

# A Grammar of Eibela:

A language of Western Province, Papua New Guinea

By

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## Statement of Authorship

I declare that this thesis is my own work, and has not been submitted in any form for any other diploma or certificate at any other university or institution. Information derived from the published or unpublished work or any other author or my own published work has been acknowledged in the text, and a list of references has been provided.

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The research presented in this thesis was completed in accordance with the guidelines of the National Health and Medical Research Council (NHMRC) National Statement on Ethical Conduct in Human Research, 2007. The research study proposal received human research ethics approval from the James Cook University Human Research Ethics Committee, Approval Number H4863.

A handwritten signature in black ink that reads "Grant Aiton". The signature is written in a cursive style with a large initial 'G'.

Grant Aiton

## Abstract

This thesis is a reference grammar of the Eibela language, also referred to as Aimele (Ethnologue code: AIL). Eibela has approximately 300 speakers living primarily in Lake Campbell, Western Province, Papua New Guinea. The majority of the data for this thesis was gathered in Lake Campbell, with some additional research taking place in Wawoi Falls, Western Province. In Lake Campbell, Eibela is the dominant language of the community, and is the language of day-to-day life. English and Tok Pisin are becoming more prominent as languages of commerce, and are preferred for written communication. Most members of the Lake Campbell community are also adept at speaking the languages of the surrounding communities.

The primary goal of this linguistic description is to describe the salient aspects of Eibela grammar, and to contribute to ongoing research in the Mount Bosavi region. This reference grammar describes the phonology, morphology, syntax, and discourse structure of Eibela, as well as providing example texts in the appendix. This grammar is also meant to facilitate the production of additional materials both for the linguistics community and for the Eibela community. In the course of describing the language, many stories and narrations have been recorded, transcribed, and annotated. From these texts, a digital corpus of Eibela has been compiled, which consists of a digitized collection of recordings as well as the accompanying transcriptions and metadata. This corpus is available in Aiton (2016).

The primary method of data collection was the collection and transcription of spoken narratives. This language data was then analyzed with the help of on-site consultants who are native Eibela speakers. Once my own understanding of the language was sufficiently advanced, I was able to observe speakers in order to analyze how the language is used in day-to-day activities, and therefore benefit from participant observation to develop an accurate representation of how the language is used. The narratives recorded were collected from a wide variety of genres such as traditional stories, explanations of common activities, and personal histories. This was to ensure that different styles of speech are represented in the description of the language.

The canonical constituent order in Eibela is SV in intransitive clauses and AOV in transitive clauses, where S is the subject of an intransitive clause, A is the subject of a transitive clause, and O is the direct object of a clause. Other constituent orders are possible, and are largely conditioned by information structure. Constituents that are prominent or topical are often omitted from clauses completely. Morphology is exclusively suffixing, with complex verbal morphology for tense, aspect, mood, and evidentiality, and optional ergative-absolutive case-marking on noun phrases in core argument positions. Word classes include open classes of nouns, verbs, and adverbs, and several closed classes including adjectives, demonstratives, postpositions, verbal particles, quantifiers, and others.

Intransitive predicates in Eibela can be formed by lexical roots of nearly any word class, although only verbs may be inflected by the full range of tense, aspect, mood, and evidentiality suffixes. Complex inflectional classes of verbs result in various patterns of stem alternations and suppletive tense forms, as well as complex predicates consisting of multiple verbal roots forming a single predicate. These complex predicates may take the form of serial verb constructions, auxiliary constructions, or converbal constructions. In these constructions, only the final verbal root is inflected for predicate categories such as tense, aspect, mood, and evidentiality.

Eibela clauses may be linked together into clause chains, which include several medial clauses culminating in a fully inflected final clause. In medial clauses, the different-subject-marking suffix {-bi:} may be used to show that the subject of the medial clause differs from the subject of the main clause, or that the subject of a main clause differs from the topic of the discourse episode. Clauses and noun phrases may additionally be morphologically topicalized, in which case, different-subject-marking functions in much the same way, with the verb in the topic clause being suffixed by {-bi:} if its subject differs from that of the main clause predicate.

Other interesting features of Eibela include a topicalization, evidentials, complex verbal suppletion, and semi-suppletive case forms for nouns and demonstratives. Topics may be formed morphosyntactically from arguments or clauses. Evidentials are a semantically defined class of construction which includes three different morphosyntactic categories, and covers

four different evidential categories corresponding to a C3 type system as described by Aikhenvald (2006a). Verb stems may have several variant forms, which in some cases is completely suppletive, and verbal tense, aspect, and modality has many instances of structural overlap. Nouns may also inflect irregularly based on noun class distinctions and case is also irregularly expressed on demonstratives.

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## Abbreviations

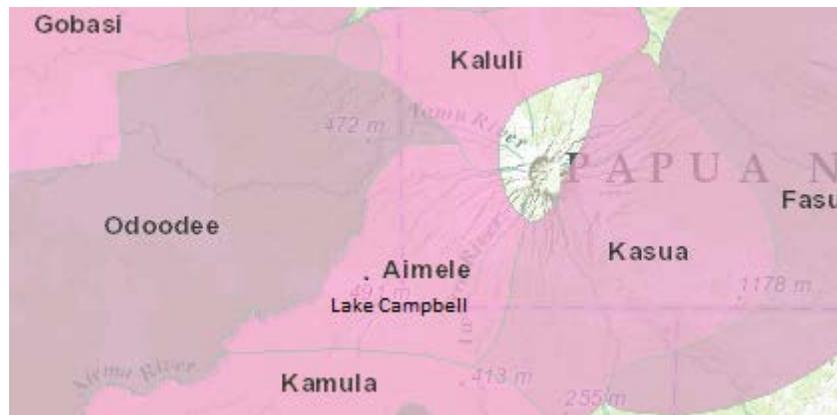
<b>1</b>	First person	<b>CS</b>	Copula subject	<b>IMP</b>	Imperative	<b>PL</b>	Plural
<b>2</b>	Second person	<b>D.S</b>	Different-subject	<b>INDEF</b>	Indefinite	<b>POSS</b>	Possessive
<b>3</b>	Third person	<b>DAT</b>	Dative	<b>IPFV</b>	Imperfective	<b>PRS</b>	Present
<b>ABS</b>	Absolutive	<b>DEF</b>	Definite	<b>INCH</b>	Inchoative	<b>PRO</b>	Proform
<b>ADV</b>	Adverbializer	<b>DEM</b>	Demonstrative	<b>INF</b>	Inferred	<b>PROG</b>	Progressive
<b>AFF</b>	Affirmative	<b>DEL.IMP</b>	Delayed imperative	<b>INST</b>	Instrumental	<b>PROH</b>	Prohibitive
<b>ANA</b>	Anaphor	<b>DEO</b>	Deontic mood	<b>IRR</b>	Irrealis	<b>PROX</b>	Proximate
<b>AND</b>	Andative	<b>DR</b>	Direct evidential	<b>KIN</b>	Kinship term	<b>PST</b>	Past
<b>ASS</b>	Associative	<b>DIR</b>	Directional	<b>LOC</b>	Locative	<b>PURP</b>	Purposive
<b>ASS.EV</b>	Associated event	<b>DISJ</b>	Disjunct reference	<b>LOW</b>	Lower elevation	<b>Q</b>	Question
<b>ASS.PL</b>	Associative plural	<b>DIST</b>	Distal	<b>LVL</b>	Level elevation	<b>QUANT</b>	Quantifier
<b>ASSER</b>	Assertion	<b>DU</b>	Dual	<b>MB</b>	Mother's brother	<b>QUOT</b>	Quotative
<b>AUX</b>	Auxiliary construction	<b>DUB</b>	Dubitative	<b>MED</b>	Medial	<b>REDUP</b>	Reduplicated
<b>BAS</b>	Basic pronoun	<b>DUR</b>	Durative	<b>MOD</b>	Modifier	<b>REF</b>	Reference clause
<b>BRIDGE</b>	Bridging clause	<b>EMPH</b>	Emphatic	<b>MULT</b>	Muliactional	<b>REL</b>	Relative clause
<b>CAUT</b>	Cautionary	<b>ERG</b>	Ergative	<b>NAME</b>	Proper name	<b>REP</b>	Reported
<b>CC</b>	Copula complement	<b>EXC</b>	Exclusive	<b>NEG</b>	Negator	<b>SIM</b>	Simultaneous
<b>CF</b>	Counterfactual	<b>EXCL</b>	Exclamatory	<b>NOM</b>	Nominalizer	<b>SG</b>	Singular
<b>COM</b>	Comitative	<b>FIN</b>	Final clause	<b>N.3</b>	Non-third person	<b>S.R</b>	Speech report
<b>COMP</b>	Complete	<b>FOC</b>	Focus	<b>N.FIN</b>	Non-final verb form	<b>STAT</b>	Stative
<b>CON</b>	Converb	<b>FUT</b>	Future	<b>N.PRS</b>	Non-present	<b>ST.IMP</b>	Strong imperative
<b>CONS</b>	Consequence	<b>HES</b>	Hesitation	<b>PART</b>	Partitive	<b>SVC</b>	Serial verb construction
<b>CONT</b>	Continuative	<b>HIGH</b>	Higher elevation	<b>PAT</b>	Patient	<b>TEL</b>	Telicity changing
<b>COORD</b>	Coordinator	<b>HYPH</b>	Hypothetical	<b>PERF</b>	Perfect	<b>TOP</b>	Topic
<b>COP</b>	Copula	<b>INCOMP</b>	Incomplete	<b>PFV</b>	Perfective	<b>VEN</b>	Ventive

## Chapter 1 Introduction

### 1.1 Overview

Eibela, also referred to as Aimele (Ethnologue code: AIL), has approximately 300 speakers living primarily in Lake Campbell. Some speakers have migrated south to the nearby village of Wawoi Falls, and a handful of speakers reside in communities north of Lake Campbell. These communities are situated south-west of Mount Bosavi along the border between Western Province and Southern Highlands Province in Papua New Guinea. In Lake Campbell, Eibela is the dominant language of the community, and is the language of day-to-day life. English and Tok Pisin are becoming more prominent as languages of commerce, and are preferred for written communication. Most members of the Lake Campbell community are also adept at speaking the languages of the surrounding communities.

Figure 1: Lake Campbell and the surrounding region showing Eibela (Aimele) territories ("Langscape" 2016))



Many of the languages of the Mount Bosavi watershed, the region immediately surrounding Mount Bosavi, have been the subject of only preliminary linguistic study, and at least two have not been previously described. The first of these undocumented languages is Sonia, which is spoken by around 300 people divided between Lake Campbell and at least one village (Baniso) farther north, near Kaluli Territory (Kelly, 1993, p. 29). The other is Eibela, which is the focus of this Grammar.

The Bosavi region, and especially the Bosavi watershed, is a center of extreme language diversity, with widespread multilingualism and intermarriage between the communities. In Wawoi Falls, communities representing the Odoodee, Kamula, and Eibela languages all live in a single extended settlement (Routamaa and Routamaa, 1992). Similarly, in the settlement at Lake Campbell, communities representing these three languages are present with the addition of a Sonia-speaking population. Kaluli and Kasua are also well known by inhabitants of Lake Campbell due to ongoing contact with the Kaluli- and Kasua-speaking communities to the north and east. This extensive language contact has likely contributed to the considerable structural similarities between these languages.

Although Eibela is the dominant language in Lake Campbell, the language is not currently written, and no written literature is available in Eibela. English and Tok Pisin are becoming more widely used, and neighboring languages, particularly Kaluli and Kamula, are also widely spoken. While Eibela is still vital and spoken by people of all ages, the extreme language contact and multilingualism found in Lake Campbell, along with the increasing prominence of surrounding languages, could easily result in language attrition, and the eventual decline of the Eibela-speaking population.

## 1.2 Grammatical Profile

The canonical constituent order in Eibela is SV in intransitive clauses and AOV in transitive clauses, where S is the subject of an intransitive clause, A is the subject of a transitive clause, and O is the direct object of a clause. Other constituent orders are possible, and are largely conditioned by information structure (see §10.4). Constituents which are prominent or topical are often omitted from clauses completely. Morphology is exclusively suffixing, with complex verbal morphology for tense, aspect, mood, and evidentiality (see chapter 7), and optional ergative-absolutive case-marking on noun phrases in core argument positions (see Aiton, 2014; §5.4; and §10.3). Word classes include open classes of nouns, verbs, and adverbs, and several closed classes including adjectives, demonstratives, postpositions, verbal particles, quantifiers, and others (see chapter 3 on open word classes and chapter 4 on closed word classes).

Intransitive predicates in Eibela can be formed by lexical roots of nearly any word class, although only verbs may form transitive predicates and be inflected by the full range of tense, aspect, mood, and evidentiality suffixes. Complex inflectional classes of verbs result in various patterns of stem alternations and suppletive tense forms, as well as complex predicates consisting of multiple verbal roots forming a single predicate (See chapter 6 on predicate structure and chapter 7 on verbal morphology).

- (1) [a:ge: φεφε-ja:]<sub>A</sub> [ε:na:]<sub>X</sub> [do:bo:su:-wε:]<sub>X</sub> [ti \_\_\_\_\_ a:nε:]<sub>PRED</sub>  
 dog skinny-ABS DEM underneath-LOC descend go:PST  
 ‘The skinny dog went down underneath there.’

- (2) so:bolo-wa: [tεbε do:-wa:]  
 plane-ABS land STAT-PST  
 ‘A plane landed.’

These complex predicates may take the form of serial verb constructions as in (1), or auxiliary constructions, as in (2). In these constructions, only the final verbal root is inflected for predicate categories such as tense, aspect, mood, and evidentiality.

