá which do not conform to the phonological norms of the language. As examples Seki mentions voiced and prenasalized plosives which do not occur in other word classes. Two examples are given in (1):

<sup>&</sup>lt;sup>670</sup> Cf. www.socioambiental.org (last consulted on the 17<sup>th</sup> of June 2011). <sup>671</sup> See section 1.4, 5.2 and Reiter (2010) for details.

(1) a. (Seki 2000: 105, (245)) *mbuk* 'caiu' 'he/she/it fell'
b. (Seki 2000: 444, (72)) *ntorotorok* 'sound of breaking the carcas of crabs'

Seki further observes that some ideophones are invariably uttered only once, while others are reduplicated or repeated up to ten times. According to her analyses, this expresses an aspectual distinction: the former usually refer to punctual activities, while the latter stand for non-punctuality or duration.

Example (2) shows that ideophones in Kamaiurá can syntactically be used as independent clauses juxtaposed to other clauses:

(2) (Seki 2000: 106, (248))

*'ar-a o'-at pok pok pok warī warī warī* day-N 3-be.born IDEO.walk IDEO.whistle 'The day came and he was walking [to his bath], whistling.'

They can occur adjacent to a clause containing a predicate with a related meaning, as in (3):<sup>672</sup>

(3) (Seki 2000: 444, (72)) *Ntorotorok je i-ka -ika -m*IDEO 1sg 3-break-RED-GER
'Ntotototok, I broke them all.'

They can further be syntactically integrated as part of a complex verb phrase with a finite light verb based on 'e ('say'). This is illustrated in (4):

<sup>&</sup>lt;sup>672</sup> For Kamaiurá there is not sufficient data to determine whether the ideophone in this usage occupies the first position in the clause or is extraclausal as in Awetí.

(4) (Seki 2000: 445, (86)) *Muk* i'i =ne wyra-her-a jen = r -ehe ko'y=py='awan.
IDEO 3.say=ASS bird -COL-N 1pl.incl=REL-CAUS PTES=M =DEIC
'The birds gave us a signal to attack.'

As in Awetí, ideophones in this language can also have the function of a predicate in a sentence with further constituents, such as the oblique argument with the semantic role of a location in (5):

(5) (Seki 2000: 106, (246))

Tyk tyk tyk tyk tyk tykywyra-her -a retam-a reheIDEO.walkIDEO.arrive bird -COL-N village-N LOC'(He was) walking, arrived at the village of the birds.'

According to Seki (2000: 105), ideophones in Kamaiurá are additionally used in utterances as sound imitations or other expressive means, but can also "correspond to descriptive utterances". Seki does not specify this statement any further but apparently refers to the fact that some ideophones add a manner component to the meaning of a verb, thus resembling descriptive verbs in their function as verbal modifiers.

As in Awetí, ideophones occur in different discourse genres, but are most often used in narrative discourse.

A comparison of the small number of ideophones given in Seki's (2000) grammar to those in Awetí confirms the existence of cognates as listed in table 5.3 in section 5.1 and confirms the statements given by Seki (p.c.) and several bilingual Awetí-Kamaiurá speakers<sup>673</sup> on independent occasions that many Kamaiurá ideophones are either identical or very similar to those in Awetí.

<sup>&</sup>lt;sup>673</sup> Even though most Awetí are bilingual speakers of Kamaiurá to differing degrees, it was not possible to elicit ideophones from that language. The trained Awetí speakers, with whom an Awetí list of ideophones was checked, classified these as not "proper words" and considered the task of giving the meanings as a kind of "interval activity" which was not to be taken seriously.

#### 6.1.1.2 Verb reduplication

Seki (2000: 133) distinguishes two reduplicative patterns with different semantic repercussions. According to her analysis, the aspectual value expressed through monosyllabic reduplication of active verb roots may be iterative and that of disyllabic reduplication successive, while disyllabic reduplication of stative verbs has the function of intensification. The distinction she illustrates with the following examples:<sup>674</sup>

(6) (Seki 2000: 133, (360), (361), (361))

| a. <i>-pyhyk</i> | 'to grab'      | -pyhy-pyhyk          | 'to grab several times, palpate'   |
|------------------|----------------|----------------------|------------------------------------|
| b. <i>-mokuj</i> | 'to make fall' | -moku-kuj            | 'to make fall one after the other' |
| c. <i>-pinim</i> | 'speckled'     | -pini <b>-</b> pinim | 'extremely speckled'               |

Seki states that the respective semantic effect of the reduplication is determined by the "nature" of the lexical verb, i.e. determined by the lexical aspect of the verb.

#### 6.1.1.3 Conclusion

In sum, Kamaiurá ideophones are phonologically marked, can be repeated and reduplicated and syntactically either form predicates of independent clauses or occur as invariant components in complex predicates formed with a light verb 'e ('say'). Semantically they seem to refer to activities which are accompanied by sound. Verb reduplication in Kamaiurá is a productive process and seems to differ from verb reduplication in Awetí in having a mono- and a disyllabic reduplicative pattern.

#### 6.1.2 Lower Xingu: Kayabi

Kayabi is another Tupí-Guaranian language spoken in the Xingu area (in the northern parts of Mato Grosso and in the south of the state of Pará). Although living in an adjacent area, the Kayabi speaker community does not participate in the common Upper Xingu cultural system. The Kayabi originally lived in an extensive area to the west of the river Xingu, from where most of them were transferred to the reservation of the Parque Indígena

<sup>&</sup>lt;sup>674</sup> For each of the examples there is a cognate in Awetí: the transitive verb root *pytyk* ('grab'), the intransitive *kuje* ('fall') and the stative *pinim* 'speckled'.

do Xingú from the 1950s onward. Two smaller groups settled at different places outside the reservation. In a 2010 census, their total population amounted to 1,193 individuals.<sup>675</sup>

### 6.1.2.1 Verb forms indicating focus

In her grammar and the consulted articles Dobson (1997, 2005) does not mention any ideophones or uninflecting verbs for the Kayabi language. Instead, she describes a 'verb form of focus' ("forma verbal de enfoque") which has several features in common with ideophones in other languages. One of them is that this marked verb form is used to highlight certain information given in narrative discourse. The information may be more specifically a change of protagonist, an unexpected event or a turning point in the narrative.<sup>676</sup> From the 'focus' form Dobson (2005: 29) further distinguishes a 'narrative' verb form, marking essential information, and a 'declarative' form for supplementary information. Their respective formation will be illustrated by examples.

In non-narrative discourse the 'focus' form is used, when a sentence has a marked constituent order, starting with a locative or temporal adjunct (Dobson 1997: 110). Jensen (1998: 526/527), who uses the term 'oblique-topicalized verb' for this form, states that it occurs whenever an adverbial, i.e. an adverb, a postpositional phrase or a temporal subordinate clause, occurs in the first clause position. An example is given in (7):

(7) (Dobson 2005: 70, (36), Jensen 1998: 527, (192)) *Ko pe kyna reko -ì ra'e.*field at 3sg.femPRO be.vi -FOC PRES
'She is at the field.'

The 'focus' form invariably has an unstressed suffix *-i* directly attached to the verb root. Different from the 'declarative' and the 'narrative' form it does not combine with  $2^{nd}$  person marking (Dobson 1997: 110). Examples with  $1^{st}$  and  $3^{rd}$  person marking are given in (8) and (9):

<sup>&</sup>lt;sup>675</sup> Cf. www.socioambiental.org (last consulted on the 17<sup>th</sup> of June 2011).

<sup>&</sup>lt;sup>676</sup> Cf. Dobson (2005: 72).

(8) (Dobson 2005: 77, (14))

*T- ata pype te mo- no ramũ je por -i t- ata wi.*INDF-fire on 1sg CAUS-go if 1sgPRO jump.vi -FOC INDF-fire from 'Se você me puser no fogo, eu pularei (para) fora.'
'If you put me on the fire, I will jump from the fire.'

(9) (Dobson 2005: 64, (8))
A'ere *i- wewe-i* tee je wi.
CONJ 3- fly.vi -FOC simply 1sg from
'Mas, ele voou (a partir) de mim.'
'But it simply flew away from me.'

If a verb root ends in a voiceless plosive, a lenition occurs in front of the final /i/ from /p/ to /w/, /t/ to /r/ and /k/ to /g/ respectively. This general phonological process at morpheme boundaries is illustrated in (8) with the verb root *pot* ('jump').

The 'declarative' verb form does not have an enclitic in this position, as illustrated in (10):

(10) (Dobson 2005: 29, (94)) *je- nupã ape* 'you beat me'
1sgOBJ-beat.vt 2sgPRO

The 'narrative' form is marked by a narrative suffix with several allomorphs.<sup>677</sup> The respective choice depends on the end of the verb stem it combines with. This is exemplified by (11)(a) and (b):

(11) a. (Dobson 2005: 30, (98)) *i-juka -ù* 'he killed (someone)'
3-kill.vt-NARR
b. (Dobson 2005: 30, (102)) *o-manũ-mũ* 'he died'
3- die.vi -NARR

<sup>&</sup>lt;sup>677</sup> Cf. Dobson (2005: 30/31).

The 'focus' form occurs with intransitive as well as with transitive verbs. Their formation differs in that intransitive verbs take free personal pronouns positioned immediately in front of the verb stem, whereas to the transitive verbs either an object personal prefix is affixed, or it is immediately preceded by an NP referring to the object.<sup>678</sup> There is no subject marking for transitive 'focus' forms.

The other two verb forms in Kayabi have personal prefixes for intransitive and transitive verbs, and there are sets of subject and object prefixes for transitives, which are used in accordance with the requirements of the person hierarchy.

The 'focus' form also but more rarely combines with stative verbs. In this case it receives personal prefixes from the 'declarative' paradigm and the same suffix *-amũ* which is used to mark 'narrative' forms (Dobson 1997: 111). Thus the paradigm of stative 'focus' forms is more regular and formally quite distinct from the active verb paradigms. This is illustrated with the  $3^{rd}$  person of the stative verb *ypywyk* ('sink') in (12):

(12) Formation of stative verbs in the three discourse modes

| 'declarative'     | 'narrative'  | 'focus'      |
|-------------------|--------------|--------------|
| t-ypywyk          | w-ypywyg-amũ | t-ypywyg-amũ |
| 'he/she/it sinks' |              |              |

The 'focus' form can be combined with aspect suffixes preceding the focus marker *-i*. There is a special permissive particle *tene* which combines with the 'focus' form, as shown in (13), while imperative prefixes are used with the other two forms:

(13) (Dobson 2005: 41, (155)) *tene je i- 'u -i* 'Let me eat it!' PERM 1sgPRO OBJ-eat.vt-FOC

<sup>&</sup>lt;sup>678</sup> Note that example (8) is apparently a counterexample to this rule established by Dobson (2005: 32) because the verb root *wewe* ('fly') is intransitive but combines with a person prefix *i*- instead of a free pronoun.

In (14) the 'focus' form occurs with the causative prefix ma-, illustrating that – like the other two forms, too – it can be combined with derivational morphology:

# (14) (Dobson 2005: 68, (22))

*Ty'ar -a* **i-** *ma- nurug -i i- juka-ù i- nug̃ -a kĩã wi ma'e* exhaustion-MN OBJ-CAUS-pierce.vi-FOC OBJ-kill -NARR OBJ-go.away-NARR 3sg.masc from X *t- amỹì -wer -a kĩã wi ma'e!* INDF-grandfather-NPST-MN 3PRO from X

'A inanição fez ela espichar, matando-a, levando-a dele, do avô dela, coitadinho.'

'The exhaustion made her (being) pierce(d), killing her, taking her away from him, from her poor grandfather.'

While the other two forms each have a specific negative marker (the circumfix nV- -*i* for 'declaratives' and the suffix -*e'em* for 'narratives'), the 'focus' form – like ideophones in other languages – cannot be negated.

There do not seem to be any restrictions with regard to the semantics of a lexical verb as to whether a specific discourse form may be formed from it.

### 6.1.2.2 Verb reduplication

In Kayabi, too, reduplication can occur in all verb types. Dobson (2005: 35f.) gives the examples in (15) for simple and derived intransitive active verbs:

(15) a. (Dobson 2005: 36, (136); 109, (21))<sup>679</sup> *Tene t-ut- ur -i -'i.* 'Let him come.'
PERM 3-RED-come.vi-FOC-DIM?
b. (Dobson 2005: 36, (133)) *o-jeka-je- ka -ù* 'it broke completely into pieces'
3-RED- REFL-break.vt-NARR

For simple and derived transitive verbs she gives the examples in (16):

<sup>&</sup>lt;sup>679</sup> The morphological segmentation and glossing of Dobson's examples was either modified or added.

(16) a. (Dobson 2005: 35, (132))

*kutu-kutuk -a* 'pierced in different places'
3OBJ-RED-RED-pierce.vt-NARR
b. (Dobson 2005: 36, (134)) *moy-moy-mo- yk -a* 'completely finished'
3OBJ-RED-RED-CAUS- finish.vi-NARR

An example for a reduplicated stative verb root, indicating intensification, is given in (17):

(17) (Dobson 2005: 36, (135)) *Je-ro'y-ro'y* je 'I have a very high temperature.'
1s- RED- fever.st ?

Dobson's examples indicate that Kayabi has a prefixing reduplication pattern. The verb is copied as a whole, but final consonants of the reduplicant, if prefixed to syllables with a consonant in the onset, are deleted. As illustrated in (16)(a) and (b), a verb stem can also be triplicated, and valency-changing morphology, such as the reflexive prefix *je*- in (15)(b) and the causative prefix *mo*- in (16)(b) are also part of the reduplicant.

#### 6.1.2.3 Conclusion

Although the available information on the Kayabi language leaves many questions unanswered and some of the analyses are not fully convincing, especially in comparison to more recent analyses of closely related languages, some preliminary conclusions can be drawn with regard to the development of ideophones and related phenomena.

The 'focus' form in Kayabi, which marks a specific discourse function similar to that of ideophones and like these cannot be negated, also formally resembles ideophonic verb phrases in having a suffix (or "clitic", as it is called by Dobson without further explanations) -i attached to the verb root. There is no information in Dobson's analyses as to whether this suffix may have developed from a light verb construction involving the irregular verb 'e ('say'). This verb also exists in Kayabi, where it is used to mark direct

reported discourse.<sup>680</sup> As will be shown for Sirionó in section 6.1.4.1, there is a tendency in 'ideophonic constructions' for the 3<sup>rd</sup> person finite element to develop into a general marker of a certain verb class.

At the same time the 'focus' form in Kayabi also resembles an ANC in Awetí, as described in section 3.3.8.1.1, in having a free pronoun to either mark the intransitive subject or the object on transitive stems. In addition, these forms frequently occur with temporal and locative adjuncts as could also be observed for Awetí ideophones and ANCs and for the so-called "circumstantial" forms in other TG languages which are formally identical to the Kayabi form in equally being marked with a suffix *-i*. This suggests a relationship between ideophones and these nominalized forms which further supports the hypothesis that reduplicated ANCs may have been a stage in the development from ideophones to active verb roots in Awetí.<sup>681</sup> Reduplication and even triplication of verb stems is also a productive process in Kayabi, but does not seem to be a special feature of the 'focus' form.

#### 6.1.3 French Guyana: Emerillon

Emerillon is one of two TG languages in French Guyana and is spoken by about 400 individuals. According to Rose (2003: 5/6) the Emerillon villages are concentrated in two areas: one to the extreme West of the country, at the border with Suriname, the other in the East, at the Guyanese-Brazilian border. In each of these areas the inhabitants have a tendency towards intermarriage with a neighboring people: in the East with the Wayana, a Carib-speaking group, in the West with the Wayampi who also speak a TG language. The Emerillons are French citizens and accordingly participate in the monolingual French education system which does not have a favourable influence on the linguistic competences regarding their native language. Their first contact with European colonialism was in the late 18<sup>th</sup> century. Nowadays the Emerillons are in permanent contact with speakers of French, Brazilian Portuguese and several indigenous and creole languages.

<sup>&</sup>lt;sup>680</sup> See Dobson (1997: 135) for the full paradigm of this verb.

<sup>&</sup>lt;sup>681</sup> Cf. section 5.3.4.

# 6.1.3.1 Ideophones

Judging from the observations given by Rose (2003: 582), the use of ideophones seems to be a typical and salient phenomenon in that language: "[...] Ces traits font des idéophones un ensemble de mots facilement repérables. Leur quantité et leur fréquence en font un aspect important de la langue<sup>682</sup>. Rose (2003: 574) distinguishes between "idéophones indépendents" and "mots introduits par le verbe "faire, dire"" which she encountered in her corpus. At the stage of analysis when she wrote the grammar she refrained from making a decision as to whether they belong to the same category or not. Unlike what was shown for Awetí, where an ideophone can occur in either structure, the elements described by Rose either always occur by themselves or always in a construction with a light verb.

Ideophones in Emerillon resemble in many respects those in Awetí, except for the fact that in Awetí they are a clear source of verb derivation (or vice versa), for which Rose (2003: 576) does not find any evidence in the Emerillon data.

Emerillon ideophones display a specific phonological structure which can also be found in other elements of the language, showing a canonical syllable pattern C(VC)VC,<sup>683</sup> corresponding to that of Awetí ideophones. The choice of phonemes in ideophones seems to be more restricted than in other words, the first consonant being nearly always a voiceless plosive and the last consonant often a /g/ or /ŋ/. The intermediate consonant in disyllabic ideophones consists mostly of /l/ or /t/. As in Awetí, disyllabic ideophones have a tendency for vowel harmony. Rose points out that the phonemes are not atypical for the phoneme inventory of the language, the only exception being a fricative /f/ in the ideophone *fu* ('to blow'). Examples for ideophones reflecting these various observations are given in (18):

### (18) (Rose 2003: 577, (1491); 578, (1496); 577 (1495))

| a. <i>sulug</i> | 'enter' |
|-----------------|---------|
|-----------------|---------|

b. *kal* 'cut (bread)'

<sup>&</sup>lt;sup>682</sup> "Due to these features ideophones are a set of words which can easily be perceived. Their quantity and frequency make them an important aspect of the language." [my translation].

<sup>&</sup>lt;sup>683</sup> Cf. Rose (2003: 574/ 575).

c.  $k^{w}$  *slog*  $k^{w}$  *slog* 'climb up'

Ideophones are further prosodically marked in being uttered with high pitch and vowel lengthening (Rose 2003: 576).

Morphologically, Emerillon ideophones show two processes: multiple repetition and reduplication. Rose does not mention any criterion by which she distinguishes one process from the other. For reduplication she gives the example in (19), while the ideophones in (20) are analysed as instances of repetition:

(19) (Rose 2003: 578, (1497))

Kosokosogo-za?ogamõ takulu-?al o-apig-e?e-o.IDEO.come.out.of.water 3-come.out.of.water.vi other rock-on3-sit.down.vi-INTENS-CONT'L'autre sort de l'eau et s'assoit sur un rocher.'

'Kosokosog, the other one gets out of the water and sits down on a rock.'

(20) (Rose 2003: 576, (1490))

#### Tulud3 tulud3 tulud3 tulud3 oza- o-zad3 -oŋ.

IDEO.laugh RED-3-laugh.vi-PL

'Elles rient.'

'They laugh.'

Syntactically, ideophones form independent clauses which precede clauses with finite lexical verbs, as illustrated in (19) and (20). As in Awetí, there are examples with second position particles, confirming this extra-clausal status. In this usage, which is most frequent in Rose's data, they refer to activities which are identical or similar to those expressed by the lexical verbs. According to Rose (2003: 578), their function in this case is to reinforce the expressiveness of the following utterance.

If not positioned as an independent unit in front of a clause, ideophones can follow temporal adjuncts, as in (21):

(21) (Rose 2003: 577, (1493))

*Ip eku?e* **ponon** *õ- hem o-ho.* one.moment.later IDEO.go.outside 3-go.outside.vi 3-go.vi 'Après un moment, il est sorti.' 'After a moment he was gone.'

In this respect they resemble ideophones in Awetí, when these function as predicates of clauses which are also often introduced by temporal or by locative adverbs.<sup>684</sup>

While in (21) the ideophone is followed by two finite verbs which – according to my analysis – form the predicates of a second and a third clause, the ideophone in (22) is more clearly a predicate in a clause without a lexical verb but with a PP and a temporal adverb as further constituents:

(22) (Rose 2003: 579, (1506)) *Ponon i-kotı ki?ı*.
IDEO.go.out 3-towards then
'Alors il sort vers lui.'
'Then he goes out towards him.'

Finally, there are ideophones which are syntactically dependent on e'i ('he says') or *ba'e* ('make'). The first type with a light verb based on '*e* ('say') is most frequent and, according to Rose's (2003: 574) observations, only introduces monosyllabic ideophones. Examples for the two construction types are given in (23) and (24):

(23) (Rose 2003: 580, (1512))
zawal-enam ka -l -ehe "wog wog wog" e?t.
dog -CHANG.TOP wasp -REL-at IDEO.bark 3say
'Le chien aboie après les guêpes.'
'The dog barks at the wasps.'

<sup>&</sup>lt;sup>684</sup> Cf. section 4.4.3 example (8).

(24) (Rose 2003: 580, (1513)) *Pul titfag o- ba?e.*IDEO IDEO 3-make.vt
'Il pète.'
'He farts.'

Rose (2003: 580) analyses them as objects of the verbs they are accompanied by, an analysis which in the case of the intransitive verb root 'e ('say') does not hold.<sup>685</sup> Rather, and confirmed by her observation that these constructions resemble those of direct reported discourse which are also introduced by 'e,<sup>686</sup> it makes sense to analyse the light verbs as verbs with the pragmatic function of introducing 'mimetic signs', as was suggested by Güldemann.<sup>687</sup> Different from Awetí, however, in Emerillon there is not only the light verb 'e ('say') but also *ba'e* ('make') which semantically is not related to a speech event. Rose does not give any information, however, on the productivity of this second construction type for which only one example can be found in the entire grammar.

Rose argues that ideophones belong to the standard lexicon of the language, due to the fact that they can be identified by native speakers independently of their context. In addition, their identification seems to be facilitated by some kind of conventionalized sound-meaning correspondence. Rose (2003: 581) classifies most of the ideophones in Emerillon as instances of 'synaesthetic sound symbolism' in the typology established by Hinton, Nichols and Ohala (1994),<sup>688</sup> due to the fact that their vowels, consonants or suprasegmental features represent properties of an event, which are perceived by a variety of senses (e.g. auditive, visual, tactile). The less frequent onomatopoeic ideophones belong to the category of 'imitative sound-symbolism'.

Frequently, the activity expressed by an ideophone in Emerillon can be associated with a specific sound. States are not referred to, except for two cases, where ideophones encode the darkness of night and the light of day.

 $<sup>^{685}</sup>$  The verb 'e in Emerillon – a cognate of Awetí 'e ('say') – only combines with person prefixes of the first series, indicating that it is intransitive (cf. Rose 2003: 36).

<sup>&</sup>lt;sup>686</sup> Cf. Rose (2003: 506, 580).

 $<sup>^{687}</sup>_{689}$  Cf. section 5.3.2.

<sup>&</sup>lt;sup>688</sup> Cf. section 2.1.

Rose states that ideophones focus on the activity and not on the participants involved in it. Evidence is given by the fact that the same ideophone can co-occur with finite predicates in adjacent clauses referring to the same activity, whereby in one case the involved participant has the semantic role of an agent, in the other that of a causee in a causative construction.<sup>689</sup> A further property of ideophones is that they hardly ever impose any semantic restrictions on agents or patients, which may be humans, animals or objects. According to Rose this is another consequence of their focus on the activity.

On the pragmatic level, Rose observes that ideophones only occur in declarative sentences in narrative discourse.

As already outlined in section 5.1, there are several forms in Emerillon that may be regarded as cognates of Awetí ideophones. Of the altogether 48 Emerillon ideophones on which Rose based her analysis, 25 could be encountered in her grammar. Nine of these formally resemble Awetí ideophones. Although Rose did not find any evidence for a relation between ideophones and verb roots in the language, example (25) may be a point of departure for further investigation:

(25) (Rose 2003: 444, (1108))

O-itun-itun, o-[kusu]kusu(g)-katu-e?e, pug o-inu- inun.
3- RED-smell 3- RED- wash -well -ITER IDEO 3-RED-put
'Il les sent, les lave bien, et les repose à chaque fois.'
'He smells at them, washes them well and puts them back each time.'

The example contains the reduplicated verb root *kusug* which – apart from the vowel quality – does not differ from the ideophone *kosokosog* in (19) referring to the same activity. This correspondence in Emerillon suggests the same process outlined for Awetí of deriving verb roots from ideophones via verb reduplication. By considering cognates from other languages of the same family it remains to be explored which kinds of vowel changes have occurred and in which direction. In Awetí, for example, there is a cognate ideophone *kutsu kutsu kutsu* which is almost identical with the Emerillon verb in alternatively being realized

<sup>&</sup>lt;sup>689</sup> Cf. section 4.5.5.2 for an equivalent example in Awetí.

with an affricate [ts] instead of the fricative [s],<sup>690</sup> while the lexical verb with the meaning 'wash' has the verb root *kyzy* [k  $tz_{t}$ ] and is probably a cognate, too. In this context, again, the question arises whether the ideophone has been borrowed from a TG language, for example from Kamaiurá, or whether ideophones may be less sensitive to specific sound changes (i.e. regarding consonants) than lexical words.

# 6.1.3.2 Verb reduplication

Emerillon has two distinct processes of verb reduplication. According to Rose's (2005) comparative analysis of various TG languages, disyllabic reduplication expresses event-external plurality, i.e. repeated (including continuous and habitual) action, whereas in monosyllabic reduplication the plurality is event-internal, signaling repetitive action, also by more than one participant on one occasion. In Emerillon disyllabic reduplication is also possible in monosyllabic verb stems, where a causative or last syllable of a personal prefix forms part of the reduplicated string.<sup>691</sup> Rose prefers the terms 'event-external' vs. 'event internal' to the dichotomy of 'successive' vs. 'iterative action' which is used in many studies because in her opinion the latter do not capture the variation induced by the "type of situation denoted by the verb", i.e. the state of affairs, and the types of participants.<sup>692</sup> In her grammar of Emerillon (2002: 444/5) Rose illustrates her distinction with verb pairs which occur with a mono- and a disyllabic variant. One of them is given in (26) as opposed to (25):

(26) (Rose 2002: 444)

*ku- kusu(g)-katu aŋ ba?e-kom!*2sg.IMP-RED-wash -well DEM thing-PL
"Lave bien ces choses!"
'Wash these things well!'

<sup>&</sup>lt;sup>690</sup> See Rose (2003: 643) for information on free variation regarding the phonetic realization of certain phonemes.

<sup>&</sup>lt;sup>691</sup> Cf. Rose (2002: chapter 12, III).

<sup>&</sup>lt;sup>692</sup> Cf. section 3.3.8.3.1.

The verb pair in (25) and (26) illustrates that with regard to the transitive verb *kusug* ('to wash') a monosyllabic reduplication indicates that more than one patient performs an activity on one occasion, while the reduplication of two syllables signals a succession of events.

Rose (2005: 355) points out that the dichotomy of reduplication signaling event-internal vs. event-external plurality presented for Emerillon does not show such a clear pattern in many languages of the TG-family. She further states that in many TG languages monosyllabic reduplication is not a productive process any more, whereby disyllabic reduplication tends to take over both functions, even though these languages occasionally show frozen forms of monosyllabic reduplication in their lexicon (cf. Rose 2005: 365).

## 6.1.3.3 Conclusion

In general it can be stated that ideophones in Emerillon show almost all features of ideophones encountered in Awetí. They do not differ from other Emerillon words in terms of phonology and syllable structure, are prosodically marked and undergo processes of reduplication and repetition. Syntactically, they either form predicates of independent clauses or represent invariant elements in light verb constructions. An interesting observation is that – unlike in Awetí – the number of syllables seems to determine whether an ideophone occurs with a light verb or not. Notable is also a second light verb *ba'e* ('make') which, however, does not seem to be very productive, as well as the fact that Rose did not notice any verb roots which formally resemble ideophones. Unlike in Awetí and many TG languages, the morphological process of verb reduplication in Emerillon displays two patterns which can functionally clearly be differentiated from each other.

## 6.1.4 Bolivia: Sirionó and Yuki

Sirionó and Yuki are closely related. For a long time Yuki had been classified as a dialect of Sirionó.<sup>693</sup> Dahl (to appear: 2) considers Villafañe's (2004) description of Yuki, which includes a discussion of distinctive features, convincing evidence to classify it as a

<sup>&</sup>lt;sup>693</sup> See e.g. Jensen (1999).

separate language.<sup>694</sup> Unlike Awetí but similar to Northeast African languages (Güldemann 2005: 136ff.), for which this has been analysed as an areal phenomenon, both languages have apparently developed a suffixing conjugation class from complex verb phrases formed with ideophones.

# 6.1.4.1 Sirionó

Sirionó is a Northern Bolivian Tupí-Guaraní language currently spoken by several hundred individuals living mostly in one village called Ibiato and in the more recent settlement Pata de Aguila which is situated about 60 km from Trinidad, the capital of the state. In 1999, the official number of members of the ethnic group was 427.<sup>695</sup> The Sirionó language is currently highly endangered. According to Dahl's estimations, the observable decline of Sirionó in favour of Spanish started with the generation born in the 1970s and was further aggravated by the relative vicinity of the state's capital with its Spanish-speaking inhabitants, by exogamy and by the abolition of bilingual instruction in 1982. Nowadays dialectal variation cannot be perceived any more, which may be a result of the concentration of Sirionó speakers in one geographical area. In the beginning of the 20<sup>th</sup> century many Sirionó people who used to be nomads were working as slaves on big farms, and from the 1930s to the 1980s they were heavily exposed to missionary work.

Sirionó has been studied by different authors at different times since the 1940s. Results from the different studies regarding ideophones and complex verbs on different levels of analysis will be presented in chronological order and contrasted with each other.<sup>696</sup>

6.1.4.1.1 Ideophones, light verb constructions and suffixing conjugation on verbs

In Sirionó there are a considerable number of verbal complexes formed with what may originally have been ideophones followed by an inflected light verb based on i or i ('say'/

 <sup>&</sup>lt;sup>694</sup> See also Hemmauer (2005) for a discussion of shared features and developments which distinguish Sirionó and Yuki from other Tupi-Guaranian languages.
 <sup>695</sup> Cf. Dahl (to appear: 1).

<sup>&</sup>lt;sup>696</sup> Most of the annotations given by Priest & Priest have been slightly modified. All annotations of the Schermair examples and all English translations were added. The orthographical representation of Sirionó, as used by the individual authors, has not been altered.

'do')<sup>697</sup>. These complex forms are listed by Schermair (1949: 252) as single word forms representing a third conjugation class which differs from a prefixing first and second class by having inflected suffixes. The suffixes, in turn, are formally identical with inflected forms of the verb *i* ('say'/ 'do'). Table 6.1 gives a full paradigm of the verb *tiri* ('tremble'), as outlined by Schermair, and in table 6.2 the irregular paradigm of the verb *t* ('say'/ 'do') is presented in the orthography used by Dahl.

| Person/ | Singular                                 | Plural <sup>698</sup>                          |
|---------|------------------------------------------|------------------------------------------------|
| Number  |                                          |                                                |
| 1       | <i>tiri'ae se</i> 'I tremble'            | <i>tiri 'ñande / tiri 'ure</i> 'we tremble'    |
| 2       | <i>tiri'ere (te)</i> 'you tremble'       | <i>tiri 'hẽn(dy)e/ tiri 'hẽ '</i> you tremble' |
| 3       | <i>tiri'i (ete)</i> 'he/she/it trembles' | <i>tiri'I (ete) ha</i> 'they tremble'          |

Table 6.1: Paradigm of the 3<sup>rd</sup> conjugation class according to Schermair (1949: 252)

Table 6.2: Paradigm of the verb *t* ('say') according to Dahl (to appear: 13/14)

| Person/ | Singular                            | Plural                                            |
|---------|-------------------------------------|---------------------------------------------------|
| Number  |                                     |                                                   |
| 1       | ae 'I say'                          | <i>nande</i> (incl.)/ <i>ure</i> (excl.) 'we say' |
| 2       | ere 'you say'                       | jenye 'you say'                                   |
| 3       | <i>t</i> 'he/she/it says/ they say' |                                                   |

The apostrophes in Schermair's examples do not – as in the other languages discussed here – mark a glottal stop but indicate, according to the author (1949: 17), a break ("una cesura (hiatus)") between the last phoneme of the root and the initial vowel of the suffix. Priest & Priest (1967: 195, fn.1), who also did not list a glottal in the phoneme inventory of Sirionó, did not write an apostrophe in this position. Villafañe (2004: 199), by contrast,

<sup>&</sup>lt;sup>697</sup> According to Schermair the verbal suffix is -i. The verb base i is given by Priest & Priest (1967) and by Dahl (to appear).

<sup>&</sup>lt;sup>698</sup> In the 1<sup>st</sup> person plural there is an inclusive and an exclusive form (cf. Schermair 1949: 60). The particle *ha*, indicating plurality of the  $3^{rd}$  person in Schermair's grammar, is absent from Dahl's recent grammar sketch of the language. According to Dahl, there is no number distinction in the  $3^{rd}$  person.

states that a glottal stop exists in Sirionó as well as in Yuki only in these verbal constructions at the position indicated by Schermair. Another interpretation of this observation may be to simply consider this pause as indicating a separate prosodic unit.

According to Schermair, verbs belonging to this third conjugation class can be negated like verbs of other classes. An example from the grammar is given in (27):

(27) (Schermair 1949: 253) *tiri* - 'ae -yã
tremble.vi-1sg -NEG
'I do not tremble'

In addition, there seem to be no restrictions with regard to tense (past, future) and mood (subjunctive, imperative, intentional, obligative and optative). The verbs may be modified by adding the respective particles.<sup>699</sup> It is, however, doubtful whether all these forms actually occur in natural language use or whether Schermair created them by analogy. One piece of evidence for the latter is that in Schermair's text corpus as well as in the text collections by Priest & Priest and by Dahl only third person forms are encountered.<sup>700</sup> For some forms Schermair (1958) explicitly states in his dictionary that they only occur in the 3<sup>rd</sup> person.

Priest & Priest (1967: 254) analyse the same construction as consisting of a "preverb" and an inflected form of the verb t ('say'/ 'do').

Verbs of this class are mostly intransitive. Transitivization is possible by adding the causative morpheme mu- which, as illustrated in (28), is prefixed to the uninflected part of the construction:<sup>701</sup>

<sup>&</sup>lt;sup>699</sup> See Schermair's (1949: 253-257) further conjugations, demonstrated on the verb *tiri'i*, which strictly follow a Latin model of grammar writing.

<sup>&</sup>lt;sup>700</sup> The same applies to most complex predicates formed with ideophones in Awetí (cf. section 4.4.4, table 4.6).

<sup>&</sup>lt;sup>701</sup> Cf. section 3.3.8.2.1 for the cognate morpheme *mo*- in Awetí which occurs with some of the verbs ending in -*e* that presumably had ideophones as their sources.

(28) (Schermair 1949: 376, 400, ex. 296, glossing added)

Tumpã amã mu-pirirã -pirirã-'i e-mu-siu-siutenõabaGodskyCAUS-flash-RED-3 3- CAUS-thunder-RED PART PART personmu-sikityesakwãgeśire.

CAUS-be.frightened in.order.to of.him PART

'Dios hizo relampaguear el cielo y lo hizo tronar fuerte a fin de que los hombres tuvieran miedo de él.'

'God made the sky light up with flashes, made it thunder (loudly) in order to make the people be frightened of him.'

When comparing the causative verb *mupirirã* in (28) with the causative forms *musiu* ('make thunder') and *musikitye* ('make be.frightened') derived from 'ordinary' intransitive verbs with pronominal prefixes, an inconsistency can be observed. While the latter only seem to carry inflectional prefixes, when there is no NP in the same position immediately in front of them, the form with the suffixing inflection has a preposed NP *amã* ('sky') for the object participant as well as a subject NP *Tumpã* ('God') and a person suffix. The example in (29) renders the analysis as a suffixing conjugation altogether doubtful:

(29) (Priest & Priest 1967: 227, Vb 31112b)

e-mu- pããmã-i -ẽã -sakã

3- CAUS-angry -do-NEG-in.order 'in order not to make him angry'

Following Schermair's analysis, (29) would show a 'double marking' of the object participant by a prefix and a suffix, but in the glossing given by Priest & Priest the "suffix" is analysed as a light verb. In both cases the two elements would be inflected. Another possibility is to assume that the *-i* at the end of the verb root in the examples with a causative prefix has grammaticalized into an invariant class marker for sound symbolic verbs, which – like the other verb classes – have inflectional prefixes.

Nominalization of the whole complex is also possible, as in (30), which is further evidence for the interpretation of the -i (-i) as either a light verb or a verb class marker:

Priest & Priest (1967: 227) cited several other examples of this type with affixes, while Dahl (p.c.) does not observe any affixation on this construction in his data corpus.

Phonological and semantic properties of the suffixing verb class

Schermair's dictionary lists many items of the verb class ending in -i (-i). They are often onomatopoeic, imitating sounds of humans, animals and natural phenomena, as in (31):

| (31) (Schermair    | 1958: 51, 291, 196)   |
|--------------------|-----------------------|
| a. <i>ãyãy'i</i>   | 'complain, whimper'   |
| b. <i>takwã 'i</i> | 'cackle (of chicken)' |
| c. kotyo-kotyo'i   | 'flow (of water)'     |

Many verbs of locomotion belong to this class. Examples are given in (32):

(32) (Schermair 1958: 200, 262, 434)

- a. *kũsu'i* 'walk in a heavy manner'
- b. *ndiri'i* 'move/ advance'
- c. *titik'i* 'move slowly' (also: 'crack', 'crackle')

<sup>&</sup>lt;sup>702</sup> The grapheme ś represents a voiceless palatal fricative [ç] (Schermair 1958:18).

Others denote different kinds of activities which are accompanied by a characteristic sound, as shown in (33):

| (33) (Schermair 1958: 202, 403, 406) |                                                      |  |
|--------------------------------------|------------------------------------------------------|--|
| a. <i>kwahaha'i</i>                  | 'sound of several objects falling to ground'         |  |
| b. <i>taktak'i</i>                   | 'sound of cutting off part of an object using teeth' |  |
| c. <i>tirik'i</i>                    | 'sound of perforating sth.'                          |  |

There are also verbs referring to soundless movements or activities, to visual sensations and to physical and emotional sensations, as in (34), (35) and (36) respectively:

(34) (Schermair 1958: 384) sok'i 1. 'bend down', 2. 'disappear', 3. 'die'

(35) (Schermair 1958: 290, 291)

a. *pã(hãhã)'i* '(be) dark (of sky, clouds)'

b. *pẽ 'i* 'glitter'

(36) (Schermair 1958: 105, 288, 290)

| a. <i>hoyhoy'i</i> | 'be surprised                          |
|--------------------|----------------------------------------|
| b. <i>pamã 'i</i>  | 'be furious' (accompanied by shouting) |
| c. pemẽ'i          | 'feel much pain'                       |

These are, however, less frequent than the verbs of the other semantic domains.

Phonologically, these verbs are similar to ideophones in Awetí in typically having one or two syllables and in beginning with the voiceless plosives /p/, /k/ or /t/. The phoneme /p/ is especially frequent at the onset of the first or only syllable of such a verb: of the 36 entries listed under the letter in Schermair's dictionary 29 belong to this class of

verbs.<sup>703</sup> There is further a tendency for vowel harmony in verbs consisting of two syllables.

Another notable fact is that there may be variation with regard to vowel quality, as in (37):

(37) (Schermair 1958: 406)*tarik'i* = *tirik'i* 'sound of piercing sth.'

Variation with regard to the initial or intermediate consonant may cause slight semantic nuances, as shown by the verbs in (38) which were marked by Schermair as being similar in meaning to each other and to the verbs in (37):

(38) (Schermair 1958: 289, 437)

| parok' i | 'sound of passing by or of piercing an object |
|----------|-----------------------------------------------|
| patok' i | 'sound of rebounding from sth., echoing'      |
| torok' i | 'sound of penetrating or piercing an object'  |

### Ideophones

A class of ideophones in Sirionó is neither mentioned by Schermair nor by Priest & Priest. In the example sentences attached to Schermair's grammar and those used to illustrate the dictionary entries, no evidence for their existence could be found either, but in a text collection by Priest & Priest (1980) there are various examples of free ideophones in addition to ideophones which form part of a construction with t ('say'/ 'do'). Examples for free ideophones are (39) and (40):

(39) (Priest & Priest 1980: 95,108, (55))

Ya mbia tiquise uru, sara sara sara.

already people machete use.instrument, IDEO.cut

'Luego comenzaron a cortar con sus machetes, sara sara sara.'

 $<sup>^{703}</sup>$  Dahl (to appear: 8), too, observes a connection between ideophones and /p/, stating that 16 "phrasal verbs" in the dictionary by Priest & Priest (1985) start with this phoneme.

'Immediately the people cut (the weeds) with their machetes, sara sara sara.'

(40) (Priest & Priest 1980: 21, 43, (75/6))

Eramei no ma<sup>704</sup> sira charõ ua. **Sarak sarak** ya.

3-male.animal only fish fierce finish. IDEO.eat already

'Solamente fue el macho que las pirañas se comieron, sarak sarak (terminaron).'

'Only the male (jaguar) was finished by the pirañas (fierce fish), sarak sarak (finished).'

In both cases the ideophones form a clause by themselves, adding a manner component to the event expressed by the verb in the preceding clause. In (40) the clause with the ideophone contains an adverb, the Spanish loanword *ya* ('already') which adds a perfective aspect to the event expressed by the ideophone.<sup>705</sup> In contrast to Awetí, <sup>706</sup> no examples could be encountered in the Sirionó data, where an ideophone functions as a predicate of a clause with arguments.

Light verb constructions

In (41) and (42) the ideophones are part of complex predicates. While the ideophone in (41) represents the sound produced by an animal, in (42) it refers to an activity which is arguably accompanied by a characteristic sound:<sup>707</sup>

(41) (Priest & Priest 1980: 18, 42, (59))

*Eh eh eh, ı nda tendi ra.* IDEO.laugh say PART kind.of.monkey PART 'El maneche está riéndose.'