Eibela clauses may be linked together into clause chains, which include several medial clauses culminating in a fully inflected final clause. In medial clauses, the different-subject-marking suffix {-bi:} may be used to show that the subject of the medial clause differs from the subject of the main clause, or that the subject of a main clause differs from the topic of the discourse episode, as seen in example (3) (see §9.4 on clause chaining).

- (3) a. [[nε εja:-ja:]<sub>CS</sub> [mumu:nε ελε:bε]<sub>CC</sub> [la’-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG:MOD father-ABS NAME river.head COP-D.S  
 ‘My father was at the head of Mumu:ne creek.’

- b. [[sa:goi εja:lε:        motu:wε:    εja:lε:]<sub>A</sub>  
 NAME    COORD:DU    NAME        COORD:DU
- c. [gεda:]<sub>PRED</sub> [jo:φa:]<sub>O</sub>        [sεdε        hεna:    mi-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 beat        tree.trunk:ABS    hit:N.SG.A    DUR        come-PST

‘Sa:goi and Motu:wε: came beating tree trunks (so their approach would be heard).’ (A.1.4-5)

In this example, the subject of the main clause in (3)a is *nε εja:ja:* ‘my father’, who is described as being at a location, whereas in the final clause (3)b the topical subject is the coordinated noun phrase *sa:goi εja:lε: motu:wε: εja:lε:* ‘Sa:gai and Motuwe’, who are coming while hitting trees. Clauses and noun phrases may additionally be morphologically topicalized, in which case, different-subject-marking functions in much the same way, as in (4)a, with the verb in the topic clause being suffixed by {-bi:} if its subject differs from that of the main clause predicate.

- (4) a. [[no:-wε:-mi:=ja:        εimε        ka:        a:gεlε-**bi**:=ja:]<sub>TOP</sub>  
 INDF-LOC-ASSOC=ABS    already    FOC    laugh-D.S=TOP  
 ‘Another one was already laughing, then...’
- b. [no:        wε        a:gε:        kεga:-ja:        wε        su:-wε:        da:-li:=ja:]<sub>TOP</sub>  
 INDF    this        dog        bony-ABS    this        inside        lie-SIM=TOP  
 ‘As this one, this bony dog was still lying inside...’
- c. wε        dεdε        la:-bi:]<sub>FIN</sub>  
 this        hear        COP-D.S  
 ‘This (dog) was listening.’

This is shown in example (4)a, where the subject of the topic clause is a pig, who is laughing at the dogs in a folk tale, while the subject of the main clause in (4)c is one of the dogs, who is covertly listening.

Other interesting features of Eibela include a topicalization, evidentials, complex verbal suppletion, and semi-suppletive case forms for nouns and demonstratives. Topics may be formed morphosyntactically from arguments or clauses, and are discussed in §5.8 and §9.3.4.

Evidentials are a semantically define class of construction which includes three different morphosyntactic categories, and covers four different evidential categories corresponding to a C3 type system as described by Aikhenvald (2006a). These evidentials are described in §7.6. Verb stems may have several variant forms, which in some cases is completely suppletive, as described in §7.2, and verbal tense, aspect, and modality has many instances of structural overlap which is described in chapter 6 and chapter 7. Nouns may also inflect irregularly based on noun class distinctions as described in §3.2.2. Case is also irregularly expressed on demonstratives, as discussed in §4.3.1.

### 1.3 Eibela History and Migrations

Written records of Eibela history is not available, and the majority of the information in this section is based on oral histories and extensive research in neighboring Bosavi cultural groups. Oral histories indicate a relatively recent migration from the region north of Mount Bosavi, and there is presently a great cultural and linguistic similarity to the Kaluli people who presently occupy this region.

#### 1.3.1 Early History

Prior to the introduction of Christianity, warfare was endemic to the Bosavi region, with raids between neighboring communities, which would be followed by reprisals and, in extreme cases, dislocation or assimilation of other groups (Schieffelin and Crittenden, 1991, pp. 62-63). This violent environment may have precipitated the isolation of threatened communities resulting in linguistic divergence, as well as the formation of alliances facilitating language contact. Shaw cites the frequent raids of the Bedamini on lowland peoples as one such divisive force between regions (Shaw, 1986, p.57). Raids were also carried out between the Eibela and Odoodee, which may explain why these two groups are still somewhat distant linguistically. In contrast, the Eibela held alliances with the Kaluli, Kasua, and Kamula peoples, and today close linguistic ties may be seen among these groups. More recently, government influence may have begun the reversal of this violence-induced isolation and resulting linguistic diversification. Former patterns of small, scattered longhouse communities are being consolidated into larger

communities, and erstwhile enemies are establishing contact now that warfare has been outlawed.

Relationships with neighboring communities were characterized by alliances with extended family and periodic raids and warfare with rivals. In the watershed region, this was realized by ongoing conflict between the Odoodee and the watershed groups south of Mount Bosavi, particularly the Eibela and the Kamula (Routamaa and Routamaa, 1992, p. 5). Numerous Kamula loans in Eibela further evidence long-standing contact between the two groups. North of Mount Bosavi, the Kaluli fought with the Bedamini and the Etoro to the west, and were often caught up in conflicts between the Onabasulu and Fasu, with allies in both groups (Schieffelin and Crittenden, 1991, pp. 62-63). Alliances were often formed by complex relationships of intermarriage and wealth exchange rather than agreements between communities as political entities (Schieffelin and Crittenden, 1991, pp. 59-62). An individual could develop cordial relationships with in-laws through gestures of hospitality, gifts of pigs or other forms of wealth. Pigs were the primary source of wealth for such exchanges, including the payment of bride-prices, but items such as axes, dog teeth, and cowrie shells would be exchanged as well (Grosh, 1991, pp. 16-17). Reciprocal marriage exchanges would often create multiple ties between individuals and families in two communities and ensured relatively stable bonds of reciprocity between neighboring groups, despite the lack of any sort of central leadership within the communities. Violence between allied groups was not unheard of, however. Accusations of witchcraft, adultery, or pig theft could trigger violent reprisals within these allied communities, and even within individual communities (Schieffelin and Crittenden, 1991, pp. 62-63). These systems of warfare and reprisal were eventually eliminated by the introduction of outside governance.

Settlements consisted of a longhouse community of 25-50 members, which often included several families related through patrilineal clan relations (Shaw, 1986, p. 56; Grosh and Grosh, 1991, p. 16). In addition, bush camps would be kept in the surrounding jungle, where the primary hunting and gardening activities would take place (Kelly, 1993, p. 37). The buildings themselves were formed by roofs thatched with sago leaves, and floors and walls built from

black palm timber and bark. The entire structure was elevated on posts about three to four meters high. Community longhouses were typically divided into separate areas for men and women by a shoulder high partition (Kelly, 1993, pp. 38-39). In addition, a longhouse site had to be adjacent to fresh water and food sources such as sago swamps and gardens, and was often located on a hill or ridge in order to offer a defensible position from raids. When the surrounding resources were exhausted, the entire community would relocate to a new site (Schieffelin and Crittenden, 1991, pp. 59-60). This mobility sometimes makes the identification of individual groups or locations difficult. A village or camp may be referred to by a clan name, or by the name of the temporary village site. As the village migrated, the name may shift to reflect a new village site, or it may be retained as the name of the clan (Grosh and Grosh, 1991, p. 3, p. 17). Additionally, migrations into the territory of a neighboring linguistic group may bring about language and identity shifts as well (Similar considerations are discussed in de Vries, 2012).

In the early 20<sup>th</sup> century, the Eibela people migrated to their current location from a region west and north of Mount Bosavi, near what is now Kaluli Territory. This supports a hypothesis of long-standing contact between speakers of Eibela, Kaluli, and Sonia, who all co-inhabited the Bosavi region. The earliest reported migration brought the Eibela into greater contact with Kasua speaking groups. A large settlement, Uludija, was created near Kasua territory, and was the primary Eibela settlement until the early 1990's.

The First governmental patrol of the region was in 1935 by Jack Hides and Jim O'Malley; this was followed in 1936 by Ivan Champion and C. T. J. Adamson (Schieffelin and Crittenden 1991, p. 257). The next patrol to the area was not until the 1950's, when regular patrols surveyed the area every two years. During this time, the first census of the population was conducted, medical care was introduced, and the first government mandates were enforced. Violence was outlawed along with open burials. In addition to burying the dead, the locals were required to keep buildings tidy and dig latrines (Ibid., pp. 262-264). Missionary activity followed soon after, arriving in northern communities in 1964 and reaching Wawoi Falls in the 1970's. Missionaries quickly became the most influential channel of outside influence.

From the late 1960's to 1980's, several communities surrounding the Eibela were studied by anthropologists, including the Kasua (Freund 1977), the Kamula (Wood 1982), and Kaluli (Schieffelin 1976). During this period, dispersed longhouse communities were consolidated into villages, and families were encouraged to build separate homes rather than living communally in the longhouse. This helped to slow the spread of epidemic disease, but only after populations had been considerably reduced by introduced diseases. Kelly estimates that the Kaluli and Kasua populations dropped by 14% and 27% respectively due to introduced diseases (1993, p. 33). Two airstrips were established near Nomad in eastern Kaluli territory in the 1960's (Kelly 1993, p. 31), and in 1970, a mission-run school and a health clinic were opened at Bosavi Station north of Mount Bosavi (Schieffelin and Crittenden 1991, p. 266). In 1980, an airstrip was completed at the Kamula settlement of Wawoi Falls, and a health center and school were established there soon afterward. These facilities served to draw members of surrounding communities, including many Eibela, to these sites. Eibela children began attending school at Wawoi Falls, bringing them into prolonged contact with Kamula, and accelerating patterns of intermarriage and intermingling of these two groups.

### 1.3.2 Recent History

In the Early 1990's, Eibela and Odoodee settled permanently at Lake Campbell in order to cooperatively construct their own airstrip. They were joined by Sonia speakers sometime afterwards. These Sonia migrated from the area around Baniso, which borders Kaluli and Onabasulu territory. Uludija was abandoned as a permanent settlement, although it remains in use as a bush camp. These migrations were not uniform for all of the Eibela people, rather, some clans or families migrated earlier and some later. The earliest southern migration was undertaken by members of the A:mine clan, and the dialect of these Eibela has some phonological differences, which might be attributed to greater language contact with the Kasua. Similarly, the most recent group to migrate to Lake Campbell are members of the Kukune:si clan, who display a stronger influence from Kaluli in their speech. Linguistic variation among the Eibela may therefore be tied to historical patterns of migration and language contact, although the Eibela clans are now more consolidated than previously.

Many practices have continued in Lake Campbell despite the introduction of government influence, although some have been adapted to accommodate innovations introduced by outside peoples. Subsistence agriculture and hunting are still the primary sources of food. Travel between communities is still by foot or canoe in most cases. Bows, spears, and bilums are still being made and used in daily life. Buildings built from milled lumber are quite uncommon compared to local methods of construction, although introduced materials such as nylon, cloth, metal nails and blades, etc. have been integrated into the manufacturing of tools and buildings. The separation of the sexes in longhouses is similar to contemporary gendered seating observed in church arrangements, but is not strictly adhered to outside of this setting. The Evangelical Church of Papua New Guinea is dominant in the region, with no internal denominational differences, and the social organization and interaction in the community is primarily carried out during frequent church gatherings and fellowships.

## 1.4 Lake Campbell

### 1.4.1 Geography and Climate

Lake Campbell lies in the tropical lowlands surrounding Mount Bosavi, which is south of the mountains of the New Guinea highlands in the Southern Highlands Province. This region is characterized by high annual rainfall and dense tropical jungle. South of the mountain, there are two distinct seasons differentiated by rainfall. In the dry season, which lasts from mid-August to mid-May, there is occasional rainfall and temperatures range from 20 to 32 degrees Celsius. The wet season, ranging from mid-May to mid-August, features near daily rainstorms and cools to 15 to 25 degrees Celsius (Routamaa and Routamaa, 1992). Additionally, there is a seasonal shift in weather patterns, with light south-easterly wind from April to October, and strong westerly winds from November to March (Grosh and Grosh, 2000). The terrain itself is characterized by numerous waterways and corresponding ridges and valleys. This difficult terrain and a rather low average population density, which averages approximately 1.5 people per square kilometer (Kelly 1993, p. 33), have led to this region remaining relatively isolated from outside development (Schieffelin 1976, p. 263).

#### 1.4.2 Subsistence and Economy

While practices of settlement and food production have changed considerably, most food consumed on a daily basis is still derived from gardens, fishing, and foraging rather than being imported. Sago is the staple crop, and is supplemented by small game, sweet potato, taro, and various fruits and vegetables harvested from their gardens (Kelly 1993, p. 38; Schieffelin and Crittenden 1991, p. 59-60). Domestic pigs are kept, but are generally only slaughtered for special occasions (Kelly 1993, p.38; Schieffelin and Crittenden 1991, pp. 59-60).

Members of the community do occasionally travel to Kamusi, a logging center about 100 kilometers to the south east, or to Kiunga, an urban center about 150 kilometers to the northwest. These trips are primarily to buy clothing, shoes, batteries, salt, and other manufactured goods. Buying items specifically for resale is also occasionally practiced on a small scale, although there is no stable trade store or merchant in Lake Campbell. The only other source of such goods is an occasional visit by merchants from urban centers in the Southern Highlands, such as Tari.

#### 1.4.3 Settlement and Facilities

Currently, Lake Campbell is a permanent settlement and large-scale migration seems to have ceased. The longhouse community has been dissolved since the introduction of Christianity, and individual nuclear families now live in separate houses, and the longhouse is no longer maintained. The most recently built longhouse is about ten years old and has fallen into disrepair. There are currently no plans to repair this longhouse or to build another. Individual nuclear families still split their time between their bush camps, where they gather sago, maintain gardens, and hunt, and the village itself.

Until recently, medical care and schooling have only been available in Wawoi Falls, which is primarily a Kamula speaking community. This situation has likely contributed to the prominence of the Kamula language among the Eibela community and Lake Campbell, since nearly everyone who has attended school has spent considerable time in Wawoi Falls, and likely received their primary school education in the Kamula language. In addition, the Kamula and Eibela people have had a long history of cooperation and intermarriage. In 2013, an Aid Post

was established, providing a source of medical aid; however, there are not always personnel available to administer medications. Access to schooling has been likewise sporadic. In 2013, a teacher was assigned to begin teaching primary school in Lake Campbell. It is hoped that local schooling will be consistently available in the future; however, there is currently no access to vernacular education, or materials written in Eibela.

#### 1.4.4 Village and Land organization

Lake Campbell is divided into four different “corners”. These are more or less demarcated by tribal or clan affiliation. The central section contains the church, aid post, communal cook-houses, and sports facilities (a basketball court and a field for touch rugby and soccer), and is populated primarily by Eibela people. The second corner is also populated by Eibela, and is dominated by one Eibela clan in particular, the Fili:so. The two other corners are populated by people of other tribes who have migrated to Lake Campbell within the last two decades: the Bani corner, which is populated by members of the Sonia, or Sunia, tribe, and the Tulusi corner, which is populated by Odoodee people. These names, Bani (or Baniso) and Tulusi, refer to villages that these people migrated from. In addition to these divisions of the village, land for hunting and farming is generally owned and use by specific clans or families, who use and maintain bush camps and gardens on this territory.

### 1.5 Social Organization, Marriage, and Contact to Outside Groups

#### 1.5.1 Social Organization and Marriage

The social organization of the Eibela living in Lake Campbell and Wawoi Falls is heavily based on patrilineal clan affiliations and intermarriage. There are five major clans present with the following names: Sesa:ne, Fili:so, A:mine, Ha:bila:, and Kukune:si. The A:mine clan constitutes the majority of the Eibela in Wawoi Falls, and was the first clan to migrate south from an area near the modern-day Kaluli territory. The other clans are more prominently represented in Lake Campbell. The clan is a social unit that often pools and shares resources including land use, food, and property. This is particularly evident when a member of a clan requires a large amount of money or goods in order to pay a bride price or compensation penalty.

Marriage should be between two individuals from differing clans, and is accompanied by an exchange of both wealth and brides. When giving a woman to another clan in marriage, it is expected that the receiving clan will then reciprocate by offering another woman for marriage, as well as a bride price, which may consist of bush knives, axes, cash, or other forms of wealth. This second marriage should also be accompanied by the presentation of a bride price from the family or clan of the groom. Therefore, a successful marriage will be a reciprocal exchange of both women and wealth, resulting in two marriages, and ongoing ties between two clans. The bride price is often gathered from the contributions of several members of a clan, and not only the immediate family of the groom. Contributors outside of the clan may also contribute to a bride price, and by doing so, enter into a kinship relation with the groom. Failure to meet these obligations, by failing to give either a woman or a bride price in exchange for a marriage, will incur a long standing debt, which will be revisited in future dealings between these clans.

Another prominent cause for large transfers of wealth is the payment of compensation. When someone has a grievance against another member of the community, the matter is judged in a formal court or council. Such conflicts are most often resolved by requiring the offending party to pay an agreed amount of money to the plaintiff. Less often, the offending party may be required to perform manual labor as punishment. Such disagreements do occasionally result in violence, though this is, of course, discouraged.

Governance through the formation of western-style boards is also becoming increasingly common. These feature the familiar roles of Chairman, Vice-Chairman, Treasurer, and Secretary. Such boards have been created for the management of church activities, sports affairs, school regulation, and land management. The church board in particular exerts a great deal of influence in the community. Communal work projects, such as cutting grass or preparing for festivals are directed and organized through the church, and extends to the Odoodee and Sonia communities as well.

### 1.5.2 Contact with Outside Groups

The Eibela think of themselves as occupying the center of the Bosavi watershed, with neighbors on all sides. The Eibela are in frequent contact with Kamula, Kaluli, Kasua, Odoodee,

and Sonia peoples, and occasional contact with other groups either from communities further south, such as the Gogodala, or to the north, such as the Huli.

At least as early as the 1970's, Eibela have been interacting with Kamula, and living in close proximity to Wawoi Falls. More recently, Eibela have shared a settlement with the Sonia and Odoodee. A handful of Kaluli and Kasua live in Lake Campbell, but the majority of contact between the Kaluli or Kasua peoples and Eibela takes place through mutual visits, or marriage exchanges, rather than the cohabitation of a common settlement. Lake Campbell also lies along a trade route from the Southern Highlands to trade centers in Kamusi and Balimo. This brings traders of clothes, batteries, and other manufactured goods, and occasionally smugglers, from the Highlands through Lake Campbell as they continue south towards the coast. Marriages to women farther afield have also been becoming more common as men become more mobile. Marriages to women from Balimo and as far away as Mount Hagen have been reported. This in turn strengthens ties between these distant communities through marriage exchanges and ongoing affinal relationships.

In addition to these social ties to other communities, professional and political associations are becoming increasingly common. Logging and gas mining provide a source of income to many men, and also increases contact to Tok Pisin, which is the preferred lingua franca in the region. Eibela then travel to urban centers such as Emeti, Balimo, Kamusi, Tari, or Kiunga in order to spend the money they earn or participate in provincial politics, again increasing their exposure to Tok Pisin.

## 1.6 Linguistic Affiliation

### 1.6.1 The Mount Bosavi Language Family

The Mount Bosavi language family was first proposed by Daniel Shaw (1986). Shaw assigns 14 of the languages in the greater Mount Bosavi area into a genetic grouping based on the relative consistency of lexical similarities between the languages within the family as compared to the surrounding, non-Bosavi, languages (such as Fasu to the north-east, Pare to the west, or Bogaia to the north) (ibid, pp. 59). One Bosavi language, Kaluli, has also been

assigned to the putative Trans-New Guinea Phylum, of the central and South New Guinea stock. By extension, this would suggest that the whole Bosavi family should share this classification (Wurm 1978), although Routamaa (1994) suggests that it may be more appropriate to treat Kamula as a family level isolate. The family is bounded to the north and west by the Strickland river system, extends east to the Kikori River, and is bordered in the south by the Aramia River as seen in Figure 1.

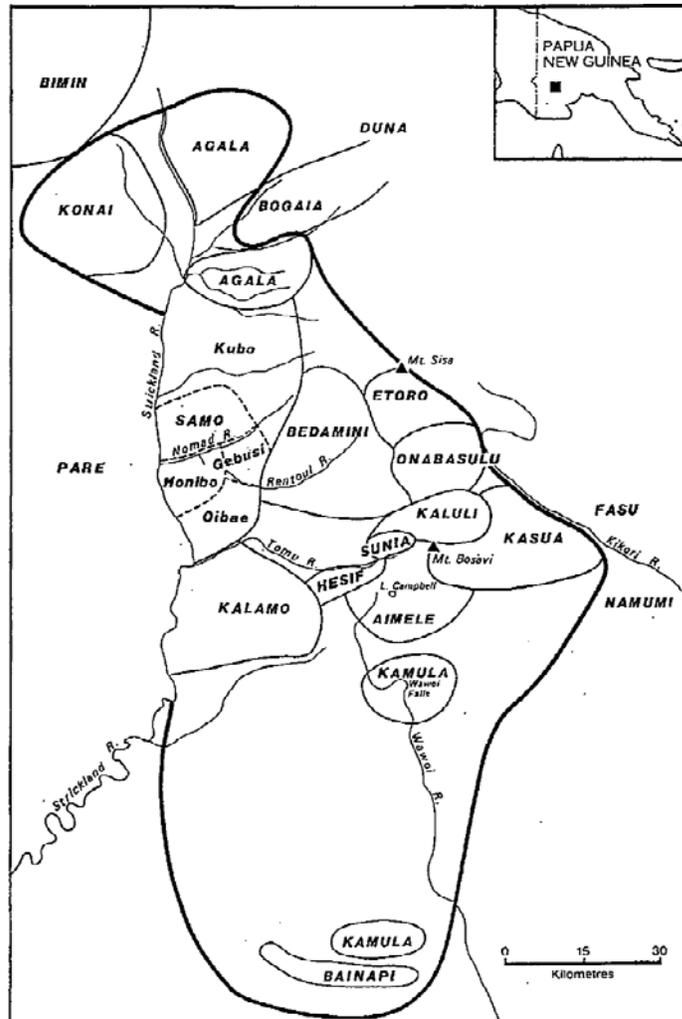


Figure 2: The Mount Bosavi Language Family (From Shaw, 1986, p. 46)

These languages are further subdivided into three branches based on lexical and phonological similarity. Languages within these sub-groupings are shown by Shaw to share a greater percentage of cognates with languages within their regional branch than to those Bosavi languages belonging to one of the other sub-groups (Shaw 1986, p. 53). These divisions,

and the full listing of the Mount Bosavi Languages, are shown below with the regional names used by Shaw:

Table 1: The Sub-divisions of the Bosavi Language Family

<b>Strickland Plain</b>	<b>Papuan Plateau</b>	<b>Bosavi Watershed</b>
Konai	Bedamini	Kaluli
Agala	Etoro	Sonia (Sunia)
Samo	Onabasulu	Kasua
Odoodee (Kalamo)		Eibela (Aimele)
Hesif		Kamula
		Bainapi

(Shaw 1986, p. 48)

These divisions are formed primarily using lexicostatistical analysis, in which Shaw compares the percentage of shared basic vocabulary between languages, and average cognate percentages between groups. Using this method, he compares the amount of common vocabulary with the metric formed by Swadesh (1955), which states that a shared basic vocabulary of approximately 80% or higher signifies two dialects of one language, 50% to 80% signifies a genetic relationship at the sub-group level, 30% to 49% signifies a relationship at the group level, and 20% to 29% signifies a relationship at the family level. The Bosavi language family consists of those languages in the Bosavi region which all share at least 20% of their basic vocabulary with each of the other languages of the group (Shaw 1986, p. 52). One language, Doso, is located within the geographical domain of the Watershed group, but was not known by Shaw at the time of his survey, and its linguistic status within the region is therefore unknown. Lexicostatistics offers an initial hypothesis of the organization of the Bosavi language family, but it must be emphasized that degrees of grammatical and structural similarity of the languages

are not considered, and Shaw's analysis must therefore be regarded as a cursory first attempt before more data are available.

Geisler and List (2011) presents a general critique of lexicostatistics, and show the method to be largely flawed in several respects. If the results are to be used to form an accurate model of the genetic relationships within a language, the method requires two assumptions to be true. Firstly, the vocabulary list must be free of borrowed forms, so that similarities may be attributed to genetic inheritance rather than language contact. Secondly, it is assumed that the amount of shared vocabulary is representative of the genetic relationship. The first assumption is the motivation for choosing a “basic” vocabulary, which has been believed to be resistant to borrowing and external influence. This may not be the case however, and many lexicostatistical studies have been shown to contain unidentified borrowings which skew their results (*ibid*, p.8). Once lists are compiled the decision regarding which items are shared must be made, i.e. identifying cognate forms which are inherited from a common ancestor language. This process is criticized as inherently subjective and inconsistent, with multiple studies on identical languages offering widely varying results (*ibid*, p.3).

In determining the internal structure of the Bosavi family, Shaw references phonology, mutual intelligibility, multilingualism, and cultural interaction as factors; however, a statistical comparison of cognates is the principle factor in his analysis of the subgroupings. Phonology is discussed briefly, and patterns of multilingualism are not discussed at all beyond a cursory mention. All of these methods indicate a gradient structure, wherein the structure of the family does not display clear clusters of languages which are clearly differentiated from the Bosavi languages outside of this group, but instead each language bears the greatest similarity to those languages that are geographically proximate, forming a “chain” of languages (Shaw 1986, p. 47). Dividing this chain into sub-groups is therefore at times more akin to dividing a continuum, rather than identifying clearly differentiated groups. As a consequence, languages which sit on the border of two proposed groups could possibly be classified as belonging to either group depending on the criteria employed.

The phonological inventories offer four criteria for classification based on the distribution of certain phonemes. Shaw discusses the phoneme /f/, equivalent to the phoneme /ɸ/ described elsewhere in the description of Eibela, which is present in most of the Bosavi languages, but absent from Kasua, Kamula, and Bainapi, while /p/ is present in all of the Bosavi languages outside of the Strickland Plain group with the exception of Eibela. The distribution of these phonemes shifts in a general transition from north to south. Languages feature /f/ but not /p/ in the north, and /p/ but not /f/ in the south, with both /p/ and /f/ being present in the languages in between (p.47). Shaw reports another areal distribution pattern between the phonemes /l/ and /r/. Both are present in the languages of the Watershed and the Strickland Plain groups, with /r/ manifesting as an alveolar lateral flap /ɺ/ in the Strickland Plain languages and two Watershed languages (Eibela and Kaluli). In the languages of the Papuan Plateau group, /r/ is absent and only /l/ is featured. A final variation is reported in the vowel inventories, where /o/ is absent from the Papuan Plateau languages, and two Watershed languages as well (Kamula and Bainapi). The phonological criteria show a general north-south gradation with the Strickland Plain and Papuan Plateau emerging as cohesive groups, although the Watershed group remains somewhat heterogeneous. Some of this analysis is inconsistent with more recent studies of the Watershed languages. My own experience with Eibela shows that [p] is present as an allophone of /ɸ/, and [l] and [r] (or [ɺ]) are allophones of a single phoneme. Logan (2003) reports /f/ as a phoneme in Kasua, but does not report either /l/ or /r/ as phonemes. Additionally /o/ is reported in Kamula, and both Kamula and Kaluli are reported to lack /r/ as a distinct phoneme (Routamaa, 1994, Grosh, 2004b). These may well be recent innovations or differing interpretations of allophonic variation.