'The monkey is laughing.'

<sup>&</sup>lt;sup>704</sup> The element *no ma* ('only') is a loan construction from Spanish (*no mas* 'not (any) more').

<sup>&</sup>lt;sup>705</sup> The particle ya corresponds in function to mu'j $\tilde{e}$  ('already') in Awetí (cf. section 4.4.6).

<sup>&</sup>lt;sup>706</sup> Cf. section 4.4.3. This observation for Sirionó was confirmed by Dahl (p.c.).

<sup>&</sup>lt;sup>707</sup> In some cases, the authors have added to their annotations of ideophones similar to those in (28) that they were uttered in a "voz falsete" (Priest & Priest 1980: 81), a falsetto voice.

(42) (Priest & Priest 1980: 36, (186))

"Eno", ya uu riqui est. Sororok, t nda ra.

all.right, already arrow pull.out from.him. IDEO.pull.out, say PART PART

"Bueno", (dijo la luna y) sacó la flecha, sororok."

"All right", he pulled out the arrow (of the other one's body). Sororok, it made.'

All occurrences of this type in Priest & Priest (1980) have a  $3^{rd}$  person form *t* which is also used to mark direct reported discourse.<sup>708</sup> This may be an indication for their development into general markers of mimesis as proposed by Güldemann (2008) for corresponding elements in African languages.<sup>709</sup>

Based on his own recent data collection from 1999 and 2008, Dahl (to appear: 15, 2.6.6) proposes a light verb construction instead of a conjugation class for phenomena of this type. According to his observations, this verb phrase consists of an ideophone or a Spanish loanword and a form of t derived from the formally identical irregular verb with the meaning 'say'/ 'do'. This construction type is very productive due to the fact that borrowing from Spanish has increased considerably. It even replaces frequently used native verbs, for which examples are given in (43) with the Spanish loan-verbs *comer* ('eat') and *cazar* ('hunt'):

(43) a. (Dahl to appear: 15, (9))

Mbia come *i* eã.

people eat say NEG

'La gente no come.'

'People do not eat.'

b. (Dahl to appear: 31, (T21))

Eriki cazá i hue mbia ae kia ee re.

COP hunt say here people say.1sg CNT PRO:3OBL PINC

"Están cazando por acá la gente", le dije."

'They are hunting around here, the people", I said to him.'

<sup>&</sup>lt;sup>708</sup> Cf. Dahl (to appear: 26, 2.12.3).

<sup>&</sup>lt;sup>709</sup> Cf. section 5.3.3.

Dahl (to appear: 8, 2.4.4) states that ideophones, which typically occur in such light verb constructions, can be either onomatopoeic, i.e. with a non-arbitrary sound-meaning relation as in (44), or sound-symbolic in a less iconic way as shown in (45):

(44) (Dahl to appear: 30, (T19))

Jau jau jau  $\mathbf{i}$  ch $\mathbf{i}$  eno mba mbae re IDEO.bark say AUG already PART PART PINC "Jau jau jau" hizo tambien." "Hau hau hau", it also made."

(45) (Dahl to appear: 32, (T36)) t chĩ oso uchã. ngiã **poo** Ae nvakua oo like.that jaguar jump CNT IDEO.jump say AUG 3.go escape 'Y así, el tigre saltó, saltó y se disparó.' '(And) like that the jaguar jumped, it jumped and escaped.'

The examples show that ideophones can be reduplicated or repeated, as in (44), or occur in a simple form. Some ideophones only exist as reduplicated forms. In (45) another form *oo* 'jump' could be interpreted as an ideophone replacing a verbal predicate, but Dahl (p.c.) points out that this form is listed in the dictionary by Priest & Priest (1985: 71) as an intransitive verb which here occurs without any inflection, as is possible for all Sirionó verbs.<sup>710</sup> The fact, pointed out above, that Dahl does not observe any affixation on ideophones in light verb constructions further suggests that the prefixation of a causative affix and the tendency towards the formation of a conjugation class marker -t is less prominent in current language use. One reason for this development may be the excessive usage of the construction for the integration of loanwords as illustrated in (43).

For the short narrative text *Nvakua risha* ('the jaguar')<sup>711</sup> the video data could be taken into consideration. There are eight 'light verb constructions' in the sense described by Dahl. In one of them (T21, see example (43)(b)) the invariant component consists of a Spanish

<sup>&</sup>lt;sup>710</sup> Cf. Dahl (to appear: 10) <sup>711</sup> Cf. Dahl (to appear: 29ff.).

loanword *cazá* (< *cazar* 'hunt'). The other examples have ideophones (T3, 19, 31, 35, 36) and a verb root *joojo* (T23, 24) in this position. Within the ideophones there is a differentiation between 'onomatopoeic' ones (T3, 19), imitating sound, which are uttered with marked prosody but without co-occurring hand gestures, and sound-symbolic ideophones in a synesthetic or conventionalized sense which – in addition to being prosodically marked – are accompanied by gestures depicting the activities referred to. Two of the ideophones (T19, 31) are uttered three times instead of twice as would be the norm in ordinary reduplication. Example (46) from Dahl's text contains the 'light verb construction' *joojo* t ('say joojo'):

(46) (Dahl to appear: T24)
Ae joojo i akiatu ke ra.
yes bark say know PART PART
"Si, sabe ladrar como perro", (me dijo mi esposo)."
"Yes, it (the jaguar) can say bow-wow (like a dog).""

This construction differs from the ones with ideophones in that it is neither uttered with marked prosody nor accompanied by a gesture and thus does not have any of the performative features characterizing an ideophone. Therefore it is suggested to treat it as an uninflecting verb *joojot* ('bark').

### 6.1.4.1.2 Verb reduplication

According to Priest (1980: 23, 24), reduplication is a frequent phenomenon observed in Sirionó verbs but also encountered in other parts of speech. In the suffixing class of verbs described by Schermair it is a productive morphological process. An example from Schermair's data is (47):

```
(47) (Schermair 1949: 366, 390, ex. 30, glossing added)
Eresa pare-pare-'i ete ka (re).
eye move-RED -? much X PART
'Sus ojos se mueven mucho' = 'Está impaciente'
```

'His eyes move rapidly.'

Dahl (to appear: 9, 2.5.3) points out that in words with more than one syllable the last two moras of the word form the reduplicant which is suffixed to the root. The same was observed by Priest (1980: 23), who stated that the only exception with a full reduplication in a word with more than two syllables was *pirirã* as in (28) above. Reduplicated verbs are further very often lexicalized.

### 6.1.4.1.3 Summary

Sirionó, as described by different researchers since the 1950s, has ideophones and a verb construction which resembles ideophones in many respects. Ideophones, uttered once or repeatedly, can occur as independent clauses or in a construction with a light verb t('say', 'do') which is also used to syntactically integrate loan verbs. They are soundsymbolic to varying degrees and may refer to sound events or to other activities. Various analyses have been proposed for a specific class of verbs which refer to the same kinds of events (locomotion, sensory events of different kinds, including emotion) as ideophones. While Schermair classified them as verbs with a suffixing conjugation for which he provided a full paradigm, the Priests proposed a complex verb phrase consisting of a root and a light verb t ('say', 'do'). Dahl in his recent analysis does not distinguish between this verb construction and a light verb construction involving ideophones. In Dahl's annotated video there are various instances of this type of construction. With one exception they are all uttered with marked prosody and mostly accompanied by gesture, so that their analysis as ideophones in these cases seems justified. However, in one case a construction of this type does not have these performative features. A solution is to consider this type of construction in Sirionó as grammaticalized to varying degrees. While on the one hand it integrates mimetic elements like ideophones into syntactic structure, it can also be formed with a verb stem. Light verb and verb stem may even fuse to a specific verb class marked with the suffix -t. The possibility of a suffixing conjugation class can also not be completely ruled out, even though in the data provided by all three authors only 3<sup>rd</sup> person forms can be encountered. Reduplication is a productive process in all verb classes in Sirionó.

# 6.1.4.2 Yuki

Yuki is spoken in an adjacent area in Northern Central Bolivia. Most Yuki, about 200 individuals, live in a village called Bia Rekuate in the department of Cochabamba.<sup>712</sup> Before the Yuki founded their first settlement in 1971, they had been nomads. They were first contacted by missionaries in 1965. According to Villafañe (2004: 7), the Yuki language is still vital, even though most of the Yuki inhabitants of Bia Rekuate are fluent Yuki-Spanish bilinguals. Before school-age, young children are monolingual speakers of Yuki. In the first few years at school they are taught by bilingual Yuki teachers, using monolingual Yuki educational material, as well as by Spanish-speaking non-indigenous teachers. During her study of the Yuki language spoken in Bia Rekuate Villafañe (2004: 8) noticed phonological and lexical variation which she attributed to two factors. One was that Yuki people from groups with different varieties settled in the village at different times, the other were changes in the speech of the younger generation growing up in Bia Rekuate. Yuki does not seem to show the same heavy borrowing from Spanish as observed by Dahl for Sirionó.

### 6.1.4.2.1 Ideophones and suffixing conjugation on verbs

In Yuki there are verbal complexes which are formed in the same way as those in Sirionó.

In her grammar of Yuki Villafañe (2004: 85ff.) generally distinguishes between active and stative verb roots which each are subdivided into three classes, according to different sets of personal prefixes they take. "Ideófonos" in her analysis are subsumed under the group of active verb roots and characterized as an additional "special class" of predominantly "onomatopoeic elements" ("elementos de naturaleza onomatopeyica") which have personal suffixes instead of prefixes marking the subject.<sup>713</sup> According to Villafañe, these suffixes are almost identical with the personal prefixes of the group of

<sup>&</sup>lt;sup>712</sup> Cf. Villafañe (2004: 2). On the Ethnologue website, according to information given by Willem Adelaar in 2000, the total ethnic population is registered with 138 individuals of whom 120 are speakers of Yuki (www.ethnologue.com, last consulted on the 12<sup>th</sup> of June 2011).

<sup>&</sup>lt;sup>713</sup> Cf. Villafañe (2004: 101).

active verbs. Without going into details with respect to the not very convincing overall classification, several observations can be made: As in Sirionó, the forms analysed as inflectional suffixes are identical to the conjugation paradigm of the highly irregular verb with the meaning 'say'.<sup>714</sup> Equally, the invariant part of the construction, whether verb root or ideophone, is phonetically separated from the inflecting part. For Sirionó this was described as a "break" (Schermair 1949: 17). Villafañe's (2004: 102) solution is the assumption of a glottal stop inserted between root and suffix, which otherwise does not belong to the phoneme inventory of the language and is her primary criterion for classifying the construction as an "ideophone".

Villafañe distinguishes two types of "ideophones" or – more correctly – 'ideophonic verb roots' according to their morphological form. Some have a simple form, others consist of reduplicated or quadruplicated morphemes. This is illustrated by (48) and (49) respectively:

(48) (Villafañe 2004: 102, (4.175)) *jo-'i* 'él canta' 'he sings'

(49) (Villafañe 2004: 102, (4.177)) *titititi'i* 'él tiembla' 'he trembles'

This general classification suggests that the reduplicated forms are lexicalized and do not have a simple counterpart, and that simple "ideophones", in turn, cannot be reduplicated.

A typical syllable structure of the ideophonic element in the construction seems to be CV. In addition to a full reduplication of this structure, as shown in (49), there are others with /r/ as the intermediate consonant, as was also observed for ideophones in Awetí.<sup>715</sup> Vowel harmony is also a frequent phenomenon in these elements. Similar to Sirionó, many of these verbs listed in the glossary start with a voiceless bilabial plosive /p/.

<sup>&</sup>lt;sup>714</sup> Cf. Villafañe (2004: 94).

<sup>&</sup>lt;sup>715</sup> Cf. sections 4.2.3, example (22) and 4.3.2.2, example (11)(a).

Ideophonic verbs can be either intransitive or transitive. Their morphology, as presented by Villafañe (2004), partially suggests a possible analysis as a light verb construction instead of a suffixing conjugation class.

These verbs form the imperative with specific suffixes,<sup>716</sup> and optative forms have an optative suffix *-t* following the glottal stop and preceding the respective person suffixes. Examples are given in (50):

| (50) a. (Villafañe 2004: 119, (4.285)) |                  |                |
|----------------------------------------|------------------|----------------|
| piri'-t-a                              | 'Dejáme cazar!'  | 'Let me hunt!' |
| hunt-OPT-1s/1say                       |                  |                |
| b. (Villafañe 2004, 119 (4.287))       |                  |                |
| turu'-t-ore                            | 'Dejános coser!' | 'Let's cook!'  |
| cook-OPT-1pl:excl                      |                  |                |

The fact that all other verbs form the optative by prefixation of *t*- to the inflectional prefixes suggests an analysis of these forms as complex verbs consisting of an invariant ideophone and a finite light verb based on the paradigm of 'say', e.g. *piri' t-a* ('let me say piri''). On the other hand is the 1<sup>st</sup> person plural suffix in the optative reduced to its first two syllables (*-ore*<sup>717</sup> instead of *-oreroa* in (50)(b)) which shows that here the form is fully grammaticalized, even though in its other uses it may still be formally transparent with regard to its origin.

In this verb class intensification or 'emphasis' as it is analysed by Villafañe (2004: 172f.) is also expressed differently from other verbs by a suffix *-na* inserted between the root and the person marker, as in (51):

(51) (Villafañe 2004: 112) *pupu'-na-i* 'pega mucho' 'he takes a lot'

However, in one of the texts, given in (52), it occupies a different position in being suffixed to the inflected part of the construction:

<sup>&</sup>lt;sup>716</sup> See Villafañe (2004: 117/118).

<sup>&</sup>lt;sup>717</sup> Thus the suffix *-ore* is identical to the prefix *ore-* on ordinary active verb roots.

(52) (Villafañe 2004: 240, (12)) *A daie e- ru popo'-i -na -ra*EVID 3s- father shoot -3/3say-INTENS-EVID
'Dicen que, su padre disparó mucho.'
'They say that his father shot a lot.'

This variation may indicate an ongoing grammaticalization process from a person suffix to a verb class marker as was also suggested for Sirionó in certain environments.

Villafañe does not provide any information on whether an 'ideophonic verb' can be negated. It further occurs with the suffixes *-sui* and *-ya*, specific to this verb class, which both mark subordination to another verb. As shown in (53) and (54), the inflection is marked on the main verb and the respective subordinating suffix directly attached to the ideophonic verb root:

(53) (Villafañe 2004: 154, (5.53))

*a-jui* **turu'-turu'-sui** 1s-finish cook -RED -SUB 'Termino de coser.' 'I finish cooking.'

(54) (Villafañe 2004, 157, (5.66)) *o-so-ta piri'-ya*3- go -FUT hunt-SUB
'Iré a cazar.'
'He will go hunting.'

Several derivational processes are observable for this type of construction. In Yuki, verbs of this type are causativized by addition of the suffix *-bokia*<sup>718</sup> to the inflected part, as in (55):

<sup>&</sup>lt;sup>718</sup> The etymological source of this suffix is not clear. Hemmauer (p.c.) assumes that it may be a blend of the PTG causative prefix \**mo*- for intransitives with the PTG causative suffix

(55) (Villafañe 2004: 125, (4.313)) *Piri'-ere-bokia de -ru -je.*hunt -2s -CAUS 2s- husband-OBL
'Haces cazar a tu marido.'
'You make your husband hunt.'

This suffix, only attached to 'ideophonic verbs', seems to form causatives from transitive roots. Another possibility, not mentioned by Villafañe but observable in her text corpus and reproduced in (56) is the simple causative m(e)- or b(e)- which is prefixed to the uninflecting part of the form, deriving transitive from intransitive verbs:

(56) (Villafañe 2004: 254) *Tata ño- ke- bian be- jojo'-i*firewood FOC-PAS-boy caus-burn-3s
'The boy made the firewood burn.'

This causative prefix is cognate with *mu*- in Sirionó or *mo*- in Awetí, where it is productive in all intransitive verb roots to derive transitive stems. Examples for the causativization of a similar type of verb in Sirionó were given in (28) and (29).

In Yuki, as in Sirionó, nominalization is a productive morphological process for these verbs. Two derivational processes involving ideophonic verbs are described in the grammar. By suffixation of *-ya* to the 'ideophonic verb' root and prefixation of a possessive marker the result of the action referred to by the ideophone is expressed, as in (57):

(57) (Villafañe 2004: 126, (4.317)) *che-piri'-ya*lsg-hunt-NOMpat
'lo que yo cazé: mi presa'
'the thing that I hunted: my prey'.

<sup>\*-</sup>ukár for transitives, for which, however, there is no obvious motivation.

The second nominalization, shown in (58), denotes the instrument, by which the action is performed. In this case a generic object prefix *aba*- and a nominalizing suffix *-kia* are attached to the ideophone:

(58) (Villafañe 2004: 129 (4.333)) *aba -nuru' -kia*OBG-sit.down-NOMinstr
'la cosa con la que alguien se sienta: una silla'
'the thing on which one sits down: a stool'

The glossary to Villafañe's grammar of Yuki registers 21 entries of ideophonic verbs. One of these appears in the data corpus with two different meanings (*popo'i* 'swim' and 'shoot', as in (52)). Since no audio data are available for this language, one can only speculate that a differentiation between one and the other can be made by taking into account prosodic features. Another ideophonic verb is registered with two variants:

(59) (Villafañe 2004: 254/255)*kiakia'i/ kiukiu'i* 'to clear with a scythe/knife'

On the basis of the restricted data corpus it is not possible to conclude whether 'ideophonic verbs' in Yuki – similar to Sirionó – have a stronger tendency for this kind of variation than other verb classes. Villafañe further states that there are several cases of homophonous verb roots, so that the verb form, depending on whether it is prefixed or suffixed, can have a completely different meaning, as shown in (60)(a) and (b):<sup>719</sup>

(60) a. (Villafañe 2004: 102, (4.180))*a-nuru* 'I discuss' vs. *nuru'-a* 'I sit down'

<sup>&</sup>lt;sup>719</sup> This is different from Franceschini's observations for Mawé, where aspectual differentiations may be expressed in a few intransitive verbs by using either the regular conjugation or the ideophonic construction and where the usage of transitive verb roots in the ideophonic construction does not alter or only little alters the lexical meaning.

#### b. (Villafañe 2004: 284)

ai-kiakia 'I take' vs. kiakia-a 'I cut with a machete'

Villafañe (2004: 199) points out that 'ideophonic verbs' in Sirionó and in Yuki are "new words" because of the glottal stop between root and suffix which does not occur anywhere else in the language. She also observes that glottal stops in these two languages have disappeared from words where they are still present in other TG languages. Villafañe does not discuss independent ideophones, and neither do they occur in the text collection of her grammar.

6.1.4.2.2 Verb reduplication

According to Villafañe (2004: 111/ 112), there are two types of partial reduplication of verbs. On the one hand, reduplication of the last syllable of the verb root indicates that an action is performed repeatedly. An example with the transitive verb root *sikio* ('break') is given in (61)(a):

(61) a. (Villafañe 2004: 111, (4.240)) *sikio* -*kio* 'he breaks it repeatedly'
3sg.break-RED

An action can further be emphasized or intensified by devoicing the initial consonant in the reduplicated last syllable of the verb base. This is shown in (61)(b) with the transitive verb  $yib\tilde{o}$  ('hunt'):

(61) b.(Villafañe 2004:112, (4.242))  $yib\tilde{o} -b\tilde{o} > yib\tilde{o} -p\tilde{o}$  'he hunts with a lot of enthusiasm' 3sg.hunt-RED 3sg.hunt-RED

Villafañe does not give any example with intransitive roots. Full reduplication of a verb stem does not seem to be a productive process in Yuki. Only 'ideophonic roots' can have a full reduplicative pattern, but these seem to have lexicalized, as mentioned above.

### 6.1.4.2.3 Summary

"Ideófonos" ('ideophonic verbs') in Yuki have been classified as such for their soundsymbolic nature and due to the glottal stop, a phoneme not normally belonging to the phoneme inventory of the language, at the end of the verb roots. They have a suffixing conjugation pattern which seems to be the result of a grammaticalization of a construction consisting of an ideophone and a light verb with the original meaning 'say'. The paradigm of this light verb is morphologically identical with the inflectional suffixes. 'Ideophonic verbs' combine with a variety of affixes specific to this class and - similar to Sirionó - can undergo derivational processes of causativization and nominalization.

Verbs of this class seem to occur in variants differing in their vowel quality, which would be an argument for their ideophonic orgin.<sup>720</sup> Yuki has two different processes of monosyllabic verb reduplication. Full reduplication, if existent at all, only seems to be possible in ideophonic verb roots.

### 6.1.4.3 Conclusion: Sirionó and Yuki

Apart from the assumption already mentioned that the glottal stop in the two languages marks the end of a prosodic unit, an alternative analysis is possible in the light of this comparative study. Since in other TG languages as well as in Awetí and Sateré-Mawé with a closely-related lexicon the glottal stop belongs to the verb root of 'e 'say', one may conclude that it has disappeared from the phonological systems of both Yuki and Sirionó at some stage of development, the only remnant being ideophonic verb constructions. At the same time variation in the data of both languages suggests that there is an ongoing process of grammaticalization from a light verb construction to a conjugation class and a related but possibly independent process from a 3<sup>rd</sup> person suffix -*t* to a verb class marker. The Sirionó video data gave a clear criterion to establish a boundary between an ideophone and a formally identical verb root in this grammaticalization process: as long as the element is pronounced in a marked way and possibly also accompanied by a gesture, i.e. as long as it is performed, it can be classified as an ideophone.<sup>721</sup>

<sup>&</sup>lt;sup>720</sup> Cf. variation in Awetí ideophones in section 4.2.3.
<sup>721</sup> Cf. section 4.6.3 for similar observations in Awetí.