The statistics used by Shaw attempts to identify a family structure in which the shared vocabulary between languages at the group level significantly exceeds the level of vocabulary shared between these languages and languages from other groups within the family. According to Shaw's analysis of word lists, the average percentage of shared vocabulary in the Strickland Plain group is 62%. The highest level of shared vocabulary between any of these languages and a language outside this group is significantly lower at 47%, demonstrating quite clearly that the Strickland plain group forms a distinct branch based on shared vocabulary. However, the

“chaining” pattern discussed above somewhat blurs the boundary between the Watershed and Papuan Plateau languages. The average level of shared vocabulary in the Watershed family is 49%, while Kaluli shares roughly 49% of its vocabulary with the languages of the Papuan Plateau group as well, and may therefore be seen as the link joining the two groups. The internal diversity of the Watershed group also makes it more difficult to treat these languages as a cohesive group distinct from other Bosavi languages. The average percentage of shared vocabulary is low between these languages (49%) when compared to that of the Papuan Plateau (56%) and Strickland Plain (62%) (Shaw 1986, p. 55). The internal diversity of the Watershed group further motivates more extensive investigation, although more documentation of the languages in the area must be completed before a reliable analysis will be possible.

In my own experience, it seems clear that Eibela is closely related to Sonia, Kaluli, and Kasua. All of these languages seem mutually intelligible, although this could also be the result of widespread multilingualism. Kamula is widely spoken in Lake Campbell although the two languages appear to be quite different in terms of grammar and lexicon. Odoodee is not widely spoken by Eibela-speakers, although many report that they can understand this language. This lack of proficiency in Odoodee may be attributed to the lack of historical contact between the Eibela and Odoodee people. Doso is very similar to Kamula, and those who speak Kamula generally report that they can also understand Doso. I did not encounter Bainapi speakers during my stay at Lake Campbell or Wawoi Falls and cannot comment on its similarity to other languages.

## 1.7 Linguistic Environment and Education

Eibela is still the primary language used in all aspects of daily life; however, Kamula and Tok Pisin are becoming more prominent among the younger generation. Signs of language shift are already apparent at Lake Campbell, but as of 2013, the language is still vital and is not in immediate danger of obsolescence.

The Eibela speaking population is estimated to be approximately 300 individuals based on my own census. The statements of who is considered an Eibela speaker were a subjective

assessment of the speaker themselves and the opinion of local consultants, and this number must therefore be presented as approximate. The total population of Lake Campbell is roughly 400 adults, based on the official tally of eligible voters. Of these, the majority are Eibela speakers, with Odoodee and Sonia forming prominent minorities. The number of Eibela speaking children is particularly difficult to determine, however. Marriages between speakers of different languages are common, making the primary language of the children difficult to predict. Often this is not consistent within a single family, with some children speaking the language of the mother, and some preferring the language of the father. This is also not predictable based on the sex of the child; sons and daughters have both been observed to adopt the language of either the father or mother. It is also not a necessary factor in determining identity; many descendants of Eibela families in Wawoi Falls no longer speak Eibela, but nonetheless identify as Eibela. Therefore the number of speakers of Eibela, as opposed to the number of people who identify as Eibela, can only be roughly approximated.

### 1.7.1 Language Use and Multilingualism

The Eibela frequently intermarry with the Kamula, Kasua, Sonia and Kaluli, which contributes to multilingualism in Lake Campbell. The Eibela in Wawoi Falls, and most of the Eibela in Lake Campbell, are fully bilingual in Kamula, and interact extensively with the surrounding Kamula communities. Routamaa and Routamaa (1992) reports that 20% of young people (less than 20 years old) among the Eibela community at Wawoi Falls are literate, with the older generation being completely illiterate. Over the past 20 years, this has likely improved considerably, but literacy remains low, and is limited to the generations which have attended formal schooling (less than 40 years old).

The availability of schooling has been sporadic and inconsistent at Lake Campbell. Schooling is generally available in the neighboring village Wawoi Falls, but attendance has also been low. The language of elementary schooling in Lake Campbell (Pre-Elementary to Grade 3) has previously been Kaluli<sup>1</sup> at Lake Campbell, and Kamula at Wawoi Falls. The language of

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<sup>1</sup> The previous elementary teacher at Lake Campbell has been a Kaluli man who had been staying at Lake Campbell for approximately 10 years. He does not speak Eibela, but instead continued to use Kaluli. He has since left the community and as of 2016, there is currently no teacher residing in Lake Campbell.

education would then change to English or Tok Pisin for primary school (Grade 4 to Grade 6). More recently, this policy has changed, and English is now preferred for all levels of education. Despite this, English proficiency remains low, and is rarely used. Tok Pisin is commonly used when speaking to non-Bosavi peoples, including those from the Highlands or coastal regions, and often Odoodee speakers as well. When speaking to Kasua, Kaluli, or Sonia speakers, the Eibela speaker will often be able to speak in the other language, or at least rely on the mutual intelligibility of the two languages rather than using Tok Pisin. It is not uncommon for people to converse in separate languages, with one person speaking Kamula, and another person speaking Eibela, for example.

### 1.7.2 Tok Pisin and Kamula

The greatest threat to the vitality of Eibela is the growing prominence of the Kamula language. A long history of intermarriage has resulted in complete Eibela-Kamula bilingualism among most of the Eibela community, while the proficiency and use of Tok Pisin is still limited to younger or more mobile individuals. While Tok Pisin is gaining ground, and is a prominent language for communicating with non-Bosavi peoples, Kamula is the most prominent second language among the Eibela at Lake Campbell. Many children and young adults who have spent considerable time in urban centers or Wawoi Falls are adopting Kamula or Tok Pisin as a primary language, while their proficiency in Eibela deteriorates. As this generation matures, the prognosis for the vitality of Eibela will become clearer.

## 1.8 Basis of this Study

Although many of the languages surrounding Eibela have been the focus of documentation and translation projects in the past (e.g. Kamula [Routamaa, 1994], Kaluli [Schieffelin and Feld, 1998], Kasua [Logan, 2007], and Odoodee [Hays and Hays, 2002]), very little information is available regarding the Eibela language or culture. The majority of the linguistic documentation in this region has been conducted by members of the Summer Institute of Linguistics (SIL), an organization which conducts linguistic investigations in order to create vernacular translations of the Bible. Translation work is currently underway on Kaluli

(Andrew Grosh), Kasua (Tommy Logan), and Odoodee (Darrell Hays) and the translation of the New Testament into Kamula was completed in 2005 by SIL translators Judy and Iska Routamaa.

Several other groups have also been described ethnographically. Freund completed a doctoral dissertation on Kasua social structure (1977), and a great deal has been written on Kaluli by Edward Schieffelin, Bambi Schieffelin, and Steven Feld. Bambi Schieffelin is notable for her extensive work on Kaluli child language acquisition (B. Schieffelin, 1990), while Edward Schieffelin has written a prominent ethnography (E. Schieffelin, 1976). Feld has written on linguistic and ethnomusicological topics as well (Feld, 1986, 1987, 1990). Kamula has also been the topic of extensive anthropological study, most notably by Michael Wood (1982). Despite this other work in the area, Eibela has not been described at all, linguistically or anthropologically, with the exception of two short word lists which were collected in the 1980's as part of linguistic surveys of the area (Shaw, 1986; Spaulding, 1981). This lack of attention has created some resentment among the Eibela-speaking community, and is a real impediment to vernacular education and literacy.

### 1.8.1 Aims and Importance

The primary goal of this linguistic description is to describe the salient aspects of Eibela grammar, and to contribute to ongoing research in the Mount Bosavi region. This reference grammar describes the phonology, morphology, syntax, and discourse structure of Eibela, as well as providing example texts in the appendix.

This grammar is also meant to facilitate the production of additional materials both for the linguistics community and for the Eibela community. In the course of describing the language, many stories and narrations have been recorded, transcribed, and annotated. From these texts, a digital corpus of Eibela has been compiled, which consists of a digitized collection of recordings as well as the accompanying transcriptions and metadata. This corpus is available in Aiton (2016). The creation of these resources will also serve as the source for the production of pedagogical materials, such as grammar primers or vernacular storybooks. It is hoped that the creation of these materials, and the understanding of the Eibela language that they embody, will result in continuing benefits for both the Eibela community and the field of

linguistics by creating a lasting resource for community education and scholarly research. A dictionary and a collection of texts will be of particular value for the Eibela community, while the reference grammar and digital recordings will be valuable for ongoing research on both languages in Papua New Guinea and the broader field of linguistic typology.

## 1.8.2 Fieldwork and Analysis

Living in a language community for extended periods of time is essential for developing a thorough understanding of the language as it is normally used. Additionally, the daily activities and cultural environment of the Eibela people forms a fundamental part of their language use, and as such, cultural understanding is a necessary prerequisite to linguistic description. For these reasons, I have spent approximately 12 months living in Lake Campbell during the course of two field trips which took place between August 2012 and November 2015. Much of the analysis and writing was conducted in Cairns, Australia at James Cook University. During this field work, I gathered and transcribed approximately 20 hours of audio and video recordings which are primarily of 12 women and 18 men who reside in Lake Campbell or Wawoi Falls. These consultants range in age from approximately 15 to 80 years old. Genres included public speeches and discussions, narratives, procedural texts, songs, family histories, folk tales, and casual conversations.

### *1.8.2.1 Methodology*

The primary method of data collection was the collection and transcription of spoken narratives. This language data was then analyzed with the help of on-site consultants who are native Eibela speakers. Once my own understanding of the language was sufficiently advanced, I was able to observe speakers in order to analyze how the language is used in day-to-day activities, and therefore benefit from participant observation to develop an accurate representation of how the language is used. The narratives recorded were collected from a wide variety of genres such as traditional stories, explanations of common activities, and personal histories. This was to ensure that different styles of speech are represented in the description of the language.

Consultants for this research were gathered on a voluntary basis, and were paid hourly for their efforts. Gifts were also given to members of the community as well in appreciation of their hospitality. All participants were asked for consent regarding whether recordings of their speech could be retained and studied, whether this information may be shared with third parties, and whether they would prefer to remain anonymous. Participants were also informed that they could end their participation at any time.

The linguistic analysis was carried out using the dictionary-building software “FLEX” and described within general typological theory, called Basic Linguistic Theory by Dixon (2010a, 2010b, 2012). This theoretical framework is intended to make the linguistic description accessible and useful to the widest possible audience within the linguistic community, regardless of their theoretical background, and is particularly oriented towards cross-linguistic comparison. While comparing Eibela with other languages falls outside the scope of this research project, it is a priority to describe the language in a framework which facilitates such comparison in order to provide a resource for later linguistic research. Recordings were transcribed and analyzed using “ELAN” transcription software, and “PRAAT” phonetic analysis software.

## 1.9 Conventions

Throughout this thesis, I will use a series of typographic conventions to organize sections and annotate present linguistic data in a clear and concise way. The numbering of tables and figures is separate for each chapter, and heading numbering will begin with the chapter number followed by sequential ordering (e.g. All chapter one headings begin with “1”, with the first section being “1.1”, the second being “1.2”, and so on.). Examples from the research corpus will be set apart from the main text of the discussion and numbered for reference, as seen in the numbered examples beginning in §1.2 of this chapter. Each chapter will have its own numbering beginning from “(1)” for language examples. Four texts have been included as an appendix to this thesis, and when an example given in a discussion is drawn from one of these four texts, the section and number of the example as it appears in the appendix will be provided as a reference. For example, the reference (A.1.1) means that the

example sentence appears as the first numbered line in section A.1 of Appendix 1. Exact quotations from language examples that are cited in the body of the discussion will be presented in italics, and without any morpheme breaks unless these morpheme boundaries are directly relevant to the discussion. Language examples may be referenced multiple times throughout the text, and in many instances, examples will be reprinted with a new number for the reader's convenience.

Morphemes will be presented within braces when the morpheme is being referred to in the abstract, while an italicized form should be understood to refer to a specific instance of the morpheme within a given example. Morphemes with allomorphic variations will be presented in the unconditioned reference form when given in braces, whereas direct quotations in italics will present the exact form of the morpheme realized in the language example being referenced. For example, in the noun phrase *na: no:wa:* 'the other animals', the absolutive suffix {-ja:} appears on the demonstrative {no:}. Suffixes in Eibela undergo a regular allophonic variation in which the approximate /j/ is realized as /w/ following a back vowel. The unconditioned form of the absolutive suffix with the phone /j/ is used when referring to the suffix in general, and this form is presented in braces, {-ja:}. A specific instance of this suffix may be quoted exactly from a language example, with any conditioned allomorphy represented, and in this case the form is presented in italics, as in *na: no:wa:*, where the final syllable —*wa:* is the conditioned allomorph of the absolutive suffix {-ja:}.

A similar distinction will be made when presenting transcriptions of individual phones, where an abstracted and unconditioned form of a phoneme is presented within slashes, and an allophonic variant or specific instance of a phone in context will be cited in brackets. For example, the phoneme /ϕ/ is listed in slashes when referring to the phoneme in general, but a specific instance of this phoneme may be realized as either [p] or [ϕ], where the abstracted phoneme /ϕ/ may be realized as the phone [p] in word-initial positions as an artifact of fast speech. In chapter 2 an orthography will be discussed as well, and graphemes representing phones will be presented in angled brackets. For example, the phoneme /ϕ/ is represented by

the grapheme <f>. Stress is generally not marked except in sections of chapter 2 which specifically discuss stress placement and the phonological correlates of stress.

In numbered language examples, transcriptions are presented in broad phonemic notation where conditioned allophones are not represented except where this represents a neutralization between two phonemes. For example, the absolutive suffix {-ja:} discussed above features two allomorphs *-ja:* and *-wa:*. Since /j/ and /w/ are distinct phonemes in Eibela, this variation is represented in the transcription used in numbered examples and in italicized examples in the text body. On the other hand, the phoneme /ϕ/ has two allophones [p] and [ɸ], which are not distinct phonemes, and are therefore not distinguished in numbered transcriptions of language data. Italics will be used in numbered examples to highlight borrowed lexical items, and bold script is used to highlight the portion of an example most relevant to the surrounding discussion. In sections discussing clauses or clause constituents, the clause boundaries and constituent boundaries may be explicitly shown by brackets and a label or the constituent or clauses role in the example. This is only done when these roles may be unclear, and are relevant to the discussion surrounding a given example. In examples with multiple clauses, the clause boundaries and the types of clauses present are labeled in order to clarify these relationships when relevant to the discussion, as in example (4). Complex predicates will also be identified as a single predicate when necessary by underlining the constituent components as seen in (1) and (2).

## Chapter 2 Phonetics and Phonology

### 2.1 Introduction

Eibela has 28 phonemes. The consonant inventory is relatively small, with 13 phonemes, but this is offset by a more complex system of vowels. Contrastive length is present in the 5 simple vowels, forming 10 distinct simple-vowel phonemes. Finally four diphthongs are present, resulting in a total of 14 phonemic vowel segments.

### 2.2 Consonants

The consonant inventory has five places of articulation which are shown in table 1: bilabial, alveolar, palatal, velar, and glottal. Alveolar and velar stops feature a voicing contrast. This is very similar to the consonant systems found in the surrounding languages Kasua, Kaluli, Kamula, and Odoodee. Only Kasua differs significantly in that stops do not have a contrastive voicing distinction (Logan, 2003). Other manners of articulation, nasals, fricatives, and approximates, do not feature a phonemic voicing contrast. Nasal and approximate phonemes are all voiced, while fricatives are all unvoiced.

Table 1: Eibela Consonant Inventory

	Voicing	Bilabial	Alveolar	Palatal	Velar	Glottal
<b>Stop</b>	<b>Voiced</b>	b	d		g	
	<b>Voiceless</b>		t		k	
<b>Nasal</b>	<b>Voiced</b>	m	n			
<b>Fricative</b>	<b>Voiceless</b>	ɸ	s			h
<b>Approximate</b>	<b>Voiced</b>	w		j		
<b>Lateral Approximate</b>	<b>Voiced</b>		l			

#### 2.2.1 Stops

Stops are differentiated by three places of articulation: bilabial, alveolar, and velar. In addition, alveolar and velar stops have distinctive voiced and unvoiced phonemes. Kaluli is

reported to have no voiced stops, but rather a phonemic distinction in aspiration in voiceless alveolar and voiceless velar stops, which corresponds to the voicing contrast found in Eibela at these places of articulation (Grosh, 2004).

### 2.2.1.1 Voicing

In word-initial positions, and in the onset of most stressed syllables, there is a clear voicing contrast in alveolar and velar stops. Voiced stops often occur with pre-nasalization in word-initial positions, and voiceless stops are only slightly aspirated.

- |     |                       |                                |
|-----|-----------------------|--------------------------------|
| (1) | [ti:] 'pick (leaves)' | [ <sup>h</sup> di] 'take'      |
| (2) | [soko] 'tobacco'      | [sogo] 'type of edible greens' |

The voicing distinction is not absolute in Eibela, however. Intervocally, the voicing contrast is often neutralized as in (3). In this environment, voiced and voiceless stops may be phonetically realized as either voiced or voiceless. In (3a) and (3b), the same word or morpheme is shown to vary in the voicing values of intervocalic stops.

- (3) Free voicing variation
- a. [do:-'si-gi:] OR [do:-'si-ki:]  
  
stand-NON.FIN-CONT  
'standing'
  - b. ['nɛ: 'ga:] OR ['nɛ: 'ka:]  
  
1SG FOC  
'I', 'me'
  - c. ['a:dɛ] OR ['a:tɛ] 'sister/brother'

This voicing is typically found in unstressed syllables such as [-ki] in (3a), and is much less frequently observed in stressed environments such as example (3b).

Additionally, when the voiced bilabial stop /b/ occurs in word-finally, it is realized as [b̚]~[p̚]. Since this allophone is unreleased, voicing is no longer a salient feature. This is

illustrated in (4) where the final segment in /sa:bi/ and /la:bi/ may be dropped, resulting in a syllable-final /b/.

- (4) Unreleased /b/  
a. /sa:-bi:/ '3:DR-D.S' → [sa:p̚]  
b. /la:-bi:/ 'COP-D.S' → [la:p̚]

In this position, a voicing contrast between [b̚] and [p̚] is imperceptible.

### 2.2.1.2 Lenition

Especially in intervocalic positions, bilabial and velar stops may be realized as fricatives corresponding to their voicing and place of articulation. This results in the phonemes /b, g, k/ being represented as the free variants [β, γ, x] respectively (5).

- (5) Lenition  
a. /sa:bi/ → [sa:βi]  
b. /kɛ:/ → [xɛ:]  
c. /wo:gu:wa:/ → [wo:γu:wa:]

The lenition of /g/ to [γ], and /k/ to [x] is particularly common in members of the Kukune:si clan, who have had longer and more intimate ties to the Kaluli people north of Lake Campbell. It is possible that this is a dialectal feature, which may be attributed to language contact with Kaluli. Additionally, some speakers living in Wawoi Falls also commonly realize /t/ as [s], particularly in intervocalic environments (6) (see also de Vries [2012] for more examples of inter-clan variation in Papua New Guinea).

- (6) [ɛta:li:ki:] OR [ɛsa:li:ki:] 'while still doing that...'

### 2.2.2 Nasals

The nasal series in Eibela lacks a phonemic /ŋ/, and a contrast is limited to the bilabial and alveolar nasals /n/ (7) and /m/ (8).

- (7) [nɛ:=bi:]  
eat=DEL.IMP  
'Eat!'
- (8) ['mɛ:bi]  
edible.greens  
'Edible greens'

In a word-final position, the phoneme /m/ is sometimes unarticulated. The nasalization of the preceding vowel is retained however, and in this way, it remains as a contrastive feature, as seen in the minimal pair, [wã:] and [wa], in examples (9) and (10).

- (9) /wa:m/ → [wã:]  
'that's it'
- (10) [wa:]  
'Over there'

### 2.2.3 Fricatives

Eibela has phonemic fricatives at three places of articulation: bilabial /ɸ/, alveolar /s/, and glottal /h/. There is no voicing contrast, and they are distinguished by the place of articulation (11).

- (11) Fricatives
- a. /ɸa:/ 'leaf'
  - b. /sa:/ 'sit'
  - c. /ha:/ 'to spin bark fibers into string'

#### 2.2.3.1 Free Variation

The phoneme /ɸ/ may alternate freely with /p/, though realization as /ɸ/ is much more common, particularly in word-initial positions.

(12) /ɸu:su/ 'bamboo' → [ɸu:ɸu] OR [pu:ɸu]

Unlike the alternation between /b/ and /β/, the allophones /ɸ/ and /p/ are not conditioned by neighboring phonemes. /ɸ/ is realized in the majority of cases, and in careful speech, while /p/ may be realized in fast speech.

Palatalization occurs when the phoneme /s/ follows the high back rounded vowel /u/, resulting in the allophone /ʃ/ in this environment. This can be seen in (12) above, and (13) below.

(13) /u:su/ 'egg' → [u:ʃu]

#### 2.2.4 Approximates

Three approximate phonemes are present in Eibela: /j/, /w/, and /l/.

(14) Approximates

- a. /wa:/ 'that'
- b. /ɛ:ja:/ 'father'
- c. /ɸili:/ 'ascend'

The palatal approximate /j/ is generally realized as an affricate [dʒ] or [dʒ] in word-initial positions as seen in (15).

(15) /ja:/ 'DIR:VEN' → [dʒa:]

Some speakers also realize /w/ as devoiced in some words. No conditioning environment can be determined, and this phenomenon does not seem to be very common.

(16) /du'wa/ 'spider' → [du'w̥a]

The lateral approximate /l/ is alternatively realized as an alveolar flap [ɾ], an approximate [l], or a lateral flap [ɺ]. This variation is free and is not strictly conditioned phonologically, though this variation seems to be mostly contingent on the speed of speech and the accompanying degree

of articulatory effort. The flapped allophones [r] and [ɹ] are most common in consonant clusters, as in (17), and in fast speech.

(17) /a:ɡla'so/ 'leech' → [a:ɡra'so]

Words in which a consonant cluster is regularly present as the result of a deleted vowel (see §2.3.4 on vowel reduction), /l/ may be realized as a flap even when the vowel is realized. For example, in the word /tila:/ (18).

(18) /tila:/ 'descend' → ['tra:] OR [ti'la:] OR [ti'ra:]

The first unstressed vowel /i/ is very often left unrealized, resulting in the pronunciation ['tra:]. Even when the initial vowel /i/ is realized, /l/ may still be articulated as a flap, resulting in [tira:].

#### 2.2.4.1 Morphophonologically Conditioned Allophones

The phonemes /j/ and /w/ are involved in a regular morphophonemic alternation in which /j/ is realized as /w/ in suffixes and enclitics if the root ends in a back vowel /o/ or /u/. For instance the root {ko:lu} 'man' with the absolutive suffix {-ja:} is realized as *ko:luwa:*, whereas the root {kali:ja:} 'wallaby' with the absolutive suffix {-ja:} is realized as *kali:ja:ja:*.

### 2.3 Vowels

Five simple vowels are present, as shown in table 2. Each of these vowels features a phonemic length contrast as well resulting in a total of 10 simple vowel categories in Eibela.

Table 2: Eibela Vowel Inventory

i, i:		u, u:
ɛ, ɛ:		o, o:
	a, a:	

(19) Simple short vowels

- a. /di/ 'take'
- b. /dɛ/ 'bow and arrows'
- c. /da/ 'lie'
- d. /do:mo/ 'hill'
- e. /dudu/ 'forest'

### 2.3.1 Length

Phonetically, long vowels are typically realized as a lower quality, such that the phonemes sometimes have a noticeable quality difference in addition to a length contrast. For instance a short vowel /ɛ/ is often realized as being closer to the phone [ɪ], whereas the long vowel phoneme /ɛ:/ is phonetically realized as the lower phone [ɛ:]. Long and short vowels are considered phonemically contrastive, as demonstrated by the minimal pairs in (20).

(20) Length contrasts

- a. /mi/ 'come'      /mi:/ 'give'
- b. /a:gɛ/ 'today'    /a:gɛ:/ 'dog'
- c. /da/ 'lie'        /da:/ 'sago'
- d. /dowa/ stone     /do:wa:/ 'stood'
- e. /u:su/ 'egg'      /u:su:/ 'cough'

Although minimal pairs exist for many phonemes contrasted by vowel length, in some lexical items, length seems to either be expressed inconsistently, or speakers disagree on the perceived length of a given segment. The full extent and possible conditioning of phonemic vowel length therefore remains as an interesting area where further research would be beneficial.

### 2.3.2 Diphthongs

In addition to the simple vowels, four phonetic diphthongs are present: /ai/, /oi/, /ou/, and /ɛi/. Vowel sequences in which the first vowel is lower than the following vowel are pronounced as a single syllable, and are therefore treated at least phonetically as diphthongs (21).

#### (21) Diphthongs

- a. /a**i**a:/ ‘male name’
- b. /sa:**oi**/ ‘male name’
- c. /bi:**ou**/ ‘breadfruit’
- d. /mi**ɛi**/ ‘come:1:FUT’

Vowel sequences in which the first vowel is higher than the following vowel are pronounced as two syllables, with each vowel functioning as a syllable nucleus (22).

#### (22) Vowel sequences across a syllable boundary

- a. /d**o.a**/ ‘stone’
- b. /s**u.ɛ**/ ‘inside’
- c. /ka.li:**a**/ ‘bush wallaby’
- d. /di:**o**/ ‘put’
- e. /ga:**li.ɛ**/ ‘female name’
- f. /b**ɛ.a**.gɛ/ ‘cuscus’

This is very similar to the vowel sequences described in Kamula by Routamaa and Routamaa (1995). The same pattern of syllabification is observed in which rising vowel sequences form a single syllable, whereas falling sequences are divided into two syllables.

### 2.3.3 Nasality

Nasal vowels are sometimes present in Eibela, and are particularly prominent in older speakers (over 40 years old). Nasality seems to be far less frequent among younger speakers, and may be an obsolete remnant of a former set of contrastive nasal vowels. No minimal pairs have been attested, and the production of nasal versus oral vowels is not consistent across speakers.

In most cases, the occurrence of nasal vowels may be phonetically motivated. A large majority of nasal vowels occurs following a velar or glottal consonant, as shown in (23).