### 6.2 Sateré-Mawé branch: Sateré-Mawé

In a 2008 census 9,156 individuals were counted as members of the ethnic community of the Sateré-Mawé.<sup>722</sup> These live in two indigenous territories, one in the Brazilian state of Amazonas, the other at the boundary of the states of Amazonas and Pará. According to recent findings on phonological processes and by lexical comparison, Sateré-Mawé is closely related to Awetí and to Tupí-Guaranian languages.<sup>723</sup> Throughout their history of study, both Awetí and Sataré-Mawé were classified as Tupí-Guaranian and later (Rodriguez 1984/85) excluded from this branch due to atypical phonological features. Like Awetí, Sateré-Mawé is now considered a single surviving language of a branch of its own.<sup>724</sup>

#### 6.2.1 The light verb construction in 'telic middle verbs'

For the following analysis, a grammar and several articles by Franceschini were consulted. In neither of these studies independent ideophones were discussed or could be encountered in the examples presented by the author. However, as was pointed out by Moore (2002: 145), there is a class of verbs in Sateré-Mawé, classified as "verbes moyens téliques" ('telic middle verbs') in Franceschini (1999), which resembles so-called "uninflecting verbs" in the Tupian languages Gavião and Mekens, to be presented in sections 6.3 and 6.4. These "uninflecting verbs", in turn, have many features in common with ideophones in Gavião and in other languages.<sup>725</sup>

According to Franceschini's morphosemantic verb scheme, 'telic middle verbs' in Sateré-Mawé belong to a group of 'process verbs' ("verbes de procès") which she generally opposes to 'stative verbs' ("verbes d'état").<sup>726</sup> Process verbs, according to this scheme, are further subdivided into 'active' and 'middle verbs'. Following Benveniste (1966: 172), Franceschini distinguishes them according to their differential positioning of the subject referent in relation to the event. In the active voice the event is accomplished by an agentive subject whose referent is situated at the outside of the event by not being affected

<sup>&</sup>lt;sup>722</sup> Cf. www.socioambiental.org (last consulted on the 17<sup>th</sup> of June 2011).

<sup>&</sup>lt;sup>723</sup> Cf. section 1.4.3.

<sup>&</sup>lt;sup>724</sup> See Rodrigues (1999: 109).

<sup>&</sup>lt;sup>725</sup> Cf. Moore (2002).

<sup>&</sup>lt;sup>726</sup> Note that in the languages discussed so far a first distinction is drawn between 'active' and 'stative' verbs which is primarily based on morphological criteria.

by it. In the middle voice, by contrast, the event is realized by a subject referent, who – constituting the centre of the event – is directly or indirectly affected.

Both, the active and the middle verb class are further divided into a 'telic' and an 'atelic' subgroup according to the lexical aspect of the verb. All 'active verbs' refer to activities which are oriented towards a second participant, who is either thoroughly affected by its accomplishment in the case of a 'telic' activity, or who may only be partially affected by the realization of an 'atelic' activity which does not need to be conclusive. 'Telic active verbs' are marked by a prefix *ti*-, 'atelic active verbs' by *he*-. Both prefixes are inserted between person prefix and verb root. The examples (62) and (63)(a) and (b) illustrate the semantic distinction. In (62) the activity of killing is conceived of as a whole, with a beginning and an end and an object participant, a snake, fully affected:

(62) (Franceschini 2010: 173, (11)) *Wa- ti- 'auka moi*.
1pl.incl- ACT.TEL-kill.vt snake
'Nós matamos a cobra.'
'We killed the snake.'

The atelic marking of the verb in (63)(a) indicates an activity ('advising') which is not conclusive in itself, while in (63)(b) a second participant, a flower, is not totally affected:

(63) a. (Franceschini 1999: 238, (47) a.)

Wa- he- wain kurum

1pl.incl.AG-ACT.AT-advise boy

'Nous conseillons le garçon.'

'We advise the boy.'

b. (Franceschini 2010 : 174, (14))

*Wa-* **h-** *i:ŋ mohy:t*.

1pl.incl- ACT.AT smell.scent flower

'Nós sentimos o cheiro de/da flor.'

'We smelled the scent of the flower.'

'Telic middle verbs', like 'telic active verbs', refer to activities which are inherently conclusive. In this class of verbs the telicity implies that the activity referred to is punctual and a resultant situation need not be ongoing, while 'telic active verbs' refer to activities which lead to more permanent situations.<sup>727</sup> 'Atelic middle verbs', on the other hand, denote activities which are not conclusive. In Sateré-Mawé, verbs referring to recurrent daily activities like sleeping or eating, which directly affect the participant marked on the verb, belong into this category.

'Middle verbs' can be formally distinguished by a middle marker *re*- which immediately follows the personal prefix marking the subject referring to the only participant.<sup>728</sup>

Apart from semantic considerations regarding the lexical aspect, the subdivision within the category of 'middle verbs' is further based on morphosyntactic criteria: while 'atelic middle verbs' have the same structure as 'active verbs', 'telic middle verbs' are formed with an auxiliary 'e. The auxiliary receives a personal prefix and a middle marker and is positioned immediately behind an uninflecting base form of the main verb of this complex predicate. This is illustrated in (64):

(64) (Franceschini 2010: 182, (36)) *Peso: e- re- 'e.*jump 2sg-MID-AUX
'Você saltou/ pulou.
'You jumped (up).'

An example for an 'atelic middle verb' is given in (65):

(65) (Franceschini 2010: 183, (39))

E- re- ket

2sg-MID-sleep

'Você dorme.'

<sup>&</sup>lt;sup>727</sup> Cf. Franceschini (2010:182/183).

<sup>&</sup>lt;sup>728</sup> There are further two 'allomorphs' *to*- and  $\mathcal{O}$ - (cf. Franceschini 2010: 185, footnote 6).

'You sleep.'

The 'telic middle verb' construction exemplified in (64) must be treated as one syntactic unit for various reasons: On the one hand no other word can be inserted between the auxiliary and the uninflecting part. A second argument is that the whole construction can be nominalized by suffixation of *-hat*, which is shown in (66) with the verb root *min* ('dive'):<sup>729</sup>

(66) (Franceschini 1999: 270, (118)) *min -Ø -Ø - 'e -hat*dive -3AG-MID-AUX-NOM
'celui qui plonge/ plongeur'
'the one who dives/ diver'

The construction can further be negated by the negative prefix *yt*-, attached to the verb root, and - '*i* which is suffixed to the auxiliary, as in (67):

(67) (Franceschini 1999: 154 (121))
yt- kak a- re- (')e - 'i
NEG-shout 1AG-MID-AUX-NEG
'Je n'ai pas crié.'
'I did not shout.'

As in the complex verb phrases involving ideophones in other languages, the auxiliary in the 'telic middle verb' construction is formally identical with a verb 'e ('say'/ 'do') which also functions as a marker of reported discourse in Sateré-Mawé.<sup>730</sup>

In addition, 'telic middle verbs' – similar to verbs of the 'third conjugation class' in Sirionó<sup>731</sup> – can be combined with a causative prefix *mo*- attached to the uninflecting part.

<sup>&</sup>lt;sup>729</sup> See section 4.3.6 for corresponding forms in Awetí. A second type of nominalization with *-hap* (Awetí *-ap*), which derives nouns referring to instruments, could not be observed for Awetí ideophones.

<sup>&</sup>lt;sup>730</sup> Cf. Franceschini (1999: 151).

However, while the structural change for Sirionó in this case has been interpreted as a reanalysis of the suffix -i as a conjugation class marker, in Sateré-Mawé the change is semantically motivated due to the fact that a causative adds an agentive participant, who is unaffected by the activity. Thus the event must be referred to by a 'telic active verb' construction. This is exemplified by (68) where, according to Franceschini (1999: 149), the original 'telic middle verb' construction with  $\eta yt$  ('be startled') was first turned into a 'telic active verb' monyt ('to startle someone') and then, by addition of a reflexive marker -(w)e, into an 'atelic middle verb':

(68) (Franceschini 2010: 149, (111)) *a- re- (w)e- mo- nyt*1AG-MID-REFL-CAUS-be.startled
'Je me suis effrayé'
'I caused myself to be startled.'

There are few verb roots in Sateré-Mawé, which can be used in both middle verb constructions, thus expressing different aspectual values. While the construction for 'telic middle verbs' refers to punctual events or processes which are accomplished and inherently concluded, the 'atelic' construction – even if referring to a single event – always implies habituality. A contrastive example is given in (69)(a) and (b):

(69) a. (Franceschini 1999: 156, (124)) *Watka a- re- 'e*.
shout 1sg-MID-AUX
'Je crie/ j'ai crié.'
'I shout out/ I've shouted out.'
b. (Franceschini 1999: 156, (126)) *a- re- watka*1sg-MID-shout
'Je crie.'

<sup>&</sup>lt;sup>731</sup> See section 6.1.4.1 examples (28), (29).

'I (habitually) shout out (e.g. at day-break).'

At this point there is an inconsistency in Franceschini's argumentation. Although she states that "il y a des unités qui peuvent être employées avec les deux constructions moyennes" (Franceschini 1999 : 156)<sup>732</sup>, of which *watka* ('shout') in (69) is an example, in a later section she points out that the 'telic middle verb' construction can be used by verbs of all other classes: "La construction à verbe auxiliaire -*'e* qui caractérise les lexèmes moyens téliques, peut aussi être employée avec les lexèmes actifs, les moyens atéliques et les statifs" (Franceschini 1999 : 238)<sup>733</sup>. For this reason, she classifies the 'telic middle verb' construction with roots of other verb classes as a kind of derivation: "On peut considerer l'emploi de ces lexèmes verbaux" (Franceschini 1999 : 238)<sup>734</sup>. The use of an 'atelic active verb' *waiŋ* ('to advice') in a 'telic middle verb' construction is exemplified by (70)(b). In this usage, due to the reduction of participants to one, the second participant *kurum* ('boy') is presented as an oblique argument in a postpositional phrase:

(70) a. (Franceschini 1999: 238, (47) a.)

*Wa- he- waiŋ kurum.*1pl.incl.AG-ACT.AT-advise boy
'Nous conseillons le garçon.'
'We advise the boy.'
b. (Franceschini 1999: 239, (47) b.) *Waiŋ wa- tu- 'e kurum me.*advise 1pl.inclAG-MID-AUX boy LOC
'Nous avons conseillé le garçon.'
'We have advised the boy.'

<sup>&</sup>lt;sup>732</sup> "There are units which can be used with both middle constructions" [my translation].

<sup>&</sup>lt;sup>733</sup> "The auxiliary verb construction with - 'e which characterizes the telic middle lexemes can also be used with active, atelic middle and stative lexemes" [my translation].

<sup>&</sup>lt;sup>734</sup> "The use of these lexemes with the telic middle construction can be considered a means of verb derivation" [my translation].

Franceschini (1999: 238) states that by a change from an active to a middle construction the event is highlighted: "[...] la construction moyenne télique serait employée pour mettre en valeur l'évenement". One indication for this emphasis on the event may be the change from a prominent direct object to a peripheral oblique argument. The usage of 'telic active' verb roots in 'telic middle verb' constructions may lead to a change in the semantics of the verb, so that the verb roots presented by Franceschini as indicating a "derivational process" may actually be polysemous.<sup>735</sup> Franceschini further observes that 'atelic middle' verb roots primarily become part of a 'telic middle verb' construction in narrative discourse. All verb classes, including stative verbs, are used in a 'telic middle verb' construction after the conjunction *mi'ite* ('and then', 'after that').

## 6.2.2 Verb reduplication

Franceschini points out that 'telic middle verbs' differ from the other verb classes in their reduplicative pattern. They always carry an iterative suffix -i which – in addition – forms part of the reduplicant, as shown in (71), while in the other classes, exemplified by a 'telic active verb' in (72) and a 'atelic active verb' in (73), either only the verb root or the root and the preceding voice-marker are reduplicated:

(71) (Franceschini 1999: 213, (263))<sup>736</sup> *Ihainnia tek - i- -teki Ø - Ø- 'e.* man cut -ITER-RED 3- MID-AUX 'L'homme est en train de couper.' 'The man is (engaged in) cutting.'

(72) (Franceschini 1999: 212, (258))

Wa-ti-pik-pikamyap.1pl.incl-ACT.TEL-break-RED bench

'Nous avons cassé le banc (en plusieurs morceaux).'

<sup>&</sup>lt;sup>735</sup> Cf. Franceschini (1999: 240/241, (48) - (50)).

<sup>&</sup>lt;sup>736</sup> The glossing was altered in that a reduplicant was inserted according to the analysis presented by Franceschini (1999: 213). Whether the reduplicant is prefixing or suffixing, could not be clearly determined.

'We broke the bench (into several pieces).'

(73) (Franceschini 1999: 212, (260))

*Mi'i hap wa-* **h(e)- enoi-henoi** ha(p) muat me:sup. this PRO.rel lpl:incl-ACT.AT-tell -RED NMLZ FUT DEM 'C'est cela que nous allons raconter – raconter à partir de maintenant.' 'It's this that we will tell, tell from now on.'

According to Franceschini (1999: 211), verb reduplication generally indicates iteration of the event expressed by the verb. In 'atelic active verbs' the reduplication has the function of expressing continuative aspect.<sup>737</sup> The same continuative or – if the process occurs at the moment of utterance – progressive aspect she attributes to the reduplication in 'telic middle verb' constructions, as shown in (71). Franceschini does not give any example for reduplication in 'stative' or in 'atelic middle verbs'.

## 6.2.3 Conclusion

Notwithstanding the different analyses, there is a clear structural similarity between 'telic middle verb phrases' in Sateré-Mawé and 'ideophonic verb phrases' in other Tupian languages in that both are formed with an invariant component which precedes an auxiliary or 'light' verb based on 'e ('say'). There is further a semantic indicator for a relation between the Sateré-Mawé verb roots used in these constructions and ideophones, in that all but two of the typical 'telic middle verbs' listed by Franceschini have a corresponding – but not cognate – ideophone in Awetí. These are *kuitu* ('spit'), *peso:* ('jump'), *put'ok* ('arrive'), *oho'oho* ('cough'), *nyt* ('be startled'), *kak* ('shout'), *min* ('dive'), *pa:* ('turn sad'), *mak* ('shoot arrow'), *poŋ* ('explode'), *tek* ('cut') and *awen* ('sweep') (Franceschini 1999: 153, 155, 213). The exceptions are *nyt* ('be startled') and *pa:* ('turn sad'), belonging to the semantic domain of emotion which is not covered by Awetí ideophones. The possibility to use verb roots of all other classes in the 'telic middle verb' construction further suggests that this 'class', although having members with specific semantic features which cannot be

<sup>&</sup>lt;sup>737</sup> Franceschini differentiates between 'continuative aspect' of events, starting at any time and extending in time from then onward, and 'progressive aspect' referring to events which are ongoing at the moment of utterance.

employed in structures without an auxiliary '*e*, shows the tendency to develop into a specific discourse form. This form seems to be similar to the 'focus' form described for Kayabi, which has the pragmatic function of highlighting the event.<sup>738</sup> Another indicator is the fact that some of these forms are especially frequent in narrative discourse. Reduplication seems to be a productive process in 'active verbs' and in 'telic middle verbs'.

## 6.3 Mondé branch: Gavião

Gavião, a tone language and representative of the Mondé branch, is spoken by about 470 individuals in the Brazilian state of Rondônia.<sup>739</sup>

### 6.3.1 Ideophones and 'uninflecting verbs'

Moore (2002) characterizes both ideophones and the related phenomenon of 'uninflecting verbs' ("verbos sem flexão") as being morphologically simple and semantically corresponding to active verbs. He draws a distinction between one and the other according to their respective position in the utterance. Ideophones only occur before a main clause, as illustrated in (74):

(74) (Moore 2002: 142, (7))
Soólók eé teét alóp éèt aa- 'aá iì kay kí -nap.
IDEO.enter there exactly 3PRO AUX 3coref-penis enter (3-)involve EVID-Indef 'Aí ele colocou seu pênis nele.'
'There he put his penis into it.'

Moore states that ideophones do not occupy the first clause position. Moreover, they do not participate in any syntactic structure. Thus their syntactic status corresponds to that of independent ideophones in Awetí, described in section 4.4.

'Uninflecting verbs', on the other hand, can occupy various positions in a clause. An example is given in (75):

<sup>&</sup>lt;sup>738</sup> Cf. section 6.1.2.

<sup>&</sup>lt;sup>739</sup> The demographic information is from www.ethnologue.com (last consulted on the 24<sup>th</sup> of June 2011).

#### (75) (Moore 2002: 140, (2))

[**Peya** teé] pa- á [mé -e ná] [aza aka][má vaN ká] kí-nap. fan CONT 1pl.incl-AUX other-PL VBLZ agouti kill other hole in EVID-Indef 'Uma outra maneira de matar paca no buraco é abanar.' 'Another way of killing an agouti in a hole is by fanning.'<sup>740</sup>

According to (Moore 2002: 140), each of the constituents marked by square brackets can be moved within the clause, which changes their topicality but not the overall meaning of the utterance.

Moore (2002: 141), within the framework he applies, also registers words which in other approaches correspond to the class of adverbs (e.g. *bicaŋ-i* 'at night', *darà* 'easily') as 'uninflecting verbs', because their syntactic behaviour, according to his analysis, is identical to that of verb phrases. For the purpose of comparability with other languages the term 'uninflecting verb' in the remainder of this section will be used in a more restricted sense in only denoting elements which refer to events.

'Uninflecting verbs' in this sense further behave like other verbs in that they may be negated, intensified or nominalized (Moore 2002: 141). An example with the negated 'uninflecting verb' *gakoráá* ('hunt') and a negated transitive verb *aka* ('kill') is given in (76):

(76) (Moore 2002: 141, (4))

"[Gakoráá] óðNp máà [a- vit aka] óðNv-á" kí -po -á.
hunt NEG (3sg-)AUX.PAST 3coref-food kill NEG -PTES EVID-Remot-PTES
"Ele não caçou, não matou sua comida.""

"He didn't hunt, didn't kill his food.""

Moore further observes that 'uninflecting verbs' may combine with the causative particle *matééN* like other verbs, as illustrated in (77), where *banyan* ('gather') is an 'uninflecting verb' and *ígí* ('take out') a transitive verb:

<sup>&</sup>lt;sup>740</sup> This example probably refers to the custom of Amazonian peoples to light a fire in front of the animal's den and fan the smoke into it.

(77) (Moore 2002: 144, (18))

*"Méne tóòt téét bó alóp máà a- maakáàp* that.one X exactly FOC 3PRO AUX.PAST 3coref-peanut *ígí matééN banyan matééN alé-ey kay -á" kí -ip.* take.out CAUS gather CAUS 3 -PL involve-PTES EVID-Remb *"*Foi a verdade; ele os mandou se reunirem e coletar o seu amendoim.*" "*It was true; he made them gather and collect his peanuts.*"* 

What distinguishes 'uninflecting verbs' from other verbs is that they do not combine with pronominal clitics and do not admit noun phrases within the verb phrase, contrasting e.g. with the transitive verb *aka* ('kill') in (76). Moore further points out that 'uninflecting verbs' cannot be analysed as constituting subordinate clauses because these latter are structured like main clauses in Gavião, with subject and auxiliary, whereas an 'uninflecting verb' phrase is much simpler. Since they change position and undergo the processes of negation, intensification and nominalization individually, they do also not behave like serial verbs.

Semantically, 'uninflecting verbs' are like other verbs in having one or two conceptual arguments. Accordingly, Moore divides them into two semantic subgroups: Those of the first group indicate an activity with an implicit object referent which may be specified by different means, e.g. as the object of a transitive verb in the same clause. This is shown by *avit* ('his food') in (76) above. Those of the second group refer to activities without implicit object referents, whereby – like in the first group – the possibility exists to include a noun phrase marked as the object of the verb *kay* ('involve'). This is illustrated by (78):

(78) (Moore 2002: 142, (10)) *kíligá nekó mága óN-gay*bite cat AUX 1sg-involve
'O gato me morde.'
'The cat bites me.'

It is possible that an 'uninflecting verb' in Gavião is formally similar to or identical with an intransitive or a transitive verb root. Two examples are given in (79):

(79) (Moore 2002: 143, (12), (13))

| Uninflecting verb |                   | Inflecting verb root |                           |  |  |
|-------------------|-------------------|----------------------|---------------------------|--|--|
| gerè              | 'spend the night' | kerè                 | 'sleep' (intransitive)    |  |  |
| basanà            | 'steal'           | pásanà               | 'steal sth.' (transitive) |  |  |

Moore argues that the inflecting verbs represent the base forms from which 'uninflecting verbs' have derived due to the observation that in nouns, too and analogous to (79), there are roots with an initial voiced plosive which turns into a voiceless plosive when inflected (e.g. *be* 'path' vs. *cipe* 'his path'). Without any further evidence, however, the same argument may also support the opposite hypothesis, that the 'uninflecting verb' is the source of the verb root.