(23) Nasal vowels following velar or glottal consonants

- a. [hã:gẽ:] ‘time, day’
- b. [kɛgẽ:] ‘gather’
- c. [no:wã:] ‘another’
- d. [hõ:gõ:ja:] ‘big’

This articulatory phenomenon, dubbed rhinoglottophilia, has been observed cross-linguistically, and is likely motivated by ease of articulation (see Matisoff, 1975). It seems probable that a former nasal contrast throughout the vowel system has been preserved in velar and glottal environments, where ease of articulation has facilitated the production of these nasal vowels, and in other environments, the nasal contrast has deteriorated more rapidly.

Some nasal vowels occur outside of a glottal or velar environment, however, such as those given in (24).

(24) Nasal vowels outside glottal or velar environments

- a. [ˈsɛ:jẽlibi] ‘place name’
- b. [hĩjõ:lo] ‘place name’
- c. [sẽsẽ] ‘whimper’

Nasalization is particularly common in onomatopoeic expressions such (24c) which describes the sound of a whimpering dog. Nasal vowels in place names, such as (24a-b) may suggest that proper names retain some conservative phonology. The names for many animals or verbs of sound production are perceived as resembling the sound described, or the call of the animal named, as in (25).

(25) Animal names

- a. [gwõ:gwõ:] ‘a cassowary without a head crest’
- b. [kwãkwã] ‘frog’
- c. [dõwãdõwã] ‘warbler’
- d. [sũ.ẽli] ‘wren’

Bird names in particular are often perceived as resembling the call of the named bird. A similar pattern has been observed in the neighboring languages Kamula, Kaluli, and Odoodee. In Kamula and Kaluli, the nasality of vowels is not contrastive, but a conditioning environment has not been ascertained (see Routamaa [1995] for Kamula and Grosh and Grosh [2004] for Kaluli). In Odoodee, however, there are a handful of minimal pairs showing that nasality is phonemically contrastive (Hays, 2007).

#### 2.3.4 Conditioned Allophones

Reduction and Deletion

Vowels in unstressed positions may be deleted or greatly reduced in fast speech. By far, the most common example of this process is the reduction of /ɛ/ or /a/ before /l/ in an unstressed syllable, as in (26).

(26) Vowel reduction

- a. /ti'la:/ → ['tra:] ‘descend’
- b. /ɛtɛ'legɛ/ → [ɛ'trɛgɛ] ‘place name’
- c. /ka:'la:/ → ['kla:] ‘FOC:DEF’

Less commonly, the reduction of other unstressed vowels is also attested as seen in example (27).

(27) Vowel Reduction

a. /'ha:suɛ:/ → ['ha:s.wɛ:] 'male name'

b. /bo'lɛ:ki:ni/ → ['blɛ:kini] 'place name'

This syllable reduction results in a consonant cluster, which may be syllabified as a complex consonant onset by merging the reduced syllable with the following syllable, as in (28).

(28) /ti.'la:/ → ['tra:] 'descend'

If the consonant cluster does not meet the phonotactic constraints for complex onsets (see §2.5 on phonotactics), then the remnant of the reduced syllable instead forms a coda in the preceding syllable, as seen in (29).

(29) /'ɛ:.mɛ.lɛ:/ → ['ɛ:m.lɛ:] 'back'

Vowel Assimilation

When a root ending in the low vowel /a/ is affixed by a morpheme containing the high vowel /i/, the final vowel of the root is raised to [ɛ] (30) and (31).

(30) /hɛna:/ → [hɛnɛ:-li:] 'While going...'

(31) /ja:/ → [jɛ:=bi:] 'Come!'

Dissimilation

In contrast to the vowel assimilation seen in (30) and (31), vowel dissimilation occurs in contexts where identical vowels occur in adjacent syllables. This can be seen in (32), where the final syllable of *mija*: 'came' combines with the topic enclitic {=ja:}, and the final vowel of the stem, *mija*., is raised to [ɛ:].

(32) /mija:/ → [mijɛ:-ja:] ‘Having come...’

Final centralization in indicative clauses

In indicative clauses with a falling intonation and an unstressed final syllable, the low vowel /a:/ may optionally be raised to [ɛ:] in order to specify a subsequent clause, shown in (33), where the final vowel of *hɛna*: ‘go’ raises to [ɛ:]. This is also shown for *mija*: ‘came’ in (34). In both instances, this vowel raising is a type of clause subordination in the sense that this form signifies that the clause is not the final clause of the utterance.

(33) ka:miga: sa:gu: ba:dɛ na:gɛ hɛnɛ:  
DIR waterfall side run go

‘That way, I ran to the side with the falls...’

(34) ka: ta:lɛ-ta: mi-jɛ:  
FOC finish-TEL come-PST

‘Having finished, I came.’

In example (35) below, the syllables {–nɛ} and {–gɛ} are unstressed, and may occur in either order as a clause linking device. Regardless of the order of these syllables, the final vowel is consistently realized as the long vowel [ɛ:]. Such flexible ordering of syllables within a morpheme, or a flexible ordering of morphemes, is not attested in any other Eibela construction.

(35) {–nɛ} and {–gɛ}

a. [[kosu:wa: ɛna:]<sub>O</sub> [dija: ja:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
cassowary DEM:ABS take DIR:VEN-MED:IPFV

‘(We) took that cassowary while walking around hunting with a torch and...’ (A.4.11)

b. nɛ: ɛ:mɛɛ: mija: ja:-gɛnɛ:

1:SG back come DIR:VEN-MED:IPFV

‘I came back and arrived.’

In imperative or interrogative clauses, which have a rising intonation and a final stressed syllable, this vowel raising does not occur (36).

(36) Imperative and interrogative stress

- a. 'tluka      'tla:ge-'ma:  
clothes    wash-IMP  
  
'Wash the clothes!'
- b. 'du:lu-wa:    'ja:      'ba:  
NAME-ABS    DIR:VEN    DUB  
  
'Is Du:lu coming?'

Note that it is not due to the fact that the interrogative and imperative verbs in (36) are affixed forms. Unaffixed verbs may be used with a rising intonation to indicate an interrogative as in (37). In this environment, the final stressed syllable is not centralized.

- (37) 'hɛ:-mi:      hɛ'na:?  
where-ASS    go  
  
'Where are you going?'
- (38) ɛ:      do:ge:      'sa:  
3:SG    house:LOC    sit  
  
'He is sitting in the house.'

In example (38), an indicative clause is also shown to retain the final low vowel /a/.

Centralization therefore is a feature of unstressed syllables in indicative clauses with a falling intonation.

## 2.4 Orthography

For the Eibela orthography, the majority of phonemes can be accommodated by the standard Latin alphabet, with graphemes corresponding to the IPA symbols. The phoneme /ɸ/ is not represented in the standard Latin alphabet, and will simply be represented by the nearest approximation, <f>. For the phoneme /j/, it was decided to use the grapheme <y>. This was done for the benefit of the Eibela community, who preferred this grapheme due to familiarity

with English and Tok Pisin spelling conventions. The front vowel phonemes /i/ and /ε/ are represented with <i> and <e>.

### Spelling conventions inconsistent with IPA symbols

/ɸ/ → <f>

/j/ → <y>

/ε/ → <e>

Length is expressed following the IPA convention of a colon <: >. Other phonetic values are not represented in the orthography. Stress and nasality are not phonemically contrastive, and tone is distinctive only in rare instances.

## 2.5 Phonotactics

### 2.5.1 Syllable Structure

The most common syllable structure in Eibela is V or CV, though consonant clusters and codas are less commonly observed. Examples of the various possible syllable structures are shown in (39) below. In the schema below, long vowels and diphthongs are represented as VV.

#### (39) Syllable Structure

a. V	/o/	'needle'
b. VV	/o:/	'lake'
c. CV	/ju.ka:.li:/	'bandicoot'
d. CVV	/sa:/	'sit'
e. CVC	Unattested	
f. CVVC	/da:m.la/	'blue'
g. CCVC/CCVVC	Unattested	
h. CCV	Unattested	

- i. CCVV                      /tla:.gɛ.ma:/ 'wash:IMP'

### 2.5.1.1 Coda Restrictions

The coda position in closed syllables is restricted to three consonants: /b/, /m/, /n/ and /s/, with examples given in (40).

(40) Coda consonants /m/, /s/, and /b/

- a. /ka:m/ 'enough'
- b. /dɛ:.u:s/ 'hot coals'
- c. /di.meib/ 'He/she will take it.'
- d. /a:.bu:n.ja:/ 'covered'

### 2.5.1.2 Word-initial Restrictions

In addition, the approximate /l/ does not seem to appear in word-initial positions. Note that /l/ does occur syllable initially within a word, as shown in (41).

(41) Word-medial /l/

- a. mu:.lu: 'bathe'
- b. ɛ:.mɛ.lɛ: 'again'
- c. wɛ:.lɛ 'top'

Two possible exceptions should be noted. The sentence copula {la:} and the possibly related determiner {la:} may be considered a phonological word, although they cannot occur in isolation. Another word, *ho:do:su* 'small' is also occasionally reduced to *lo:su*.

### 2.5.1.3 Onset Clusters

In syllable initial consonant clusters, any stop may appear as the first consonant, and are limited to a stop followed by an approximate. Any stop may co-occur with /l/ as seen in (42).

(42) Consonant Clusters: [Stop] + /l/

- a. /blo:go/ 'black palm container'

- b. /tla:ɡɛ/ 'wash'
- c. /wɛ:dlɛ/ 'exchange'
- d. /klɛ:nɛ/ 'ear'
- e. /na:ɡlɛ/ 'to hurt'

With the approximate /w/, however, only clusters with velar stops are attested, as in (43).

(43) Consonant Clusters: [Velar stop] + /w/

- a. /ikwa:bɛ/ 'fly'
- b. /ɡwo:ɡwo:/ 'a cassowary without a head crest'

This can be explained by the share place of velar articulation for /w/, /k/, and /g/, which enables this particular onset cluster, when others are not possible.

#### 2.5.1.4 Vowel Sequences

The phonological status of some sequences of continuants has been difficult to ascertain. In vowel sequences in which the first vowel is higher than the following vowel, the two vowels form separate nuclei for two separate syllables (see also §2.3.2 on diphthongs). These CV.V vowel sequences are phonetically indistinguishable from a C<sub>1</sub>V.C<sub>2</sub>V syllable, where C<sub>2</sub> is an approximate.

(44) Alternate Syllable structures

- a. /do.a/ → /do.wa/ 'stone'
- b. /su:.ɛ:/ → /su:.wɛ:/ 'inside'
- c. /ka.li:.a:/ → /ka.li:.ja/ 'bush wallaby'
- d. /di.o:/ → /di.jo:/ 'put'
- e. /ga:.li.ɛ/ → /ga:.li.jɛ/ 'female name'
- f. /bɛ.a:ɡɛ/ → /bɛ.ja:ɡɛ/ 'cuscus'

For most phonemic and orthographic representations, it was decided to follow a CV.CV representation for vowel sequences in which the first vowel is higher than the following vowel. By including the approximate consonant in these transcriptions, the two-syllable structure in these vowel sequences is more clearly represented by analogy to other CV syllable structures, which are more clearly recognized as a syllable.

## 2.6 Suprasegmental Phonology and Prosody

Prosody as presented here will encompass the relative pitch and amplitude of phonological units with respect to the surrounding environment. This will include changes in amplitude (stress), and changes in pitch. Pitch variation will be referred to as tone, pitch, or intonation, depending on the units being discussed.

### 2.6.1 Stress

Stress in Eibela is not wholly predictable, but general tendencies may be observed. No minimal pair are attested, and stress is often predictable. It is therefore deemed non-contrastive, and not included in the orthography. In the majority of words, the last two syllables are stressed, with stress being defined as an elevated amplitude. For two-syllable words, this means that both syllables are stressed, and there is no significant difference in the amplitude of the two syllables, as seen in the examples in (45).

#### (45) Constant Stress in Two-syllable Words

- a. 'ε:'sε 'string bag'
- b. 'a:'bo 'bird'
- c. 'sa:'wa 'child'
- d. 'di'mi: 'give'

In these examples, stress remains constant across both syllables. This stress pattern is attested in words presenting both long and short vowels (45a-b), and in words with only short vowel. Syllables differing in the length of the nucleus do not necessarily differ in stress. Similarly, in

most three-syllable words, the final two syllables are stressed, with the initial syllable being unstressed, as in (46).

(46) Final Two-syllable Stress in Three-syllable Words

- a. bɛ.'a:'gɛ 'cuscus'
- b. sɛ'ga:'lɛ 'be happy'
- c. to'go:'lo 'path'
- d. su'gu:'lu: 'school'

As in the two syllable words seen in (45), this stress pattern may be observed in words containing a long vowel, and in words containing only short vowels.

*2.6.1.1 Exceptional Stress Patterns*

While the majority of words display the stress patterns illustrated in (45) and (46), some words are exceptional in various ways. These stress patterns are not predictable, but may arise from interactions of stress and tone. In some two-syllable words, vowel length does correlate with greater amplitude, as in (47).

(47) Length Induced Stress in Two-syllable Words

- a. do'gɛ: 'house:LOC'
- b. ɛ:'sa: 'string bag:ABS'
- c. 'a:gɛ: 'dog'
- d. 'a:bo 'bird'

In these cases, vowel length and stress correlate, but this does not necessarily allow stress to be predictable.

Another exceptional pattern exhibits stress on only the first syllable, as seen in (48).

(48) Word-initial Stress

- a. 'dogono 'mountain'

This does not appear to be a consequence of vowel length, given that all of the vowels seen in (48)

'*dogono* are the same length. Additionally, the initial syllable may bear secondary stress, while a more prominent primary stress is placed on the final syllable, as in (49).