Regarding the pragmatic function of ideophones in Gavião Moore (2002: 149) adds that they are mostly used in narrative discourse to refer to events which are in the foreground, as is a typical cross-linguistic feature of ideophones. For 'uninflecting verbs' he states that a similar discourse function was suggested by Gildea (p.c.), who pointed out that they seem to focus on the event rather than on the relation between participants.

## 6.3.2 Conclusion

In sum, it can be stated that in addition to independent ideophones Gavião has a class of verbs which do not carry inflectional marking although – unlike ideophones – they do participate in the clause structure. There are intransitive and transitive verb roots in the language which correspond in meaning to these verbs, and in few cases a direct relationship between verb roots and 'uninflecting verbs' can be perceived due to their formal similarity. Moore does not mention whether there are formal similarities between 'uninflecting verbs' and ideophones, so that no conclusion can be drawn as to a possible diachronic relation between the one and the other. But with regard to information structure there seems to be a further correspondence in that 'uninflecting verbs' and ideophones are both event- rather than participant-oriented. No information could be obtained regarding the existence of verb reduplication in this language.

## 6.4 Tuparí branch: Mekens

Mekens or Sakurabiat, as it is called by the ethnic community, is spoken by a lesser part of a small group of about 70 individuals in the indigenous reservation Area Indígena Rio Mequens in the Brazilian state of Rondônia. Since the language is not passed on to the younger generation it is almost extinct.<sup>741</sup> According to historical documents, a group referred to as "Mekens", which seems to have been a common name to denominate several related groups, had already been contacted in the 17<sup>th</sup> century and temporarily lived in the proximities of a Jesuit mission. Later the area was abandoned and only invaded again by outsiders in the second half of the 19<sup>th</sup> century in the course of the Brazilian rubber boom. Galucio (2001: 10) attributes the survival of the Mekens to the present day to the fact that they lived in places of difficult access, but even like this they experienced heavy losses in terms of population size and cultural traditions.

## 6.4.1 The class of 'uninflectible verbs'

According to Galucio (2001: 54), there are words in Mekens which resemble ideophones in several respects. They are like ideophones in that they primarily occur in narrative discourse where they have the function of highlighting the activity they refer to, and they are partially "onomatopoeic".<sup>742</sup> Due to their distributional properties Galucio analyses them as a specific class of 'uninflectible' or 'particle verbs'. <sup>743</sup> Like other verbs these 'uninflectible verbs' can occupy various positions inside a clause, while 'ideophones', in the way described by Moore (2002), on which Galucio's definition of the term is based, can only occur outside a clause with a verbal predicate.<sup>744</sup> One of the reasons for the labelling of these verbs is that – although they may have one or two conceptional arguments – they do not inflect for person, i.e. they do not accept pronominal clitics which mark the subject on intransitive and the object on transitive verb roots. Instead, if a subject

<sup>&</sup>lt;sup>741</sup> Cf. www.ethnologue.com (last consulted on the 24<sup>th</sup> of June 2011).

<sup>&</sup>lt;sup>742</sup> The phenomena Galucio refers to as "onomatopoeic" (e.g. (83) below), in the terminology used by Hinton et al. (1994) would have to be classified as instances of 'conventionalized' rather than the 'imitative' sound symbolism represented by onomatopoeia (cf. section 2.1).

<sup>&</sup>lt;sup>743</sup> Note that Galucio (2001: 51-53) subsumes three different phenomena under the term 'uninflectible verb', of which only the first type, referring to activities, and the third type of a closed set of 'stance verbs' are taken into account here.

<sup>&</sup>lt;sup>744</sup> Cf. example (74) above.

is overtly expressed, it is realized by a free pronoun or by a noun phrase. This is exemplified by (80) with the 'uninflectible verb' *pup* ('burst') and the pronoun *sete* ('he/ she/ it'), in contrast to the transitive verb root *ko* ('ingest') in (81), which receives object marking:

(80) (Galucio 2001: 39, (17)(b))

Poret sete piip te se- eit te kwaõt. now 3sgPRO burst FOC 3coref-belly FOC fox 'Then it burst, the fox's belly.'

(81) (Galucio 2001: 39, (17)(a)) *O- iko na e- ko pa õt.*1sg-food VBL 2sg-ingest FUT 1PRO
'You will be my food, I will eat you.'

'Uninflectible verbs' can have their thematic objects expressed in an oblique phrase marked with the clitic *pe* as in (82):

(82) (Galucio 2001: 121, (18)(a))

Sigi sigi sigi te pe=kimakãy

raise-RED FOC OBL=soil/ground 'He started to raise up the soil.'

In contrast to other verb classes, they do not combine with tense and aspect affixes. On the other hand, there are, apart from their variable syntactic position, several other features they share with transitive and intransitive verbs. With regard to their semantics Galucio points out that there are regular transitive and intransitive verbs in Mekens, which refer to the same activities as those encoded by 'uninflectible verbs'.

Members of this verb class can further be focalized like other verbs with the particle *te*, as shown in (80), and may occur with auxiliaries, future and question particles (Galucio 2001: 54).

Verb phrases formed from 'uninflectible verbs' may minimally consist of the verb, if their omitted arguments have been previously mentioned. Galucio further observes that they particularly often occur in multiple verb phrase constructions. An example with two 'uninflectible verbs' constituting a sequence of two clauses is given in (83):

(83) (Galucio 2001: 100, (94)(d))

#### Koboy soboy.

'(He) dove and splashed.'

'Uninflectible verbs' can undergo various derivational processes, by which they become regular verb roots. By addition of the transitivizing suffix *-ka* they can be turned into transitive verb roots, as shown in (84), compared to the same bare 'uninflectible verb' in (83). In (84) the derived transitive verb stem *soboyka* ('splash sth.') has received an obligatory object NP *tkt* ('water'), positioned immediately to its front, as well as a tense suffix *-t*:

(84) (Galucio 2001: 100, (94)(f)) *tkt* soboy-ka-t i- piso=bõ
water splash-TR -PAST 3sg-foot=with
'He/she/it splashed water with his/her/its feet.'

A different kind of transitivizer *-kwa* can also be suffixed to an 'uninflectible verb', thus adding a feature of "plurality of action", referred to by the derived transitive verb. This is illustrated by the pair in (85)(a) and (b):<sup>745</sup>

(85) (Galucio 2001: 101, (95)(c), (e))

a. kiriy

'He/ she/ it took it.'

<sup>&</sup>lt;sup>745</sup> Note that there is some inconsistency in Galucio's analysis with regard to this suffix, in that she states in another section that it indicates the plurality of an S or O participant which is marked on the intransitive or transitive stem (cf. Galucio 2001: 54/55).

b.*i- kırıy -kwa* 

OM-grab/take-TRV.PL 'Take it all.'

Plurality of an argument may in some cases be expressed by a formally different 'uninflectible verb':

(86) (Galucio 2001: 55, (39)(a), (a'))

a.  $\tilde{O}t$  k<sub>i</sub>y pe= k<sub>i</sub>pe set tekwaemo. 1sgPRO grab OBL=machete go also

'I grabbed the machete and went, too.'

b. Ki-ora i- pet -ka soga te **iririt**.

1pl.incl-leave OM-extract-TRV HORT FOC go.pl.subj 'Let's go cut it, (he said), and (we) went.'

This phenomenon also exists in inflecting verbs, where it is less frequent. In Mekens any kind of transitive verb, including those derived from 'uninflectible verbs', as e.g. *ŋwãyãka* ('spin sth.') in (87), may be intransitivized by addition of the prefix *e*-:

(87) (Galucio 2001: 103, ex. 98 b') *o-anıp e- ywãyã-ka õt.*1sg-head INTRV-spin -TRV 1sgPRO
'My head is spinning.'

In addition to 'uninflectible verbs' referring to activities which have been discussed so far, there is a subgroup of 'stance verbs' which – although this is not confirmed by examples – are claimed to have the same distributional properties. Apart from their semantics they seem to differ from the subgroup of activity verbs in that in the two examples given by Galucio they occur as modifiers of verbs referring to activities. The examples are reproduced in (88) and (89):

(88) (Galucio 2001: 53, (36)(a))
Arob=ēp e- i- motkwa soyē?
wh = really 2sg-OM-make seat
'What are you doing seated there?'

(89) (Galucio 2001: 53, (36)(b))
Arob=ēp e- i- ywa sogop?
wh=really 2sg-OM-gather bend
'What are you gathering bent there?'

This specific subgroup of 'uninflectible verbs' in Mekens in this respect resembles those ideophones in Awetí which are extra-clausal but related in meaning to the predicate of an adjacent clause. Semantically, however, Awetí ideophones are always dynamic, i.e. there is no ideophone referring to stance, but rather to a change of posture (e.g. *pok* 'sit down', 'get up').

### 6.4.2 Verb reduplication

Reduplication is, according to Galucio, a very productive morphological process for any verb in Mekens, whereby the whole verb stem is doubled or tripled. Galucio (2001: 104, (99)) gives three examples with 'uninflectible verbs', in which she illustrates that the respective meaning conveyed by the reduplication depends on the semantics of the lexical verb. In (82) above the reduplication indicates iterativity of the performed activity. The example, in Galucio's terminology, would be an example for tripled verb reduplication. She does not provide any example of triple reduplication with inflected verb roots. In Awetí and most other Tupian languages only ideophones can be repeated or reduplicated more than once, while in verb reduplication there is only one reduplicant.

#### 6.4.3 Conclusion

'Uninflectible verbs' in Mekens show many of the features observed for ideophones and ideophonic verb phrases in other Tupian languages: Excluding a small group of 'stance verbs', they refer to activities, are often sound-symbolic in their form and have the discourse function of highlighting the event they refer to, while their participant-orientation is minimal. They can further be converted into ordinary verbs by causativization. They differ from the verbs derived from ideophones in other languages in that they do not occur in a light verb construction, in which the light verb is marked for person, tense and aspect. In addition and different from specific verb roots in Aweti which end in an unstressed -e, they are diverse in their syllable structures, so that there is no indication for the assumption that at some time a fusion of a light verb with a root may have occurred, a process for which there is also evidence in Sirionó, Yuki or Kayabi. Galucio does not provide any information on whether 'uninflectible verbs' are prosodically marked or whether there is a separate phenomenon of ideophones which - in her conception of the term - are syntactically restricted to an extra-clausal position. These would be important questions for further investigation. According to the examples given by Galucio (2001) a process of verb reduplication or even tripli- and quadruplication only seems to occur in the class of 'uninflectible verbs'.

### 6.5 Arikém branch: Karitiana

Karitiana, the only surviving language of the Arikém branch, is spoken in Rondônia. In 2005 all 320 members of the ethnic group were speakers of the language. The Karitiana people were presumably first contacted at the end of the 18<sup>th</sup> century. During the 19<sup>th</sup> century they sporadically met outsiders who came to the area to work in the rubber industry. Since the 1950s, when they were first visited by missionaries, they have been living in permanent contact with representatives of the non-indigenous population of Brazil. Although Karitiana is a minority language with few speakers altogether, the language has been explicitly mentioned as showing that population size alone is not a good indicator of endangerment.<sup>746</sup> Karitiana is not considered to be highly endangered, because it is spoken by the whole ethnic community and passed on to the younger generation. In addition, from 1970 to 2005 the population size quintupled.<sup>747</sup>

 <sup>&</sup>lt;sup>746</sup> Cf. Yamamoto (1997).
 <sup>747</sup> Cf. www.socioambiental.com.br (last consulted on the 3<sup>rd</sup> of July 2011).

6.5.1 The discourse-pragmatic function of 'ideophonic utterances'

According to Landin (1988/2005: 30), ideophones or "orações ideofônicas" ('ideophonic utterances') as a special type of utterance are a frequent phenomenon in Karitiana. Ideophones correspond to the regular sound pattern<sup>748</sup> of the language and occur in all (narrative) text genres, i.e. in historical narratives, myths and other narrative accounts, which were collected by the author. Landin distinguishes three utterance types according to formal characteristics and the kind of discourse information they provide: 'Narrative utterances' ("orações narrativas") only occur in historical and mythological narratives and inform about events that really happened (Landin 1988/2005: 30). 'Ideophonic utterances' also provide information on the events but in a more vivid way, while 'utterances integrating reported discourse' ("orações que integram a fala relatada"), which are also not restricted with regard to text genre, give the background information. To the 'narrative utterance' type he attributes any form containing a prefix  $n\tilde{a}(ka)$ - in front of the verb root and the past-tense suffix -t. 'Ideophonic utterances' occur as independent clauses and as "complements" of 'narrative' verb forms. 'Utterances integrating reported discourse' are distinguished by specific person prefixes and suffixes marking subjects (and objects) on intransitive and transitive verbs.

In the following different occurrences of ideophones, as mentioned by Landin and/ or encountered in the Karitiana data, are presented.

Example (90) demonstrates that ideophones in an utterance may form clauses by themselves without subcategorizing for any other argument. The subject participant of the ideophonic clause must be identified by contextual information:

(90) (Storto 2002: 162, (1))

*Jyryj jyryj jyryj otam kinda pe'ep yn naka-m- 'a ty- ki - 'oot* IDEO.walk arrive.vi thing grate 1sg DECL-CAUS-make IMPF-DEIC-INCEP 'We walked, walked, arrived, and I started to make a grate.'

<sup>&</sup>lt;sup>748</sup> Cf. Landin (1988/2005:35).

This phenomenon in (90) differs from the one in (91) in that the event expressed by the ideophone *jyryj jyryj* ('walk') is not the same as the one referred to by the verb of an adjacent clause:

(91) (Storto 2002: 162, (2))

Naka-heredn-'oot taso, here here naka-'a -t taso, naka-hot taso. DECL-gather -INCEP man IDEO.gather DECL-make-NOFUT man DECL-go.PL man 'The men started to gather, they gathered and went away.'

In (91) a clause with an ideophone *here here* ('gather') follows a clause with a finite verb based on the root *heredn* ('gather'), referring to the same event but carrying a different grammatical aspect (inceptive vs. continuative expressed by reduplication). This occurrence of 'ideophonic utterances' directly after 'narrative utterances' with inflected verbs referring to the same activities is pointed out by Landin (1988/ 2005: 34/ 35) as particularly frequent. In these cases the ideophones are prosodically marked as separate units. According to Landin (1988/2005: 35), this is indicated by their rising intonation pattern after the falling tone at the end of the declarative utterance. Landin does not give an example for this observation. Example (91) also differs from (90) in that the ideophone, repeated only once, does not occur as an independent clause but is embedded in a complex structure. Landin presents the structurally similar sentence in (92) as an example where an 'ideophonic utterance' complements a 'narrative utterance':<sup>749</sup>

(92) (Landin 1988/2005: 34)

Terek Ø-naka-'a -t tug - taso.

IDEO.walk 3- DECL- make-NOFUT many-man

'Muitos homens foram andando.'

'Many men were walking.'

<sup>&</sup>lt;sup>749</sup> The prefix *naka* was classified as a declarative marker by Storto (2002: 159), who also assumes zero-marking for the third person (orthography and gloss were adapted to this more recent analysis). Note that a thoroughly different analysis of this prefix is presented by Everett (2006: 409 ff.).

He states that in this type of 'narrative utterance with a complement' ("oração narrativa com complemento")<sup>750</sup> the 'main verb' ("verbo principal") is always the "dummy verb" '*a* ('make').<sup>751</sup> Ifn analogy to other Tupian languages, the construction should rather be analysed as a complex verb phrase consisting of an ideophone in combination with a light verb '*a*. Similar to other languages, too, the same type of construction is used for the embedding of direct speech, where an optional component mãs ãg ('and like that'), analysed by Landin (1988/2005: 33) as a conjunction but rather resembling a manner deictic typically used in this kind of construction,<sup>752</sup> may be additionally inserted in front of the finite verb, as shown in (93):

(93)(Landin 1988/2005: 34)

"Uy so'or nim" mãsõg nãka- 'a -t.
1pl see.iv tomorrow and.like.that DECL- make-NOFUT
"Olhemos amanhã", eles disseram.'

"Let's see tomorrow", (and) like that they said.'

A clause, in which an independent ideophone functions as a predicate, may additionally contain an object encoding the patient participant or a locative adjunct, to which the semantic role of "goal" is assigned. According to Landin (1988/2005: 35), these constituents have the function of disambiguating the meaning of the clause, even though he declares that most ideophones in Karitiana – especially the onomatopoeic ones – are conventionalized. An example with an object argument is given in (94), one with a locative adjunct in (95):

(94) (Landin 1988/2005: 35, (11))

Mãsõgnãka-ma-tor'ep nonnon non or'epe-tunon non or'epe-tuand.like.thatDECL-make-NOFUT bows IDEO.finish IDEO IDEO bow -OBJ IDEO IDEO IDEO IDEO bow-OBJ'E assim, eles fizeram os arcos. Fizeram muitos arcos. Fizeram muitos arcos.'

<sup>&</sup>lt;sup>750</sup> Cf. Landin (1988/ 2005: 34).

<sup>&</sup>lt;sup>751</sup> Landin did not perceive the glottal stop in the onset of this monosyllabic verb, which was added in Storto's orthography.

<sup>&</sup>lt;sup>752</sup> Cf. section 5.3.3 and Güldemann (2008).

'And like that they made the bows. (They) finished many bows. (They) finished many bows.'

(95) (Landin 1988/2005: 35, (11)) *Ho ho ho tõg tõg ami -p*.
IDEO.walk IDEO.arrive house-LOC
'Eles andaram, andaram, e chegaram à casa.'
'They walked and walked and arrived at home.'

The ideophones listed in Landin's (2005) dictionary belong to the same semantic domains as those in Awetí. Many of them refer to a specific manner of locomotion, as in (96)(a), to sounds uttered by humans and animals, as in (96)(b), or sounds caused by natural phenomena like fire or rain, as in (96)(c):

(96) (Landin 2005)

| a. <i>saryp</i>        | 'walk'                    |
|------------------------|---------------------------|
| tettet                 | 'run'                     |
| b. <i>haha, harara</i> | 'laugh'                   |
| apĩmĩmĩ                | 'sound of bird'           |
| c. hararara            | 'sound of fire'           |
| pyk                    | 'sound of drizzling rain' |

The overwhelming part, however, encodes other kinds of human activities which may or may not be accompanied by a characteristic sound. Some examples are listed in (97):

(97) (Landin 2005)  $atop \quad \text{`go out of a place'}$   $goj \quad \text{`eat soup'}$   $t\tilde{yg} \quad \text{`beat'}$ 

Several ideophones – unlike in Awetí but similar to Mekens – also refer to soundless or even motionless events. Examples are listed in (98):

(98) (Landin 2005)

| nok  | 'sit (down?)'            |  |  |  |  |  |
|------|--------------------------|--|--|--|--|--|
| mõja | 'last, take a long time' |  |  |  |  |  |
| hãhã | 'wait'                   |  |  |  |  |  |

Among the around 120 Karitiana ideophones in Landin's dictionary no cognates with Awetí ideophones could be found. Several ideophones, however, differ only slightly from Awetí ideophones with related or identical meanings, as shown in (99):

(99) (Landin 2005)

| a. <i>kywy</i> | 'rub'  | (Awetí kyw 'scratch', zyw 'rub')    |
|----------------|--------|-------------------------------------|
| b. <i>nok</i>  | 'sit'  | (Awetí pok 'sit down')              |
| c. kom         | 'dive' | (Awetí tom 'dive, fall into water') |

For several dictionary entries two meanings are listed, one of a verb, the other of an ideophone. Two examples are given in (100):

(100) (Landin 2005: 26)

| a. <i>pyjẽg</i> | 1. ' blow'                 | (intransitive verb) |
|-----------------|----------------------------|---------------------|
|                 | 2. 'whistle'               | (ideophone)         |
| b. <i>pyp</i>   | 1. 'take off/ out at once? | (intransitive verb) |
|                 | 2. 'reap out'              | (ideophone)         |

In addition, there are verb roots and ideophones, as e.g. *heredn* and *here here* in (91) above, both with the meaning 'gather', which are similar in form. This observation and the fact that in (94)(a) and (b) the two meanings are clearly related, suggests that in Karitiana, too, there seems to be a tendency for ideophones to develop into verbs or vice versa.

#### 6.5.2 Verb reduplication

According to Everett (2006: 210) verb reduplication is a non-productive process in Karitiana. In his dissertation Everett lists 16 fully lexicalized reduplicated verb forms. Most of these do not have a non-reduplicated counterpart, and only in four cases a semantic relation to a simple form can be observed.

#### 6.5.3 Conclusion

Ideophones in Karitiana occur in two kinds of structures: either as independent clauses or embedded in a complex verb phrase formed with the light verb 'a ('make') which carries additional morphology. When they form independent clauses, they are prosodically marked. In this respect they resemble ideophones in Awetí. Independent ideophones further show the same behavior as independent ideophones in Awetí in their capacity to occur with objects and locative adjuncts. The semantic domains covered by Karitiana ideophones are typical for ideophones in other languages of the Tupian family. Although most Karitiana ideophones refer to activities which are accompanied by a characteristic sound, there are also some soundless and even motionless events which can be encoded by an ideophone. In this respect they are less semantically restricted than Awetí ideophones. There is some weak evidence in the Karitiana data for a historical relationship between ideophones and verb roots. Verb reduplication is not productive in current language use.

#### 6.6 Mundurukú branch: Mundurukú

In a recent census the Mundurukú ethnic population is listed with 11,630 individuals who are living in different areas in the Brazilian states of Amazonas, Mato Grosso and Pará. The Mundurukú originally occupied a region known as Vale do Tapajós in Pará. Their first contact with European colonization was in the mid 18<sup>th</sup> century.<sup>753</sup> According to recent information, Mundurukú is still the only language spoken by most women and all children of the ethnic community. Men occasionally use Portuguese for trading purposes.<sup>754</sup> The population, like most indigenous populations in Brazil, is currently

 <sup>&</sup>lt;sup>753</sup> Cf. www.etnolinguistica.org (last consulted on the 17<sup>th</sup> of June 2011).
 <sup>754</sup> Cf. www.ethnologue.com (last consulted on the 3<sup>rd</sup> of July 2011).

growing after a heavy decline in the past which was caused by infectious diseases brought in from outside.

Mundurukú is one of two surviving languages of the Mundurukú branch of the Tupian languages. It is further one of the fewer Tupian languages with a tonal distinction. While Crofts (1971: 11, footnote 2) proposed four opposing tone levels, Picanço's (2005: 12) phonetic analyses showed that the Mundurukú tonal system only consists of a high and a low tone opposition. Since the examples in this section are taken from different studies written by Crofts, her annotations regarding tone will be kept with "1" referring to a high, "2" to a mid and "3" to a low tone.

### 6.6.1 Ideophones as 'pro-forms'

Crofts (unpubl.) noticed for narrative discourse in Mundurukú a frequent use of elements she referred to as "pro-formas" ('pro-forms'). This term relates to the fact that for her such forms replace a complete lexical item, in the case of ideophones or "pro-verbos" a finite verb form. Mundurukú ideophones typically or exclusively, as stated in Crofts (1984: 207), occur in narrative discourse. They are frequently used by skilled storytellers and add to a vivid presentation (Crofts unpubl.: 1).

Mundurukú ideophones show specific phonological and prosodic features. Crofts points out that many of them are phonologically similar to verb roots which refer to the same event. An example with the verb root and the ideophone *min* ('tie') is given in (101):

(101) (Crofts 1973: 22)  $So^3ra^2ra^2yt^3 a^3\tilde{n}o^2kat^2kat^2 o^{,3} - tao^2 - mtn^3$ ,  $mtn^3 mtn^2 mtn^1$ soldiers man 3- leg- tie IDEO.tie IDEO IDEO 'The soldiers tied up the man's leg, mtn mtn mtn.' <sup>755</sup>

According to Crofts (1973: 22), the ideophones in such occurrences are uttered three times with a rising tone, as is indicated by the numbering. The verb complex, by contrast, ends in a low tone syllable. Apart from showing different tonal patterns, ideophones further

<sup>&</sup>lt;sup>755</sup> The glossing was modified according to more recent analyses by Gomes (2006: 24; 231, (20)(b)). While Crofts (1973) assumed that the prefix *tao*- was marking the transitive object on the verb, it here is presented as a body-part-incorporation.

often terminate in /h/, independently of the final consonant of a corresponding verb root. This is exemplified by *wuh* ('push') as opposed to the verb root *wun* in (102):

(102) (Crofts unpubl.: 3)  $O^{3}$ - $\tilde{g}u^{2}$ - wun<sup>3</sup>, wuh.<sup>2-3</sup> 3- CAUS-push, IDEO.push 'He pushed him, wuh.'

The example also displays a second tonal pattern often found in the last syllables of ideophones, which Crofts (unpubl.: 1) describes as a descending "tonal glide". If the verb root ends in a vowel, the ideophone also frequently terminates in /h/.

Other ideophones do not show any resemblance with the verb roots they semantically correspond to. An example is given in (103):

(103) (Crofts 2004: 206)  $Po^{1}tag^{2-3}$ .  $I^{3} - w\tilde{u}y^{2} - w\tilde{u}y$ .<sup>2</sup> IDEO.send.arrow X- send.arrow-RED 'He sent an arrow. He kept sending arrows.'

The last syllable of an ideophone may further be uttered with vowel prolongation. Another typical cross-linguistic feature of ideophones is the occurrence of phonemes which do not normally form part of the phonological system of the language. In Mundurukú this is restricted to the velar fricative /x/ (Crofts 1984: 209).

Reduplication of syllables can also be observed. Examples are the pairs given in (104):

| (104) a. (Crofts unpubl.:                                      | 1)                                                                              |             |
|----------------------------------------------------------------|---------------------------------------------------------------------------------|-------------|
| <i>ku<sup>2</sup>ru<sup>2</sup>ruk<sup>2</sup></i> (verb root) | <i>ku<sup>1</sup>ru<sup>1</sup>ru<sup>1</sup>ruh</i> <sup>1-3</sup> (ideophone) | 'tie'       |
| b. (Crofts 1984: 210)                                          |                                                                                 |             |
| <i>pen<sup>3</sup>pen<sup>3</sup></i> (verb root)              | <i>pen<sup>3</sup>pen<sup>2</sup>pen<sup>2</sup>pen<sup>1</sup></i> (ideophone) | 'turn over' |

Whether Crofts additionally assumes a separate process of repetition cannot be unambiguously deduced from her data which display many instances of repeated or reduplicated ideophones. Apart from these processes ideophones are morphologically invariant.

As in other languages, ideophones most often occur as independent clauses (Crofts unpubl.: 3). This can be exemplified by the following sequence (105) from a narrative in which a hunter kills pigs and takes them to his village:

(105) (Crofts 2004: 206) *Ku<sup>3</sup>ru<sup>2</sup>ruuuuh<sup>2-3</sup>*. *Ba<sup>3</sup>kũũ<sup>2-3</sup>*. *Ku<sup>3</sup>ru<sup>3</sup>kooooh<sup>2-3</sup>*. *Mũg<sup>3</sup>*.
IDEO.drag IDEO.put.down IDEO.take.up IDEO.put.on.back
'(He) dragged (them), put (them) to the ground, took (them), put (them) on his back.'

Mundurukú ideophones as independent clauses can further precede or follow a clause with an inflected verb referring to the same event, as was shown in (102) and (103). According to Crofts (1984: 215), the position of the ideophone depends on the respective finite verb of the adjacent clause. Although Crofts points out that ideophones can replace verbal predicates, she does not give any example for this observation. A possible example for this function is given by (106) from a narrative text annexed to Crofts' grammar. Here the locative adjunct *i'pibe* ('onto the ground') immediately follows the ideophone *parakth* ('push') and therefore should be analysed as belonging to the same clause:

(106) (Crofts 1973: 77, (N.1.))

Ñebijep o'-niwin parakih i'pi be.

so 3- push IDEO.push ground onto

'So he pushed him, (he went) parakth onto the ground.'

Likewise, there is no indication by Crofts for a complex predicate structure involving ideophones and inflected light verbs in Mundurukú.

Semantically, ideophones in this language seem to mostly refer to activities accompanied or not by a specific sound. Crofts (1984: 213) further lists two examples for qualities, e.g.  $k\tilde{e}^{l}r\tilde{e}^{2}r\tilde{e}^{3}$  ('ugly'), and the ideophone  $c\tilde{u}g^{3}$  ('be standing'), referring to posture. Sounds uttered by animals, such as *hm hm hm hm hm* ('sounds of pigs getting

outside')<sup>756</sup> are not consistently analysed as ideophones but as "exclamations", possibly due to the fact that ideophones in Croft's definition are forms which replace specific verbs. According to Crofts (1984: 214), the events referred to by ideophones are always situated in the past and imply one or several third person participants which must be deduced from contextual information.

Since Crofts generally analyses ideophones as "pro-verbos", i.e. verb substitutes, she further points out that for a number of lexical verbs there are several ideophones, whereas each ideophone in turn is semantically related to just one lexical verb: "Muitos verbos têm "pro-verbos". Cada "pro-verbo" é semanticamente relacionado a um verbo só. Alguns verbos tem mais do que um pro-verbo, mas cada pro-verbo representa só um verbo"<sup>757</sup> (Crofts unpubl.:1).

On the discourse level ideophones have the function to emphasize the event. According to Crofts, Mundurukú narrative discourse can be roughly divided into parts that form the background of the story and others that mark the storyline. Sentences belonging to the first category contain auxiliary verb phrases, descriptive and existential verbs or no verb at all. "Aspect" in these sentences is expressed via auxiliary phrases and/or aspectual particles. These sentences are generally situated at the beginning or end of the discourse and in a narrative may have the function of an "explanation in parenthesis". Ideophones never appear in this type of sentences but in sentences which carry the action. Crofts (1984: 215/6) attributes different levels of "event-emphasis" to the construction types involving ideophones. If an independent ideophone occurs in the immediate environment of a clause with a finite verb referring to the same event, as in (102) and (103), the event and the participant(s), marked on the inflected verb form, are emphasized. If an ideophone, however, occurs by itself without a corresponding clause with a finite verb, the emphasis is on the event only.

Crofts (unpubl.: 1) states that she found more than 200 ideophones in her data. Due to the specific requirement she imposed on ideophones to 'replace' inflected verbs, there may

<sup>&</sup>lt;sup>756</sup> Cf. Crofts (unpubl.: 4).

<sup>&</sup>lt;sup>757</sup> "Many verbs have "pro-verbs". Each "pro-verb" is semantically related to one verb only. Some verbs have more than one pro-verb, but each pro-verb represents only one verb" [my translation].

be more which she did not consider and others which – according to the definition chosen in this study – would be excluded from this category.

### 6.6.2 Verb reduplication

Verb reduplication in Mundurukú is a frequent process which indicates the repetition of an event, the ongoing duration of a state or intensification of a quality. In addition, reduplication can express plurality of the participant.

According to Picanço (2005: 94) the most frequent pattern of reduplication in Mundurukú is that of a reduplicated last syllable of the base form. Syllables with a CV or CVC-structure are copied entirely, as in (107):

(107) Picanço 2005: 257, (4)) doy-  $dz \tilde{e}m \ \tilde{o}n$  'I'm bleeding.' blood-go.out.vi -RED 1sg

In reduplication of verb roots with a final syllable consisting only of a vowel, a 'default' consonant /h/ is inserted at the onset of the reduplicant, as shown in (108):

(108) (Picanço 2005: 94, (4)) *i*- *á* -*há* -*m* 'he was biting sth.'
3OBJ-bite-RED-IMPF

If the final syllable has a VC-structure, the consonant of the coda is lengthened to provide a consonantal onset of the reduplicant.<sup>758</sup> According to Gomes (2006: 58/ 59) some verb stems also have a disyllabic pattern of reduplication, and in few cases even reduplicants consisting of three syllables are formed.

In transitive and intransitive active verbs the reduplication most often indicates plurality of the event, adding a progressive or durative aspect. This is illustrated in examples (107) and (108). A plural object participant expressed by the reduplication of a transitive verb stem is given in (109):

<sup>&</sup>lt;sup>758</sup> Cf. Picanço (2005: 374ff.) for a more detailed account with regard to individual patterns of reduplication.

(109) Gomes 2006: 58, (18)b.) *kopo-yu o= jo- wuy -wuy*glass-PL 1sg=REL-wash.up-RED
'I washed up several glasses.'

In descriptive verbs reduplication indicates intensification of the described quality. An example is (110):

```
(110) (Gomes 2006: 56, (14)b.)
axima i- ku -ku
fish REL-tasty.st-RED
'The fish is very tasty.'
```

If the vowel quality in the reduplicant changes to  $/\partial/$ , this indicates attenuation, as in (111):

(111)(Gomes 2006: 57, (16)b.) *pak- pək* 'reddish' red.st-RED

If a descriptive verb occurs as a modifier of a reduplicated active verb in which the reduplication indicates a plural subject, the modifier is reduplicated, too, as shown in (112):

(112) (Crofts 1971: 4)
o<sup>3</sup>-e<sup>2</sup>xe<sup>3</sup>-xe<sup>3</sup> -ip<sup>2</sup> i<sup>3</sup>-re<sup>3</sup> -re<sup>3</sup> 'they arrived hungry'
3- arrive-RED-PL 3- hungry-RED

### 6.6.3 Conclusion

Mundurukú ideophones mostly differ from other words by their prosodically marked features which animate a narrative. The identical or similar forms of ideophones and verb roots in this language signal a clear relation between them. Crofts states that ideophones are "abbreviations" of the verbs they semantically relate to, which implies that they have formed from these verbs and not vice versa. Since there are, however, some ideophones which do not resemble any verb root, it can be hypothesized that these may have had a different origin. Ideophones further have the same discourse function as ideophones in other languages in that they are used to mark the development of the plot by emphasizing the events and not the participants. Mundurukú does not have a light verb construction involving ideophones. Reduplication is a productive process in all verb classes of this language and displays various patterns. In active verbs it is iconic in indicating plurality of the event.

#### 6.7 Ramaráma branch: Karo

For Karo, the only surviving language of the Ramarama branch of the Tupian family, 208 speakers were registered in 2006.<sup>759</sup> The language is spoken in two villages in the indigenous territory Igarapé de Lourdes in the state of Rondônia which is the traditional homeland of the Arara who were first contacted in the late 1940s. The language is not highly endangered because it is still passed on to all children of the community and spoken on a daily basis. The national language Portuguese is only used in contact situations.<sup>760</sup>

## 6.7.1 Ideophonic verb phrases

Karo 'ideophones' were carefully described on various linguistic levels by Gabas & van der Auwera (2004), who argue for their existence as a separate class of words in this language due to the fact that they differ in their grammatical properties from all other word classes they may be associated with, i.e. verbs and adverbs. Ideophones in Karo are mostly conventionalized, but according to Gabas & Van der Auwera (2004: 402) they form an open word class, because ad-hoc creations are also possible.

On the phonetic level ideophones do not differ from other words, except for the fact that they present the consonant cluster [tp], consisting of a voiceless alveolar plosive and a voiced bilabial trill, which does not occur anywhere else in the language and is altogether rare. In addition, another cluster of any consonant followed by [r] occurs in the beginning

<sup>&</sup>lt;sup>759</sup> Cf. www.ethnologue.com (last consulted on the 27<sup>th</sup> of June 2011).

<sup>&</sup>lt;sup>760</sup> Cf. Gabas & Van der Auwera (2004: 397).

of certain ideophones such as *mĩrik* ('pinch') due to a vowel reduction in the first syllable, i.e. the ideophone is realized as ['mrĩk'].

Phonotactically, Karo ideophones obey the constraints established for the syllable structure of Karo words.<sup>761</sup> A CVC pattern seems to be preferred for monosyllabic ideophones and CVCVC for disyllabic ones which only in some cases display vowel harmony. Ideophones can have up to three syllables.

According to Gabas & Van der Auwera (2004: 410) ideophones further form an intonation unit apart from the auxiliary.

Karo ideophones cannot receive any inflectional morphology, but they can combine with the enclitic =tem, usually attached to adjectives, to derive modal adverbs. For this latter observation, however, no example is given in Gabas (1999) and Gabas & Van der Auwera (2004). They can further be nominalized by the nominalizer *kanã*. This is illustrated in (113):

(113) (Gabas 1999: 250)

Õn a?toypúŋkanãpe?õn a?= top -tpúŋkanãpe?1sg 3sg=see-IND IDEO.shoot NOMZ LOC'I saw him at his shooting (place).'

The only other morphological process they can undergo is reduplication which has the function of adding iterative or continuative aspect. An example for the indication of repeated action is given in (114):

(114) (Gabas 1999: 238) *Puŋ púŋ* wet péŋ kəy.
puŋ púŋ o=?e -t péŋ kəy
IDEO.shoot IDEO 1sg=AUX-IND white.man DAT
'I shot the white man several times.'

<sup>&</sup>lt;sup>761</sup> See Gabas (1999: 24).

An interesting observation which is not mentioned by the author(s) is that in all given examples the ideophones are only reduplicated once, as happens with verb roots in most of the other languages. In addition, the process in Karo is restricted to ideophones and does not – as in most other Tupian languages – occur with verb roots.

A basic syntactic property of Karo ideophones can also be observed in (114): They are nearly always accompanied by an auxiliary – most often by 'e ('do', 'say') – and by its argument which is either expressed as a proclitic person marker, as in (114), or an NP immediately preceding it, as in (119) below. Two other auxiliaries are presented by the authors, one being *kap*, indicating immediate future, the other *wa?ye* for a 'presentative' which is not further specified.<sup>762</sup> The auxiliary *wa?ye* is exemplified in (122) below. An example with *kap* is given in (115):

(115) (Gabas/ Van der Auwera 2004: 406, (10)(a)) *Círup* ahy9 ekay e?a? *círup* ahy9 e= kap -t e=?e -a. IDEO.run INTERR 2sg=AUX.FUT-IND 2sg=AUX-GER 'Are you going to run?'

Usually, subject and auxiliary immediately follow the ideophone, but, as one can see in (115), certain particles like the interrogative are allowed in intermediate position. Apart from that there are three constructions, in which the ideophone occurs without an auxiliary. One is the nominalization already shown in (113), another one is a negative imperative with the particle *yahmãm* which is illustrated in (116), as well as a subordinate clause with the subordinator *kañap* ('when'), as shown in (117):

(116) (Gabas/ Van der Auwera 2004: 404, footnote 3, (Ib)) *Muturum yahmãm*.
IDEO.jump NEG
'Don't jump!'

<sup>&</sup>lt;sup>762</sup> Cf. Gabas & Van der Auwera (2004: 403).

(117) (Gabas/ Van der Auwera 2004: 404, footnote 3, (IIIb))

*Onaká yakốy wen wen kañap cúrem.* o=naká yakốp-t wen wen kañap cú=tem 1sg=head be.hot -IND IDEO.write IDEO when big=ADVZ 'My head gets hot when I write too much.'

Gabas & Van der Auwera (2004: 403), however, point out that in these syntactic environments auxiliaries generally do not occur. They illustrate that ideophones in combination with auxiliaries can occur in all sentence types: in declaratives, in interrogatives, as shown in (115), as well as in imperative clauses. They further admit all clause modifications. An example combining future and negation is given in (118):

(118) (Gabas/ Van der Auwera 2004: 406, (9)(b)) *Cok* cok ma?pəy ?et yat i?ke.
cok cok ma?pəy ?e -t yat i?ke
IDEO.grind IDEO woman AUX-IND FUT NEG

'The woman will not grind.'

The occurrence of such 'ideophonic' constructions in combinations with clauses with inflected verbs, of which (119) is an example, can also be observed:

(119) (Gabas/ Van der Auwera 2004: 407, (12)(b)) *Tpu* ameko ?et a?kıga.
tpu ameko ?e -t a?= kık -a.
IDEO.jump jaguar AUX-IND 3sg=catch-GER
'The jaguar jumped, catching it.'

Ideophones usually occupy an initial clause position, thus partially having the same syntactic distribution as adverbs. In clauses with focused elements or for contrastive purposes they can occur in a different position. In simple declarative clauses an 'ideophonic' construction can further be accompanied by a PP or an adverb at the end of the clause.<sup>763</sup>

Gabas & Van der Auwera point out that there are few onomatopoeic ideophones and that no conventionalized sound symbolism could be discovered in the ideophones encountered in Gabas' data corpus. Apart from nuw ('noise of thunder') and  $n\tilde{n}m$  ('blink') all of the 100 ideophones listed in (Gabas 1999: 259ff.) refer to activities performed by animate beings. Many are characteristically accompanied by a sound, others, as (120)(a) and (b) are not:

(120) (Gabas/ Van der Auwera 2004: 408)
a. mõm 'look'
b. vép 'disappear'

The authors compare the semantics of ideophones with the meaning of lexical verbs and observe that some ideophones have a very specific meaning which is not encoded in any Karo verb. This is exemplified by (121)(a) and (b):

- (121) (Gabas/ Van der Auwera 2004: 407)
- a. *ŋ9r9ŋ* 'turn the head back'
- b. *parak* 'perforate somebody with arrow'

For other ideophones with a broad meaning there exists a corresponding verb. Some ideophones are more precise in their meanings than verbs. An example containing the verb *ti* ('come') and the ideophone *ohyuruŋ* ('come suddenly') is given in (122):

(122) (Gabas/ Van der Auwera 2004: 408, (17))
Møy a?wa?ye totia ohyuruŋ a?wa?ye.
møy a?= wa?ye to=ti -a ohyuruŋ a?= wa?ye
then 3sg=AUX 3coref=come-GER come.suddenly 3sg=AUX
'Then he came (by suddenly showing up).'

<sup>&</sup>lt;sup>763</sup> Cf. Gabas (1999: 240).

There is no formal resemblance between Karo ideophones and the verb roots they are semantically related to.

According to Gabas & Van der Auwera (2004: 409), ideophones in Karo have the same discourse function of highlighting, i.e. drawing attention to an event, as was observed for ideophones in other languages. They further state that they are more frequent in narrative discourse, where they add to the livelihood of the story-telling, than in natural conversation.