(49) Primary and Secondary Stress

a. ,do:go'ba: 'clearing'

b. ,kɛɛ:'gi: 'huge'

This is the only stress pattern in which secondary stress appears to be clearly represented. All other stress patterns seem to show only two levels of stress: stressed or unstressed.

## 2.6.2 Tone

Tone is a peripheral characteristic of Eibela syllables. Lexically determined tone, as measured by pitch variation, is attested in a number of lexical items. Despite these examples, pitch levels in the majority of words may be predicted entirely by stress position and phrasal intonation patterns.

### 2.6.2.1 Predictable Pitch Variation

Most of the variation in pitch can be predicted by stress placement or the prosodic environment. Higher pitch values correlate with stressed syllable across the majority of lexical items, as shown in (50), where stress and pitch are labeled, where pitch is dichotomized as either high or low.

(50) Pitch conditioned by stress

a. [ˈná:ˈgí] 'run'

b. [ˈsáˈwá] 'child'

c. [sùˈgúˈlú] 'school'

d. [tòˈgóˈló] 'road'

e. [ˈdógònò] 'mountain'

As can be seen, in these lexemes, there is a predictable correspondence between stressed syllables as measure by amplitude, and high pitch, as measured by fundamental frequency.

Pitch variations can also be predicted by the position of a syllable within an intonational phrase. In independent declarative clauses, the final predicate shows an overall falling intonation. Both of these contexts are shown in (51).

- (51) [ 'wá:'wí        'sɛ:]    [ 'tá:    'dó'dó-,sɪ ]  
river.name    shore    cross    stand-MED:PFV  
'We had crossed to the shore of the Wa:wi river.'

The phrase 'wá'wí 'sɛ: shows a phrase-final drop in pitch. Similarly, the final syllable of the clause –sɪ shows a clearly lower pitch. This context predicts the incongruity of 'sɛ: being a stressed syllable, yet displaying a low pitch. Similarly, questions and imperatives demonstrate a final rise in intonation, as seen in (52).

- (52) sù'gú: 'lú:-'mɛ:nà:-já:  
attend.school-FUT-QUES  
'Will (they) attend school?'

This phrasal pitch contour may explain the unexpected result of high pitch in the unstressed syllable –já: seen at the end of the clause.

#### 2.6.2.2 *Lexically Determined Pitch*

Pitch contours within a word which are consistent across various prosodic positions and not predictable based on word stress are indicative of a lexical tone system. However, the rarity of such examples suggests that lexical tone is only peripherally present in Eibela phonology, similar to nasality in vowels discussed in §2.3.3. Unpredictable stress may be expressed as a low tone in a stressed syllable, as in (53), or as a high tone in and unstressed syllable, as in (54).

(53) 'dò:'gó 'house'

(54) ,dògÓ' bá 'airstrip'

As with nasality in vowels, lexical tone is not contrastive in the sense that there are no lexical pairs which are differentiated solely by tone.

### 2.6.3 Phonological Word Criteria

A number of phonological and morphophonological criteria serve to define a phonological word. These are broadly defined as phenomena which occur at a phonological word boundary, or do not occur across a phonological word boundary. The phonotactic restriction on word-initial consonants is the first such restriction. As described in §2.5.1.2, the phoneme /l/ has restricted distribution at the beginning of a phonological word, but may appear freely within a word. The initial word position is also characterized by a more frequent realization of the phoneme /ɸ/ as [p], as mentioned in §2.2.3.1. The segment deletion described in (4) and (9), where a final vowel or nasal may be deleted, is also conditioned by a phonological word boundary since it occurs regularly in word-final positions. Another morphophonemic alternation occurs in approximates, where an initial approximate in a suffix may change, contingent on the preceding vowel in the stem, as described in §2.2.4.1. The canonical stress pattern described in §2.6.1 is also a useful criterion for a phonological words, though only for unsuffixed stems. A polysyllabic stem with a canonical stress pattern will have two stressed syllables at the end of the phonological word. Suffixes are inconsistent with this stress pattern since they are often unstressed, as described in §2.7.1, but suffixes may still be considered as part of a phonological word due to conditioned morphophonological processes such as the assimilation and dissimilation described in §2.2.4.1, §2.3.4, and §2.7.2.

Both enclitics and suffixes are dependent morphemes which form a single phonological word together with their host, as defined by the above criteria. If these phonological processes affecting a phoneme are conditioned by a segment across a morpheme boundary, then these morphemes are considered a single phonological word. For example, both the topic-marking morpheme {=ja:} and the absolutive-case-marker {-ja:} have allomorphs which are conditioned by the final vowel of the preceding stem. Another example of allomorphy is the regular raising

of a stem-final phoneme /a/ to /ε/ when a following suffix includes the high vowel /i/ (see §2.7.2.2 for more discussion of these processes). These phonological criteria are used to determine whether a morpheme is phonologically dependent, and forms a single phonological word together with the word stem. Clitics and suffixes are both phonologically bound to a stem according to these criteria, but are distinguishable based on the word classes they may attach to. Morphemes such as the topic-marker {=ja:} are labeled as enclitics rather than suffixes because they display low selectivity and may freely appear with stems of nearly any word class, including nouns, adjectives, verbs, quantifiers, and demonstratives. Enclitics may additionally have scope over an entire clause when the predicate of the clause is combined with the enclitic (see for instance clauses with a predicate bearing the topic enclitic in §9.3.4.). Suffixes on the other hand are much more limited in the number of word classes that may combine with the bound morpheme. Case suffixes for example, may only combine with a small number of word classes that may form the head of an argument, as discussed in chapter 8, and the large majority of verbal morphology is limited to verbal roots in a predicate role. The distinction between enclitics and suffixes is therefore a syntactic distinction based on which word classes may function as the stem of the bound morpheme, though both enclitics and suffixes are considered to be bound morphemes based on phonological criteria.

#### 2.6.4 Sentence and Phrase Intonation

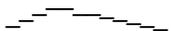
Phrasal boundaries are generally marked by specific intonation contours. Depending on the phrase type, this contour may be rising, level, or falling.

##### 2.6.4.1 *Rising Intonation*

Rising intonation in a clause can indicate the left boundary of an argument, and the end of three specific types of clauses. Arguments of an independent clause are typically prosodically prominent, meaning that the onset of an argument features a rise in pitch, and the right boundary shows a drop in pitch. In the compound sentence given in (55), the arguments in both clauses, (55a) and (55b) trigger are demarcated by a rise in pitch. In (55a), this argument is the first clausal constituent *ne wi:ja:* ‘my name’, which begins with a slight prosodic rise, and then a significant drop in pitch after the phrasal head *wi:*. In this case the actual rise is less prominent

because *nɛ wi:ja:* is the first element of the sentence. Since there was no preceding element in the sentence with a lower prosodic pitch, the sentence simple begins at a higher pitch.

(55) a.   
 nɛ wi:ja: robət aiba:  
 [nɛ wi:-ja:]<sub>S</sub> [robət aiba:]<sub>PRED</sub>  
 1:SG:MOD name-ABS NAME NAME  
 ‘My name is Robert Aiba.’

b.   
 nɛ ɛ:ja:ja: aiba:  
 [nɛ ɛ:ja:-ja:]<sub>S</sub> [aiba:]<sub>PRED</sub>  
 1:SG father-ABS NAME  
 ‘My father’s name is Aiba.’

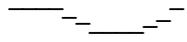
In contrast, the argument *nɛ ɛ:ja:ja:* in (55b) show a clear rise and fall. The two clauses, (55a) and (55b) are coordinated without any overt syntactic or morphological markers, and this relationship is made clear by the rising pitch shown at the end of the initial clause. This rise in pitch signals that a coordinated clause will follow.

A rising intonation is also observed in interrogative clauses such as (56) and (57) below.

(56)   
 hɛ:gu: to:go:-mɛ:na:ja: ɛ:sa:  
 [hɛ:gu: to:go:-mɛ:na:=ja:]<sub>PRED</sub> [ɛ:sa:]<sub>O</sub>  
 do.how lift-FUT=Q:N.PRS bilum:ABS  
 ‘How will we lift the bag?’

(57)   
 gɛ: hɛna: ba:  
 [gɛ:]<sub>S</sub> [hɛna: ba:]<sub>PRED</sub>  
 2:SG go DUB  
 ‘Are you going?’

This is true for both content questions, as in (56), and in polar yes/no questions, as in (57). Finally, rising intonation is also used accompanying imperative mood, as shown in (58).

- (58) 
- ti:saja: kɛɛma:  
 [ti:sa-ja:]<sub>O</sub> [kɛɛ=ma:]<sub>PRED</sub>  
 teacher-ABS find=IMP  
 'Find a teacher!'

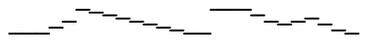
#### 2.6.4.2 Level Intonation

Level intonation at the end of a clause signals an incomplete structure. This is typical of morphologically marked clause chaining like that seen in example (59). The suffix *-nɛɛɛ:* is an affix used on the verb of a non-final clause in a sequential series of clauses.

- (59) 
- wo:kowa: do:ɣɛ: sa:li: danɛɛɛ:  
 [wo:ko-wa:]<sub>S</sub> [do:ɣɛ:]<sub>X</sub> [sa:-li da-nɛɛɛ:]<sub>PRED</sub>  
 NAME-ABS house:ERG sit-SIM be.at-MED:IPFV  
 'Wo:ko was sitting in the house and then...'

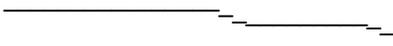
#### 2.6.4.3 Falling Intonation

Finally, declarative sentences and the right edge of clausal constituents display a falling intonation. As mentioned above, and exemplified in example (55), arguments of a main clause are prosodically prominent, beginning with a rising or high intonation and ending with a drop in pitch. Similarly, sentence-initial subordinate clauses feature a final drop in pitch, as shown in (60).

- (60) 
- ka: a:nɛ:jaaaaaa:: ba:ma to:ja  
 ka: anɛ:-ja:: ba:ma to:ja  
 FOC go:PST-TOP:DUR place.name hilltop  
 'We kept going and reached Ba:ma hill.'

In (60), the initial constituent *ka: a:nε:ja::* is a subordinate clause which features an iconic lengthening of the final vowel to signify a durative aspect. The falling intonation, followed by the abrupt rise in *ba:ma to:ja* marks a clear prosodic boundary between these two constituents.

Falling intonation is also observed at the end of declarative clauses, such as (60) above, and (61) below.

(61) 

nε: ko:sε: do:gε: a:nε: wa:lεmε:na:  
nε: ko:sε: do:gε: a:nε: wa:lε-mε:na:  
1:SG sago:LOC camp:LOC go:PST tell-FUT:1  
‘I will tell about when I went to a sago camp.’

## 2.7 Morphophonology

The majority of suffixes and inflectional modifiers in Eibela are unstressed and feature a falling or low pitch. The exceptions to this generalization will be discussed below. Suffixes with phonologically conditioned allomorphs are discussed along with the discussing of the form and function of those suffixes in later sections.

### 2.7.1 Stress in Bound morphemes

Case suffixes, such as the absolutive {-ja:} and the ergative {-jε:} are always unstressed. However, in nouns that inflect for case through a stem change rather than concatenative affixation, the stress may shift to the final vowel, which is the locus of the stem change and marker of case. For example, in concatenative case suffixation, the suffix {-ja:} is unstressed, as in *ε:ja:ja:* shown in (62). In contrast, in the analogous absolutive case forms of *ε:sε* ‘bag’ and *do:go* ‘house’ shown in (63), which are inflected through a change in the final vowel, the stress shifts to the altered vowel compared to the uninflected nominative form.

(62) 'ε:'ja:-ja:  
father-ABS

- (63) 'ε:σε → ε:'sa:  
'do:'go → do'ga:

This stress shift results in an unstressed initial syllable in the inflected forms compared to both syllables being stressed in the uninflected form. This shift in prosodic prominence to the syllable bearing the case-marking stem change may be attributed to the likelihood that this information-bearing vowel would otherwise be considerably less perceptible than the alternative concatenative case-marking strategy.

Verbal suffixes, like all suffixes, are generally unstressed. However, verbal suffixes which consist of multiple syllables or sequences of verbal suffixes show stress on their penultimate syllable. The suffix {-gε:}, used in multi-verb constructions for iterative actions, and the past tense suffix {-ja:} are shown in (64) and are representative of the majority of suffixes, which are unstressed.

- (64) 'mo:ti kε:'gε'jε-gε: 'mi-ja:  
close forage-SIM come-PST

'(It) was coming close while eating (fruit) from the ground.'

In contrast, the perfective suffix {-'φειja:}, the future suffix {-'mε:na:}, which both consist of two syllables, show penultimate stress in (65) and (66), and do not alter the stress patterns of the root verb.

- (65) 'ni:ja: ε:'lemε:n'tri:-ja: di'na:'φε:-'mε:na:-'ta: 'tira: ,ba:li'mo:  
1:PL-ABS elementary-ABS sort.out-FUT-TEL descend NAME

'We went down to Balimo in order to sort out the Elementary.'

- (66) ε: 'ko'mei 'ku'φu 'dε:'gε-'ta: ta:-'φειja:  
3:SG pandanus juice submerge-TEL finish-PERF

'(He) put him into the pandanus juice and left him there.'

Similarly, in (67) and (68), the sequences of verbal suffixes -lo:'luwa: and -'li:ja: show penultimate stress.

(67) 'hɛ'na: bɛ'da:-lo:'lu=wa: 'na: ɛ'na:  
 go see-ASS.EV=TOP animal those

'(They) went and saw those animals.'

(68) 'kɛ:-ja: ɛ'na:'tɛ'ma: 'mɛ:'na:-'li:=ja: ,ɛ:mɛ'lɛ: 'mi-ja:  
 pig-ABS not.yet eat:FUT-SIM=TOP back come-PST

'The pig didn't want to eat yet, so I came back.'