### 6.7.2 Conclusion

In comparison to ideophones in other Tupian languages one can state that what Gabas has termed as 'ideophone' in Karo resembles the invariant component of the 'ideophonic verb phrases' which could be found in Awetí, Kamaiurá, Emerillon, Sirionó, Yuki and Karitiana. In section 4.4.4 it was argued with regard to this kind of construction in Awetí that ideophones are gradually losing their performative features, especially when the light verb is morphologically complex and ideophones are reduced to one or two occurrences. In section 4.6.3 this claim was supported by showing that ideophones in constructions with a simple light verb are uttered with marked prosody and accompanying gestures depicting the activity, while ideophones in a light verb construction with additional morphology were prosodically less salient. Cross-linguistically, therefore, it is questionable whether the 'ideophones' described by Gabas & Van der Auwera have not in fact lost many of the performative features by which ideophones are generally characterized. Independent ideophones in Karo only occur in three specific syntactic environments, and the authors do not mention any prosodic markedness of their 'ideophones' which, in addition, never occur as multiply repeated elements. Instead, they form a complex verb phrase with finite auxiliaries by which – in most cases – they are immediately followed. One factor in favor of a separate status is the fact that they do not form a prosodic unit with the auxiliary construction and that a subject NP as well as certain particles can occupy the position between ideophone and auxiliary. There do not seem to be any restrictions regarding the occurrence in specific sentence types or the grammatical marking of the auxiliary. Therefore it must be concluded that 'ideophonic verb phrases' in Karo, even though they have the discourse function covered by independent ideophones in other languages, are highly grammaticalized and rather comparable to reduplicated verbs in other languages. There is no separate process of verb reduplication in Karo.

# 6.8 Comparison of the described phenomena

Table 6.3 summarizes the results of the individual analyses of constructions in each of the twelve Tupian languages, which are all characterized as expressive or foregrounding to some degree and which share additional phonological, morphological, syntactic and/ or semantic properties.

| Inventory of phenomena            | А   | K | Κ | Е | S   | Y   | М   | G | М   | K   | М | K   |
|-----------------------------------|-----|---|---|---|-----|-----|-----|---|-----|-----|---|-----|
|                                   | w   | a | a | m | i   | u   | a   | a | e   | a   | u | a   |
|                                   | e   | m | У | e | r   | k   | w   | v | k   | ri  | n | ro  |
| Independent IDEO                  | +   | + | ? | + | +   | ?   | ?   | + | (+) | +   | + | -   |
| IDEO + arguments                  | +   | + | ? | + | ?   | ?   | ?   | ? | (+) | (+) | + | -   |
| IDEO + simple light verb          | +   | + | - | + | +   | ?   | (+) | - | -   | (+) | - | (+) |
| IDEO (IDEO) + compl. light v.     | +   | ? | - | ? | +   | ?   | (+) | - | -   | (+) | - | +   |
| Verb reduplication <sup>765</sup> | +   | + | + | + | +   | +   | +   | ? | (+) | (+) | + | -   |
| Uninflecting verb                 | -   | - | - | - | +   | ?   | -   | + | (+) | -   | - | -   |
| Suffixing conjugation             | -   | - | - | - | (+) | +   | -   | - | -   | -   | - | -   |
| Verb class marker                 | (+) | - | - | - | (+) | (+) | +   | - | -   | -   | - | -   |
| Marker of information type        | ?   | - | + | - | -   | -   | (+) | - | -   | (+) | - | -   |

Table 6.3: Ideophones and related phenomena in Tupian languages<sup>764</sup>

Two thirds of the languages have independent ideophones, with the clear exception of Karo and three other languages, Kayabi, Yuki and Sateré-Mawé, for which this information could not be obtained. With regard to the languages with independent ideophones no counterevidence could be found in the data against the possibility of additional arguments (objects, obliques) or temporal and locative adjuncts in such clauses. Clear evidence is given for Awetí, Kamaiurá, Emerillon and Munduruku. In the data available for Mekens (where these elements are analysed as 'uninflectible verbs') and for Karitiana several examples also support this general observation.

<sup>&</sup>lt;sup>764</sup> A question mark indicates that no or not sufficient information could be obtained, a

<sup>&</sup>quot;(+)" has been set, where the available literature does not or not clearly support the specific analysis of a construction.

<sup>&</sup>lt;sup>765</sup> This process is not productive in Karitiana and can only be observed in fossilized forms.

Ideophones dependent on a morphologically simple light verb, mostly derived from '*e* ('say'), and thus forming the meaning-bearing element ('content sign') <sup>766</sup> in a complex predicate, also seem to be a frequent phenomenon across Tupian languages. Four languages (Awetí, Kamaiurá, Emerillon and Sirionó) clearly have this feature. In the case of Karo, this is synchronically the only way in which ideophones or former ideophones without prosodic markedness appear in the language. In Sateré-Mawé only verbs referring to a specific event type characterized as "telic" and affecting the only participant can be encoded in such a structure, so that in this language it must be analysed as marking a semantically defined verb class. In Karitiana this kind of construction has the function of highlighting discourse information which is relevant for the development of the plot.

For Kamaiurá and Emerillon, two of the seven languages with a simple light verb construction, a morphologically complex light verb form could not be attested in the data, while the other five languages do have one. In Karo, moreover, the light verbs are possibly always complex, since the ideophonic constructions occur in any sentence type, receive TAM marking and can be negated.

A phenomenon, which does not exist in Awetí and in most of the other languages, was termed as 'uninflecting' (Moore 2002) or 'uninflectible verbs' (Galucio 2001). These have been described for Gavião and Mekens and seem to differ from equally invariant ideophones in that the clause can have an overtly expressed subject NP or pronoun while, according to Moore (2002), object referents can only be given implicitly or in a subordinate verb structure. Ideophones, by contrast, have unexpressed subject referents. These 'uninflecting verbs' can be negated like other verbs and causativized, whereby in Mekens the causativization leads to the derivation of an ordinary inflecting verb. At the same time 'uninflecting verbs' have the discourse function of emphasizing (Gavião) or highlighting (Mekens) the event they encode. With the exception of those which have a subject in the same clause the 'uninflecting verbs' in Mekens have been analysed as ideophones in the sense defined here. In Sirionó, too, the possibility exists to use verb roots without any inflection. In addition, a form *joojoi* ('bark'), prosodically unmarked and not accompanied by gesture, was encountered in the Sirionó video data, which suggests that it may have developed from a combination of an ideophone and a light verb. Neither Moore (2002) nor

<sup>&</sup>lt;sup>766</sup> Cf. Güldemann (2005) and section 5.3.3.

Galucio (2001) provide any information as to whether 'uninflecting verbs' in Gavião or Mekens are prosodically marked.

In Sirionó as well as in the closely related neighboring language Yuki data further provides evidence for the development of a suffixing conjugation. Such a development from a light verb construction to a suffixing conjugation has been described as an areal feature for African languages.<sup>767</sup> Based on studies of historical reconstruction,<sup>768</sup> it is widely accepted that in languages of the Cushitic family a 'weak' suffix conjugation, based on a periphrastic construction consisting of an ideophone and an auxiliary verb, has replaced to differing degrees an inherited 'strong' prefix conjugation. One example is the language Bedauye, for which Reinisch – without giving any information on functional differences – stated in the late 19<sup>th</sup> century that one and the same verb could be inflected according to a an older prefixing and a newer suffixing conjugation, as given in (123):

(123) Reinisch (1893/4: 4: 18) *an-dī́r vs. dír-ani* 'I kill.' 1sg.PRS-kill kill-AUX:1sg.PRS

In Sirionó there even seems to be a tendency of the suffixing conjugation to develop into a verb class marker. The few examples in the available data which support this hypothesis are invariably formed with a causative prefix mu-, a third person -t (-i) and a person prefix or full NP preceding the causative marker. In Yuki, too, variation in the positioning of affixes in these constructions points into the direction of such a development. In both languages, however, the verb root or former ideophone still forms a separate prosodic unit from the inflected part of the construction.

In addition to Sirionó and Yuki which show a tendency for the development of a verb class marked by -t and Sateré-Mawé which marks a separate verb class with the whole periphrastic construction, Awetí also has specific verb roots ending in an unstressed open syllable with  $/\epsilon/$  as a nucleus.<sup>769</sup> Several of these roots are clearly related to ideophones and (if not transitivized by the prefix *mo*-) are all intransitive. They can even be characterized as

<sup>&</sup>lt;sup>767</sup> Cf. section 2.6. and Güldemann (2005: 138).

<sup>&</sup>lt;sup>768</sup> Cf. Praetorius (1894: 329-32).

<sup>&</sup>lt;sup>769</sup> Cf. section 4.3.5.

"telic middle" verbs, as has been done by Franceschini (1999) for equivalent verbs in Sateré-Mawé. Some Awetí verbs which clearly fit into this scheme and do not have a related ideophone in current language use are given in section 5.2, example (6).

Finally, a construction which marks the information it encodes as foregrounded in the respective discourse can be found in Kayabi. In this language any verb root can be presented in three different 'discourse modes' marking its information status. One of these is a 'focus' form with a suffix -i, which does not have subject or object prefixes like the 'declarative' and the 'narrative' form but has a free personal pronoun or NP immediately preceding it in intransitives and a prefix or NP marking the object in front of transitive roots. Thus its structure resembles that of action nominal constructions in Awetí. Awetí ANCs are structurally based on possessive constructions, whereby the person is either marked by a possessive proclitic or by an NP in the same position. The 'focus' form in Kayabi further differs from the other forms in not having subject marking for transitives and in not admitting  $2^{nd}$  person marking or negation. The suffix -*i* of this form may also be a remnant of a light verb based on 'e ('say') or of a mimetic marker, having developed from the same source, and would neatly fit into Güldemann's scheme, who claims that a mimetic marker in some languages can develop a foregrounding discourse function.<sup>770</sup>

Such a discourse-pragmatic function could not be clearly attested for any of the other languages, even though in Awetí two forms with the impersonal ANC 'etu ('one says') suggest a comparable function.<sup>771</sup> In Sateré-Mawé, Franceschini's (1999) observation that verbs from other verb classes could also form a "telic middle" auxiliary verb construction can be interpreted as pointing into the same direction. In Karitiana, too, ideophones are differenciated from other predicates on the utterance level. However, in this language do not only the 'ideophonic utterances' structurally differ from the 'narrative utterances', as described by Landin (1988/2005), but also ideophones from the verb roots used in the 'narrative forms'. On the other hand, there is another correlation between Karitiana and Awetí which puts the 'ideophonic form' into the vicinity of Awetí ANCs: According to Landin, utterances in which an 'ideophonic form' immediately follows a clause referring to the same event by a 'narrative form' (also presenting non-background information) are very

<sup>&</sup>lt;sup>770</sup> Cf. Güldemann (2005: 133).
<sup>771</sup> Cf. section 5.3.3.2, examples (32) and (33)(b).

frequent. A similar observation was made for Awetí with regard to ordinary inflected verbs and ANCs,<sup>772</sup> but a difference in the encoding of information could not be observed, except for the general tendency that ANCs are event- rather than participant-oriented. The ANC in Awetí further correlates with nominalizations expressing the so-called "circumstantial mode" (Rodrigues 1981) or "oblique-topicalized verbs" (Jensen 1998) in several TG languages, which e.g. in Kamaiurá is marked with the suffix *-i* and thus has the same form as the 'focus' form in Kayabi.<sup>773</sup> In Kamaiurá these forms only exist in the 3<sup>rd</sup> person and do not differ greatly from inflected verb forms, except that they are exclusively and obligatorily used in clauses with topicalized adverbs.<sup>774</sup> Drude (2008: 85), too, observes the tendency for ANCs in Awetí to correlate with adverbs in the first clause position, but they are neither restricted to this syntactic environment nor to 3<sup>rd</sup> person marking and have therefore been analysed as complete equivalents to inflected verbs at the synchronic level.<sup>775</sup>

Another observation with regard to ANCs in Awetí suggests that they bear some relation to ideophones and have partially retained a 'performative' feature: A quantitative analysis of a representative Awetí sample showed that the expressive (i.e. iconic) morphological process of reduplication occurred much more frequently with ANCs than with finite verb forms.<sup>776</sup> From this and several other correlations between ideophonic constructions and ANCs the hypothesis presented in section 5.3.4 was developed that ANCs may be at an intermediate stage between ideophonic constructions and finite verbs, assuming that the process involves an increasing loss of 'expressivity' which is compensated by grammatical structure.<sup>777</sup> Further support for the idea that reduplication indicates a certain degree of 'expressivity' is given by Gabas' (1999) observation that Karo

<sup>&</sup>lt;sup>772</sup> Cf. section 3.3.9.3.

<sup>&</sup>lt;sup>773</sup> Note that Jensen (1998: 526) also classifies the 'focus' form in Kayabi as 'oblique-topicalized'. She does this on purely structural grounds without taking into account its specific function in narrative discourse.

<sup>&</sup>lt;sup>774</sup> Cf. Seki (2000: 131).

<sup>&</sup>lt;sup>775</sup> See also section 3.3.8.1.1.

<sup>&</sup>lt;sup>776</sup> Cf. table 3.16 in section 3.3.8.3.1.

<sup>&</sup>lt;sup>777</sup> Cf. Kita's (1997) cognitive approach to the semantics of ideophones, which is summarized in section 2.3.

does not have verb reduplication and that this process only exists in ideophonic constructions.<sup>778</sup>

All the constructions which have been discussed here as being historically related to ideophones due to their expressive or foregrounding function can be subsumed under the mimesis framework developed by Güldemann (2008) and described by various, partially interacting processes of lexicalization and grammaticalization departing from this kind of construction. According to Güldemann's theory which has been outlined in section 5.3.3, an ideophone can be the 'content sign' of a complex predicate formed with a light verb. One of the cross-linguistically observable sources of such a light verb is 'say', as was also the case with 'e ('say') in the Tupian languages presented except for 'a ('make') in Karitiana, which, however, is also considered to be a common source. Güldemann states that by this inflected light verb ideophones, non-linguistic sounds (here defined as group-IIideophones), direct reported discourse or non-linguistic signs such as representational gestures can be inserted into the syntactic structure of a language. Since all these elements can be grouped together as generally imitating or enacting events instead of referring to them by words, Güldemann considers the light verb to be a general device to indicate mimesis. In some languages one and the same indicator of mimesis can introduce each of these elements, in others they may have developed from diverse sources. The verb 'e in Tupian languages, as outlined in section 5.3.3.2 is irregular in its  $3^{rd}$  person form which would normally be the source for a grammaticalized indicator of mimesis and any further grammaticalization. Awetí and TG languages have the not further analysable 3<sup>rd</sup> person form e'i  $\epsilon$ ?i/. The  $\epsilon$  has apparently lexicalized as a reduced mimesis marker in the pattern of Awetí verb reduplication and further (or additionally) as an unstressed final vowel characterizing verb roots derived from light verb constructions. In Sirionó and Yuki the same mimesis marking light verb has grammaticalized into a suffixing conjugation class for verbs referring to nature sounds and to activities with and without a charactistic sound. At the same time there is evidence in Sirionó that a regular prefixing verb class lexicalizes from the fusion of a root of the suffixing paradigm with the third person -i. This new verb root can also be used as an uninflecting verb, i.e. without any person marking, as can any

<sup>&</sup>lt;sup>778</sup> Similarly, Beck (2008: 11) notices for Upper Necaxa Totonac, spoken in Mexico, that reduplication on the synchronic level is not a feature of most word classes but very productive in ideophones.

verb root in this language. In Sateré-Mawé a semantically defined verb class is marked by the distinct grammatical feature of a light verb construction. Verbs of this class further differ in having an "iterative" suffix *-i* inserted after the root when reduplicated, which seems to be a lexicalized mimesis marker similar to the *-e* in Awetí verb reduplication. A separate development is the indication of a specific discourse-pragmatic function by the suffix *-i* on Kayabi verbs. An interesting language for further investigation in this respect seems to be Sateré-Mawé which, according to Franceschini (1999: 154; 238), has a verb class characterized by a periphrastic conjugation and at the same time uses the light verb construction to pragmatically mark verbs from other verb classes as salient in discourse. These seem to be two different outcomes of grammaticalization processes based on the same grammaticalizing element.

## 7 Conclusion and prospects

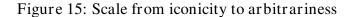
As was emphasized throughout this study, the most important cross-linguistic feature of ideophones is their "expressivity" or performative quality and their connected discourse-pragmatic function of foregrounding or highlighting information.

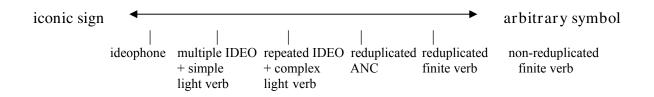
Ideophones have a marked prosody and in Awetí are consistently accompanied by representational gestures, two further features which – according to Kita (1997) – in human cognition are stored in an 'affecto-imagistic dimension' of semantic representation. Ideophones are further frequently reduplicated and repeated, thus indicating repetitive or repeated action in an iconic and therefore "expressive" way.

In Awetí, ideophones can be considered a word class, because they can be distinguished from other words on various levels of analysis. Regarding their prosodic markedness they differ from all other words except interjections which, however, do not have the same syntactic and semantic behaviour and are – unlike ideophones – not time-aligned with gesture. Awetí ideophones either occur as independent clauses, admitting specific arguments, or embedded as 'content signs' in a light verb construction functioning as the predicate of a clause. In their independent occurrences they are always prosodically marked, but when they are syntactically embedded, they may lose this feature and thus also their status as ideophones.

Different from African but similar to other Tupian and many Amazonian languages Awetí ideophones of the first, conventionalized group are semantically restricted to depicting activities, i.e. events involving motion, or – more specifically – perceptually salient features of these. The less conventionalized onomatopoeic group II ideophones imitate sound events. The most frequently used conventionalized ideophones can usually refer to a variety of events involving similar movements and must be interpreted in context. Following Nuckolls (1996), who based her semantic description of ideophones in another language of the Amazonian lowlands on an approach developed by Lakoff (1987) and Johnson (1987), this is due to their image-schematic structure which directly reflects bodily experience. In their respective discourse context these ideophones can further be disambiguated by co-occurring gestures. Some ideophones, however, can also refer to very specific events. This suggests that ideophones may have developed from different sources. One hypothesis is that Aweti ideophones of the latter type entered the language as loanwords from other languages, where the same elements are verbs. A second hypothesis, according to which some ideophones developed from Awetí verbs, can also not be excluded, but more comparative research is needed in order to unequivocally classify a representative sample of Awetí ideophones according to their origins. Although most individual ideophones depict basic bodily experiences which are semantically vage and characterize various events, sequences of two or more of these ideophones can express complex events in their subsequent phases and thus in a more precise way than verbs referring to the same events.

In Awetí synchronic evidence could further be found for a historical development from ideophones to verbs, with various intermediate stages, which is characterized by a constant decrease of iconicity and its replacement by grammatical structure. This development has been schematized in figure 15.





Within the Tupian family ideophones, especially in complex predicates with finite light verbs, seem to have been the source of different phenomena which are described in the literature and/ or can be observed in synchronic data. Due to the general scarcity of data the results can currently only be treated as preliminary. Nevertheless, it was possible to join all the phenomena described for individual languages in the mimetic framework proposed by Güldemann (2008) and to attribute the respective outcome in a language to processes of grammaticalization and lexicalization which – in parallel or different combinations – could be found in other languages of the Tupian family.

In the last few years studies of Amazonian languages from different families have increased considerably, and many of them are known to have large inventories of ideophones. In addition, it could be shown for other parts of the world (Australia, Africa) that ideophones are involved in the development of certain areal features, so that an interesting point of departure for future studies would be a comparison of Awetí ideophones with those in other languages of the Upper Xingu cultural area.

As was pointed out in section 5.1, several similar or identical ideophones could be encountered in the currently available data of Kamaiurá, Kalapalo and Waurá. In her reference grammar of Trumai, a language isolate spoken in the Upper Xingu, Guirardello (1999) did not mention a word class of ideophones, but in the meantime she has investigated this phenomenon and a study will soon be published. Guirardello (p.c.) further informs that the Trumai seem to have borrowed ideophones from Kamaiurá, a group they live in close contact with. According to Franchetto (p.c.) ideophones are also very frequent in the Kuikuro DoBeS corpus as well as in Kalapalo and Nahukwa, the two other dialects of that same Carib language which are spoken in the Upper Xingu area. Recently published video data of Kuikuro discourse confirm this observation. Further evidence was given by Basso (1995) in her anthropological analysis of Kalapalo discourse which in many performative and structural aspects resembles Awetí discourse. In her English translations of texts belonging to different sub-genres of narrative discourse she consistently annotated ideophones of the independent type, more specifically those which are semantically related to a lexical verb forming the predicate in an adjacent clause. In the translations, the ideophones are positioned either in front of or after the clause, although, however, it cannot be excluded that this may simply be an appropriate slot for them in the English language and not reflect the original position.

For the Arawak language Waurá, Richards (1988: 2) states that ideophones are a common source of verb formation. They either turn into simple verb roots, receiving pronominal prefixes and optional suffixes, or into derived verb stems which are combinations of ideophones with specific causative affixes. The resulting verbs may be transitive or intransitive. Ideophones in Waurá, too, are characterized by their tendency for repetition and depict either sound events or movements.<sup>779</sup>

Another open question to be explored is whether ideophones can be seen as a rudimentary means of communication in a multilingual environment, where people are only entitled to speak the language of their own group and that of their other-ethnic father or mother. It has been argued by several researchers that ideophones across languages are closely related to or closely interact with gesture, and from the anthropological literature it is known that gesture is another mode of Upper Xinguan interethnic communication, which is especially used in ritual discourse.

Since there are, in addition, many bilingual individuals currently living in that area, it would further be interesting to investigate more deeply the cognitive structuring of ideophones by these speakers. Given that these elements are considered to be direct expressions of embodied perception and thus considerably different from other words, the question arises whether a bilingual speaker has one or two language-specific sets of ideophones. While Mithun (1982) pointed out that Iroquoian-English bilinguals had little awareness of the ideophones they produced in their own discourse, bilingual Awetí consultants repeatedly identified Kamaiurá ideophones during their transcription work, so that one may hypothesize that the social appropriateness of code-mixing even on this level may be an important factor.

<sup>&</sup>lt;sup>779</sup> Cf. Richards (1988:3) and Richards (1977: examples (42) and (55).

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## APPENDICES

## Appendix I: Data corpus used for the study

| Name of File            | Genre         | Duration      | Year of Rec. | Tueses (Tueses)  |
|-------------------------|---------------|---------------|--------------|------------------|
| ama dry ages            |               |               |              | Transc./Transl.  |
| ama_dry_seas            | description   | 13min 34sec   | 2003         | Reiter           |
| ary_fem_recl            | description   | 8min 32sec    | 2001         | Reiter           |
| awu_fishing             | explanation   | 23min 14sec   | 2003         | Reiter           |
| jak_village-1           | explanation   | 3min 32sec    | 2001         | Drude            |
| kaj_house-1             | explanation   | 15min 12sec   | 2001         | Drude            |
| kam_village             | description   | 17min 40sec   | 2001         | Drude            |
| kup_autobiogr           | autobiography | 38min 46sec   | 2002         | Drude/ J. Awetí? |
| maw_male_recl           | description   | 13min 16sec   | 2001         | Drude            |
| mop_manioc              | explanation   | 18min 58sec   | 2002         | Reiter           |
| tal_kakaja              | narrative     | 28min 4sec    | 2001         | Drude/ Reiter    |
| tal_kamu_kwat1          | narrative     | 25min 13sec   | 2002         | Reiter/ J. Awetí |
| ti-a_autobiogr          | autobiography | 18min 56sec   | 2002         | Reiter           |
| tim_salt                | explanation   | 4min 53sec    | 2002         | Reiter           |
| ula_seasons             | description   | 19min 41sec   | 2003         | Drude            |
| <br>Total (video)       |               | 4h 9min 31sec |              |                  |
|                         | l             |               |              |                  |
| ama_autobiogr           | autobiography | 10min 18sec   | 2002         | Drude/ J. Awetí  |
| ama_rain_seas           | description   | 49min 54sec   | 2003         | Drude            |
| autuk_paraw_dias        | explanation   | 7min 5sec     | 2003         | Reiter           |
| kal_angut1              | narrative     | 27min 51sec   | 2003         | Drude            |
| kal_angut2              | narrative     | 22min 45sec   | 2003         | Drude            |
| kal_awakap1             | narrative     | 22min 13sec   | 2003         | Reiter           |
| kal_awakap2             | narrative     | no media file | 2003         | Reiter           |
| kal_awytyza1            | narrative     | 33min 56sec   | 2003         | Reiter           |
| kal_awytyza2            | narrative     | 30min 30sec   | 2003         | Reiter           |
| kal_azoamujza           | narrative     | 5min 19sec    | 1998         | Drude            |
| kal kamukuaka4          | narrative     | 30min         | 2003         | Reiter           |
| kal kamukuaka5          | narrative     | 22min 56sec   | 2003         | Reiter           |
| kal_kamukuaka6          | narrative     | 32min 3sec    | 2003         | Reiter           |
| kal_kwaza               | narrative     | 37min 22sec   | 2003         | Reiter           |
| kal_kujamary1           | narrative     | 31min 8sec    | 2003         | Drude            |
| kal_makawaja            | narrative     | 37min 56sec   | 2003         | Reiter           |
| kal_mene                | narrative     | 35min 21sec   | 2003         | Reiter           |
| kal_sham_myth1          | narrative     | 21min 23sec   | 2004         | Reiter           |
| kal_sham_1              | explanation   | 35min 54sec   | 2004         | Reiter           |
| kal_ta-wat              | narrative     | 24min 18sec   | 1998         | Drude            |
| kal_tawozy2             | narrative     | 26min 27sec   | 2003         | Reiter           |
| kal_tawozy3             | narrative     | 28min 10sec   | 2003         | Reiter           |
| kal_tawozy4             | narrative     | 29min 59sec   | 2003         | Reiter           |
| kal_tawozy5             | narrative     | 16min 50sec   | 2003         | Reiter           |
| kal_maw_ama_oldvillages | conversation  | 12min 5sec    | 2003         | Drude            |
| mopot_birth             | explanation   | 11min 16sec   | 2003         | Reiter           |
| tal_awaniwani           | narrative     | 16min 45sec   | 2002         | Reiter           |
|                         | narrative     | 29min 35sec   | 2002         | Reiter           |

Table I.1: Video and audio data

| tal_kwat_lang1      | narrative | 5min 14sec    | 2002 | Reiter |
|---------------------|-----------|---------------|------|--------|
| tal_kwat_lang2      | narrative | 2min 16sec    | 2002 | Reiter |
| tal_kujakyt         | narrative | 48min 26sec   | 2002 | Reiter |
| tal_mamuti_1_8      | narrative | 30min 15sec   | 1998 | Reiter |
| tal_mamuti_2_8      | narrative | 30min 56sec   | 1998 | Reiter |
| tal_mamuti_3_8      | narrative | 30min 49sec   | 1998 | Reiter |
| tal_mamuti_4_8      | narrative | 17min         | 1998 | Reiter |
|                     |           | 14h 13min     |      |        |
| Total (audio)       |           | 58sec         |      |        |
| Total (audio/video) |           | ca. 18h 24min |      |        |

| Narrative texts | Duration       | Non-narrative texts     | Duration       |
|-----------------|----------------|-------------------------|----------------|
| kal_angut1      | 27min 51sec    | ama_autobiogr           | 10min 18sec    |
| kal_angut2      | 22min 45sec    | ama_dry_seas            | 13min 34sec    |
| kal_awakap1     | 22min 13sec    | ama_rain_seas           | 49min 54sec    |
| kal_awakap2     | no media file  | ary_fem_recl            | 8min 32sec     |
| kal_awytyza1    | 33min 56sec    | autuk_paraw_dias        | 7min 5sec      |
| kal_awytyza2    | 30min 30sec    | awu_fishing             | 23min 14sec    |
| kal_azoamujza   | 5min 19sec     | jak_village-1           | 3min 32sec     |
| kal_kamukuaka4  | 30min          | kaj_house-1             | 15min 12sec    |
| kal_kamukuaka5  | 22min 56sec    | kal_sham_1              | 35min 54sec    |
| kal_kamukuaka6  | 32min 3sec     | kal_maw_ama_oldvillages | 12min 5sec     |
| kal_kwaza       | 37min 22sec    | kam_village             | 17min 40sec    |
| kal_kujamary1   | 31min 8sec     | kup_autobiogr           | 38min 46sec    |
| kal_makawaja    | 37min 56sec    | maw_male_recl           | 13min 16sec    |
| kal_mene        | 35min 21sec    | mop_manioc              | 18min 58sec    |
| kal_sham_myth1  | 21min 23sec    | mop_birth               | 11min 16sec    |
| kal_ta-wat      | 24min 18sec    | ti-a_autobiogr          | 18min 56sec    |
| kal_tawozy2     | 26min 27sec    | tim_salt                | 4min 53sec     |
| kal_tawozy3     | 28min 10sec    | ula_seasons             | 19min 41sec    |
| kal_tawozy4     | 29min 59sec    |                         |                |
| kal_tawozy5     | 16min 50sec    |                         |                |
| tal_awaniwani   | 16min 45sec    |                         |                |
| tal_kakaja      | 28min 4sec     |                         |                |
| tal_kaminu      | 29min 35sec    |                         |                |
| tal_kamu_kwat1  | 25min 13sec    |                         |                |
| tal_kwat_lang1  | 5min 14sec     |                         |                |
| tal_kwat_lang2  | 2min 16sec     |                         |                |
| tal_kujakyt     | 48min 26sec    |                         |                |
| tal_mamuti_1_8  | 30min 15sec    |                         |                |
| tal_mamuti_2_8  | 30min 56sec    |                         |                |
| tal_mamuti_3_8  | 30min 49sec    |                         |                |
| tal_mamuti_4_8  | 17min          |                         |                |
|                 | 13h Omin 43sec | Total                   | 5h 22min 46sec |

Appendix II: List of ideophones to be identified by consultants

| ideophone<br>ãj ãj ãj | (narrative) context<br>to cry       | meaning given by consultants to cry |
|-----------------------|-------------------------------------|-------------------------------------|
| aka aka               | exclamation of pain                 | exclamation of pain                 |
| atīw atīw atīw        | to sneeze                           | to sneeze                           |
| atsy atsy (interj.)   | exclamation of disgust              | exclamation of disgust              |
| fu [f:u]              | to conjure, to exhale smoke         | to fly, to smoke                    |
| haj (interj.)         | sound of surprise, answer to call   | answer to call                      |
| hap hap hap           | to jump in the water                | person bathing, to dive             |
| haw haw haw           | jaguar swallowing a thorn           | sound of animal (wolf?)             |
| hm hm hm, e'i         | sound of jaguar                     | jaguar                              |
| huhuhuhu              | bee humming                         | bee humming                         |
| hu hu hu hu           | sound of scaring away               | sound of scaring away               |
| hu hujujuj            | to have bad luck                    | -                                   |
| ihihi(n)              | to laugh                            | to laugh                            |
| ke (interj.)          | exclamation "the poor one!"         | "the poor one!"                     |
| ko [ko:](interj.)     | to call, exclamation "I don't know" | 1                                   |
| kon                   | to swallow (something big)          | to swallow                          |
| kut kut kut           | to drink                            | to eat something liquid             |
| kutsu kutsu kutsu     | to wash                             | to make a sound in the              |
|                       |                                     | water with the hands,               |
|                       |                                     | to wash skin/ clothes               |
| kuzuk kuzuk           | to enter a hole                     | to enter a hole, to dress, to       |
|                       |                                     | put sthg. inside a thing            |
| kykyky                | to lie down in one's hammock        | to lie down in hammock              |
| kyryk kyryk kyryk     | to climb a tree                     | -                                   |
|                       | to unfasten one's hammock           | to pull, to unfasten one's          |
|                       | to unfusion one s nummous           | hammock                             |
| kyryryryryryryry      | to drag something                   | to drag, to pull                    |
| kyryryryry lok        | to pull out                         | to pull out of something            |
| Kyryryryry lok        | 1                                   | (e.g. a necklace on a neck)         |
| kytsy kytsy kytsy     | to smooth, polish                   | context-dependent, walk in          |
| Kytsy Kytsy Kytsy     | to shiooth, polish                  | a dragging manner, to grate         |
|                       |                                     | manioc, to smooth, polish           |
| kytyk kytyk kytyk     | to climb up a tree                  | to climb up a tree                  |
| Kytyk Kytyk Kytyk     | to enino up a tree                  | (s. kyryk kyryk kyryk)              |
| kyw kyw kyw           | to eat (manioc cake), to scratch    | to eat, to scratch one's skin,      |
| Kyw Kyw Kyw           | one's skin                          | to dig a hole, several meanings     |
| kyw tak kyw tak       | to cut loose                        | to cut (e.g. with scissors)         |
| kỹw kỹw kỹw           | to walk on the beach                | to walk in a dragging               |
| кут кут кут           | to wark on the beach                | manner (on the beach)               |
| pek                   | to spit into water                  | liquid falling on the ground        |
| perek perek           | fish jumping                        | fish jumping                        |
| ping                  | to send an arrow                    | to break (ping)                     |
| piwiwiwiwi            | smoke                               | cramp (in the legs, arms)           |
|                       | SHIUKE                              | cramp (in me legs, arms)            |

| po [pɔ:]                  | to emerge from water                | a lot of rain falling, to fall<br>into shallow water      |
|---------------------------|-------------------------------------|-----------------------------------------------------------|
| pok                       | to put (to the ground)              | to put                                                    |
| ророро                    | to fly                              | to fly                                                    |
|                           | to pour with a ladle, scoop         | to throw liquid, to throw the manioc mass onto the ground |
| puj                       | to spit                             | to spit                                                   |
| pujpujpujpuj              | fish jumping                        | fish jumping                                              |
| pu pu pu                  | 1) to vomit, 2) steam getting out   | 1) steam getting out of                                   |
| r r r                     | -)                                  | saucepan, 2) to vomit                                     |
| pururururu                | to run in the forest                | to run (many people, animal)                              |
| pyw                       | to get up, to grab                  | to get up, to grab                                        |
| pyw pyw pyw               | to row, to tie around               | to row, to pick up (a fruit)<br>from the ground           |
| tak tak tak               | to cut (a tree)                     | to cut with an axe/ a knife                               |
| taky                      | to break sthg.                      | to break sthg.                                            |
| tarara tarara tarara      | to spin cotton                      | to spin cotton                                            |
| tarak                     | to drill a stone                    | sound of something breaking                               |
| te, tehe, tehehe (interj. | )exclamation "beautiful"            | exclamation "beautiful"<br>(increasingly)                 |
| tiw                       | to tear manioc cake into pieces     | to tear manioc cake into pieces                           |
| tiw tiw tiw               | pull out plant, sweep               | to grate manioc, sound of bird, several meanings          |
| toho toho toho            | to cough                            | to cough                                                  |
| to'aw'aw'aw               | to cough (jaguar)                   | sound of animal                                           |
| tok tok tok tok           | to beat someone/something           | to beat with a club/ the hand                             |
| tom                       | to jump/fall into water             | to fall into water                                        |
| tom tom tom               | to swim                             | to swim                                                   |
| tsakyhy                   | to cut (e.g. the throat)            | to hit with arrow, to stab                                |
|                           |                                     | with knife                                                |
| tsok tsok tsok            | to cut with a knife                 | to hit with arrow                                         |
| tsak tsak tsak            | to cut with a knife                 | to cut with a knife                                       |
| tsirik tsirik tsirik/     | to walk on dry leaves (not on path) | to walk in the thicket                                    |
| tirik tirik tirik         |                                     |                                                           |
| tsom tsom tsom            | to wash                             | to make movements in water                                |
| tsõpe tsõpe tsõpe         | to describe (point into different   | -                                                         |
|                           | directions)                         |                                                           |
| tsu                       | to water, to throw water            | to enter the thicket, to spill water                      |
| tsuruk                    | to enter the house                  | to get inside                                             |
| tsururum tsururum         | to cool down hot liquid             | to cool down hot liquid                                   |
| tu [tu:]                  | 1) to fall                          | 1) to fall                                                |
| tu, (nã'etu)(interj.)     | 2) exclamation "well done"          | 2) exclamation "well done"                                |
| tuk                       | to start running                    | context-dependent, to arrive at the ground                |

| tung tung           | to fart                              | to fart                    |
|---------------------|--------------------------------------|----------------------------|
| turururu            | to run                               | to run (many people,       |
|                     |                                      | animal)                    |
| tutututu            | fire burning                         | sound of wind, fire        |
| tyk                 | to encounter                         | to encounter, to stop of a |
|                     |                                      | sudden when hearing sound  |
| tyk tyk tyk         | to walk (on the path)                | to walk                    |
| tyky                | to close around something, encounter | to encounter               |
| tykyhy              | to encounter, meet with              | to encounter, meet with    |
| tyryk tyryk tyryk   | to climb up, to limp                 | to limp                    |
| zaj zaj zaj, nã'etu | to drive/scare away                  | context-dependent          |
| ZYW                 | to stroke over someone's shoulder    | to touch someone, to       |
|                     |                                      | apply urucum to            |
|                     |                                      | someone's body             |
| zyw zyw zyw zyw     | to lick up                           | context-dependent          |

## Appendix III: Quantitative analysis of Awetí constituent order

| Name           | Proportion | SVO   | SOV | OVS   | OSV | VSO   | VOS   |
|----------------|------------|-------|-----|-------|-----|-------|-------|
| kal_azoamujza  | 0 of 1     |       |     |       |     |       |       |
| kal_ta-wat     | 0 of 35    |       |     |       |     |       |       |
| tal_mamuti_1_8 | 5 of 37    | 2     | 1   | 1     | 1   |       |       |
| tal_mamuti_2_8 | 6 of 36    | 3     |     | 2     |     |       | 1     |
| tal_mamuti_3_8 | 4 of 55    | 2     |     | 1     | 1   |       |       |
| tal_mamuti_4_8 | 0 of 13    |       |     |       |     |       |       |
| tal_kakaja     | 3 of 33    |       | 1   | 2     |     |       |       |
| tal_awaniwani  | 0 of 13    |       |     |       |     |       |       |
| tal_kaminu     | 2 of 22    |       | 2   |       |     |       |       |
| tal_kamu_kwat1 | 0 of 22    |       |     |       |     |       |       |
| tal_kwat_lang1 | 3 of 5     | 1     |     |       | 2   |       |       |
| tal_kwat_lang2 | 1 of 1     |       |     | 1 (1) |     |       |       |
| tal_kujakyt    | 7 of 45    | 4     | 1   | 1 (1) |     | 1 (1) |       |
| kal_angut1     | 2 of 11    |       |     | 1 (1) |     |       | 1     |
| kal_angut2     | 0 of 13    |       |     |       |     |       |       |
| kal_awakap1    | 1 of 20    |       |     | 1 (1) |     |       |       |
| kal_awakap2    | 0 of 24    |       |     |       |     |       |       |
| kal_awytyza1   | 2 of 37    | 2     |     |       |     |       |       |
| kal_awytyza2   | 0 of 14    |       |     |       |     |       |       |
| kal_kamukuaka4 | 1 of 41    | 1     |     |       |     |       |       |
| kal_kamukuaka5 | 3 of 23    |       |     | 2 (2) |     |       | 1 (1) |
| kal_kamukuaka6 | 3 of 18    |       |     | 2 (2) |     |       | 1 (1) |
| kal_kwaza      | 2 of 28    |       |     | 1 (1) |     |       | 1(1)  |
| kal_kujamary1  | 0 of 23    |       |     |       |     |       |       |
| kal_makawaja   | 10 of 76   | 4 (2) |     | 4 (4) | 1   |       | 1     |
| kal_mene       | 5 of 15    |       |     | 3 (3) |     | 1 (1) | 1(1)  |
| kal_tawozy2    | 1 of 20    |       |     | 1     |     |       |       |
| kal_tawozy3    | 1 of 25    |       |     | 1 (1) |     |       |       |

Table III.1: Constituent order in narrative texts<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Numbers in parentheses are given for clauses having one or both arguments expressed by pronouns. 'Narrative texts' include only mythological and historical narratives as a culture-specific discourse genre. Autobiographical narratives have been categorized as 'non-narrative texts'.

| kal_tawozy4    | 1 of 25        |        |   |         |   | 1     |       |
|----------------|----------------|--------|---|---------|---|-------|-------|
| kal_tawozy5    | 4 of 12        |        |   | 2(1)    |   | 1     | 1     |
| kal_sham_myth1 | 1 of 31        | 1      |   |         |   |       | 1 (1) |
| Total          | 69 (27) of 774 | 20 (2) | 5 | 26 (18) | 5 | 4 (2) | 9 (5) |

Table III.2: Constituent order in non-narrative texts

| Name             | Proportion     | SVO   | SOV | OVS   | OSV | VSO   | VOS   |
|------------------|----------------|-------|-----|-------|-----|-------|-------|
| ary_fem_recl     | 1 of 7         | 1     |     |       |     |       |       |
| jak_village-1    | 0 of 0         |       |     |       |     |       |       |
| kaj_house-1      | 0 of 3         |       |     |       |     |       |       |
| kam_village      | 2 of 15        | 1     |     | 1(1)  |     |       |       |
| maw_male_recl    | 0 of 29        |       |     |       |     |       |       |
| ama_autobiogr    | 0 of 0         |       |     |       |     |       |       |
| kup_autobiogr    | 1 of 29        | 1 (1) |     |       |     |       |       |
| mop_manioc       | 1 of 6         |       |     | 1(1)  |     |       |       |
| ti-a_autobiogr   | 3 of 11        |       | 2   |       |     | 1     |       |
| tim_salt         | 0 of 0         |       |     |       |     |       |       |
| ama_dry_seas     | 2 of 9         | 1(1)  | 1   |       |     |       |       |
| ama_rain_seas    | 8 of 51        |       |     | 7 (7) |     |       | 1 (1) |
| awu_fishing      | 1 of 31        |       | 1   |       |     |       |       |
| autuk_paraw_dias | 0 of 2         |       |     |       |     |       |       |
| kal_maw_ama_ov   | 1 of 5         |       |     |       |     | 1(1)  |       |
| mopot_birth      | 2 of 6         |       | 1   |       |     | 1(1)  |       |
| ula_seasons      | 2 of 12        | 1     | 1   |       |     |       |       |
| kal_sham_1       | 0 of 38        |       |     |       |     |       |       |
| Total            | 24 (14) of 254 | 5 (2) | 6   | 9 (9) | 0   | 3 (2) | 1 (1) |