## 2.7.2 Lexically Specific Instances of Allomorphy

Several bound morphemes have allomorphs which are in some cases in line with the conditioned allophones described in §2.2 and §2.3, but in many cases the conditions of allomorphic variation will vary by morpheme, and is less predictable from solely phonological conditions. These patterns of allomorphy are discussed broadly as segment deletion, assimilation, and fusion.

### 2.7.2.1 Segment Deletion

This first section discusses allomorphs which are a reduced form of the unconditioned form of the morpheme, and includes the future morpheme {-mɛ:na:}, the inferred evidential {=jo:bo:}, and the completive morpheme {-jo:ɸo:}.

In the case of the future tense, when the phoneme /m/ occurs as the onset of the final syllable of a verb, the verb root retains the same form as the past and present tense forms, and the alternate suffix *-jɛ:na:* (for first person) or *-jɛi* (for non-first person) is used to form the future tense. This is best exemplified by the frequent verb *mi-jɛ:na:* 'come-1:FUT' in (69)a and *mi-jɛi* 'come-N.1:FUT' in (69)b, which is compared with the past tense form in (69)c.

(69) a. nɛ: ɛ:mɛlɛ: mi-**jɛ:na:** kɛi  
 1:SG back come-1:FUT ASSER

"I will come back"

b. ko:lu-wa: to:bo: gi:ja: kudu mi-**jɛi** kɛi  
 man-ABS all 2:PL follow come-3:FUT ASSER

'All of the men will follow you.'

- c. na:nεε ε:mεε: mi-**ja**:  
 1:DU back come-PST

'We two filled the bag and came back.'

In this case, the omission of the initial bilabial nasal may be considered a dissimilation strategy, wherein identical consonants in close proximity are dispreferred, and the onset of the suffix is therefore deleted. Bilabial consonants in particular are prone to phonological processes when two bilabial consonants are in close proximity, as will be noted again in §2.7.2.3 on phonological fusion.

The completive morpheme {-jo:φo:} has two reduced forms, *-jo:* and *-φo:*. In the first of these, the onset consonant is an approximate determined by the previous vowel, with /w/ occurring after back vowels, and /j/ occurring elsewhere. This alternation of approximates is common in other morphemes including tense, case, and topic-markers, as discussed in §2.7.2.2. The allomorph *-jo:* occurs when {-jo:φo:} is not the final morpheme of a clause predicate. This includes contiguous complex predicates such as (70) and a predicate with additional suffixes such as in (71).

- (70) do:ma: ho:go:ja:=ja: φili:-**jo**: di-si  
 hill:ABS big-ABS ascend-COMP PFV-MED:PFV

'We finished climbing a big hill and then...'

- (71) a. [[kosu:wa:=ja: nε: sa:nε-**jo**:-φεija:=ja]<sub>TOP</sub> ka:]<sub>FIN</sub>  
 cassowary=TOP 1:SG kill-COMP-PERF=TOP FOC

'I have indeed killed a cassowary.'

In both of these contexts, the initial approximate depends of the preceding vowel, but the process of reduction is dependent of the morphosyntactic environment rather than phonological factors. The second reduced form of {-jo:φo:} is conditioned by vowel height, with the reduced form *-φo:* occurring after non-high vowels, as in (72) and (73), and the full form *-jo:φo:* appearing after high vowels, as in (74).

(72) ho:ge: dija: γε-**φο**:  
 bottom:LOC take plant-COMP

'Taking it to the bottom, I planted it.'

(73) togo:la: kolo ε-**φο**: =ma:  
 door:ABS open do-COMP=IMP

'Open the door!'

(74) do:go su:-wε: di-**jo:φο**: =wo:bo:  
 house inside-LOC take-COMP=INF

'He put me into the house.'

The inferred-evidential marker {=jo:bo:} undergoes a very similar reduction, with the reduced form =bo:. However, the distribution of this reduce allomorph differs, with the reduced form occurring after low vowels, as in (75), and the full form occurring elsewhere as in (76) and (77).

(75) [u:gei εna:] a:mi: mi-ja: =**bo**:  
 NAME DEM:ABS PRO:ASS come-PST=INF

'That U:gei came there.'

(76) kε:-ja: gu:du: =**wo:bo**:  
 pig-ABS die:PST=INF

'The pig died.'

(77) na: wε nili: di=moko:no: =**wo:bo**: =la:  
 meat DEM:PROX 1:PL:EMPH take=DEO=INF=Q:PRS

'Should we take that meat?'

It is as yet unclear why these essentially identical allomorphic alternations should have these differing distributions. A final example of simple segment deletion is the additive determiner {la:la:}, which has the reduced form la:, which occurs after low vowels, as in (79), which may be compared to the full form in (78).

(78) nɛ:    **la:la:**    mɛnɛ:na:  
 1:SG    ADD    go:FUT:1  
 'I will go too.'

(79) *okei*    kɛ:-ja:    **la:**    u:sɛ:    o:lo:    ba:nɛ-ta:    di-si  
 okay    pig-ABS    ADD    middle:LOC    stab    break-TEL    PFV-MED:PFV  
 'Okay, we divided that pig too in the middle...'

While this phonological alternation suggests that {la:la:} is phonologically bound, two phonological properties support the analysis of this morpheme as an independent phonological stem. First is the initial phone [l] which otherwise does not occur medially in a phonological word, and second the determiner bears phonological stress. This determiner may therefore be viewed as bearing intermediate status between a phonological word and a phonologically bound morpheme. For more discussion of the future tense {-mɛ:na:}, see §7.3.2. For discussion of completive aspect {-jo:ɸo:}, see §3.3.2.2.3 and §7.4.2.2. For discussion of the inferred evidential {=jo:bo:}, see §7.6.2, and for more on the additive determiner {la:la:}, see §4.4.2.

### 2.7.2.2 Assimilation

The most pervasive example of assimilation is the alternation of morpheme-initial approximates depending on the preceding vowel, with /w/ occurring after back vowels, and /j/ occurring elsewhere. This alternation occurs in any suffix or enclitic that begins in an approximate, including the case-markers {-ja:} 'ABSOLUTE', and {-jɛ:} 'ERGATIVE' (see §5.4 on core case-marking), the evidential-markers {=jo:bo:} 'INFERRED' and {=jo:nɛ:} 'REPORTED' (see §7.6 on evidentiality), the aspect-marker {-jo:ɸo:} (see §3.3.2.2.3), the topic-marking enclitic {=ja:} (see §5.8 and §9.3.4), and the interrogative enclitics {=ja:}, and {=jɛi} (see §7.5.3.3). For instance compare the evidential form =wo:bo: in (77) with ja:nɛ:**jo:bo:** in (80).

(80)    ja:-nɛ:=**jo:bo:**  
        DIR:VEN-PST=INF  
        '(He) apparently came'

In (80), a mid-vowel /ɛ:/ requires the following onset /j/, whereas in (77), a preceding high vowel requires the approximate /w/ in the subsequent morpheme. a similar example may be

seen in the past-tense suffix /-ja:/ in (81) and (82), which shows this same alternation of approximates dependent on the preceding vowel.

(81) do:gɛ:          wa:-**ja**:  
house:LOC      teach-PST  
‘He was teaching in that house.’

(82) waija:=ja:    ja:          φili:          do:-**wa**:  
NAME=TOP    DIR:VEN    ascend      stand-PST  
‘We two came here, we came here to Lake Campbell.’

Another phonological process, which occurs with multiple suffixes, is the raising of a low vowel in a word stem, when a following suffix includes the high vowel /i/. This may be viewed as a type of simple vowel assimilation or vowel harmony in which a low vowel is raised in the vicinity of a higher vowel. These suffixes include the different-subject marker {-bi:} (see §9.4.1.1.2), the delayed-imperative marker {=bi:} (see §7.5.4.1.2), the continuous-aspect marker {-ki:} (see §9.4.1.1.2), and the simultaneous-aspect marker {-li:} (see §6.4.2.2). For example, in (83) the root stem {ja:} ‘DIR:VEN’ has the low vowel /a:/ when uninflected, but when suffixed by the delayed imperative in (84) the root vowel is raised to /ɛ:/.

(83) a:gɛ:    ja:  
dog      DIR:VEN  
‘The dog is coming.’

(84) ga:lo:          ɛ:mɛɛ:          jɛ:=bi:  
afternoon    back          DIR:VEN=DEL.IMP  
‘Come back in the afternoon.’

The progressive present tense suffix {-la:} occurs with a superficially similar raising of the stem vowel, but without the phonological motivation of a high vowel to motivate the raising of a low vowel. For instance, the root {ja:} shown in (83) with a low vowel in the uninflected form is realized as jɛ:-la: ‘DIR:VEN-PRS’ when suffixed with {-la:} in (85) (see §7.3.3 for more on {-la:}).

(85) ko:lu    εna:            εime        jε:-la:  
 man    DEM:ABS    already    DIR:VEN-PRS

‘That man is already coming.’

Although the result is very much the same, the phonological motivation for this process is unclear, and quite distinct. The stem-vowel change seen with {-la:} cannot be interpreted as part of the same process of vowel assimilation observed in conjunction with suffixes containing the phoneme /i/.

### 2.7.2.3 *Conditioned Fusion*

This section discusses instances in which two adjacent morphemes both undergo some phonological change, and may not be easily parsed as separate morphemes. The first example is the inferred evidential {=jo:bo:} which has a lexically specific reduction when combined with the progressive auxiliary {dεnε}, resulting in the semi-fused form *dεno:bo:*. This fused form omits the final vowel of the stem while also eliding the initial glide of the suffix. This fusion is specific to this combination of lexical items, and is not attested in other similar contexts such as in (80), where {=jo:bo:} may appear after the vowel /ε/ without any such reduction. The inferred evidential {=jo:bo:} may also appear in a fuse form with the reported evidential {=o:nε:}, as in (86) where both morphemes must omit the initial vowel.

(86) ε:mε:                    di-mεi=**bo:ne:**  
 DEM:ERG                get-3.FUT=INF=REP  
 ‘That (man) will reportedly get (it).’      (B4.p15)

This combined evidential is also discussed in §7.6.4.

Another instance of fusion occurs in consecutive morphemes which contain bilabial consonants (e.g. the completive morpheme {-jo:φo:} in §7.4.2.2 which may combine with the future morpheme {-mε:na:} in §7.3.2, and the counterfactual suffix {-ba:bε} in §7.5.2.1). A bilabial phoneme in a preceding syllable will result in a fused form as in (87)a where the morphemes {-jo:φo:} and {-ba:bε} fuse into the form {-jo:φa:bε}.

- (87) [[ε-φειja: nε: jε:bε ka: sa:nε-jo:φα:bε=ja:]<sub>TOP</sub> ka:]<sub>FIN</sub>  
 happen-PERF 1:SG tree FOC kill-COMP:CF=TOP FOC

‘When that happened, that tree branch would have indeed killed me.’

This same process gives rise to the completive morpheme {-jo:φο:} and the first person future *-mε:na:* resulting in the fused form *-φε:na:*. In non-first person, the fused form is *-φει*, resulting from the fusion of {-jo:φο:} and *-mει*. These completive future forms are also discussed in §7.3.2.2.

The final fusional variation appears in the future tense and appears to be conditioned by the onset consonant of the final syllable of the verb root; however, this alternation is limited to verb roots consisting of more than one syllable, and is poorly understood. If the final consonant is a voiced alveolar stop, /d/ or /n/, the final syllable of the verb root is omitted, and the initial consonant of the future suffix is expressed as the oral bilabial stop /b/. For example the verb shown in (88) below has the uninflected form *ko:dε* in (88)c. When inflected for the future tense in first person (88)a or non-first person (88)b, the final syllable of the root is replaced by the form *-bei* or *-bε:na:* respectively.

- (88) a. ko:so:      **ko:bε:na:**    kei  
 sago.trap    cut:1:FUT    ASSER

‘I will cut a sago trap’

- b. a:mi:    jε:      ka:φα:    a:mi:      **ko:bei**  
 then    tree    skin:ABS    PRO:ASS    cut:N.1:FUT

‘Then he will cut the tree bark.’

- c. da:-ja:      **ko:dε**    hεna:    do:-si  
 sago-ABS    cut      DUR    PFV-MED

‘I had been cutting sago, then...’

Another way of describing this alteration would be to say that the final syllable of the verb root fuses with the initial consonant /m/ in the future suffix *-mε:na:*. This results in a consonant with the oral feature of the root consonant /n/ or /d/, and the place of articulation of the suffix

consonant /m/. This process is extremely irregular, and is discussed in 7.2.5 as a specific conjugation class of verbs.

## 2.8 Loan Phonology

Eibela speakers are nearly universally multilingual in several surrounding languages, which has resulted in a number of loan words which have come into use. Loan words from other local languages, such as Kaluli, Kasua, or Kamula, generally bear more or less the same form as in the source language. This is because the phoneme inventory and syllable structures of these languages is similar enough that Eibela phonology is easily able to accommodate these forms. However, loan words which have been adopted from English and Tok Pisin often appear in a modified form which adheres to Eibela phonology. Since many Tok Pisin words originally stem from English it is often impossible to know with certainty which of these two languages a loan originates from. For comparison between forms where the source is uncertain, Eibela forms will be compared to English forms.

Phonemes in loan words are typically pronounced as the nearest equivalent Eibela phoneme, e.g. /ʊ/ is produced as /u/ in (89), /ʌ/ is produced as /a/ in (90), /ɑ/ is produced as /o/ in (91), and /ʃ/ is produced as /s/ in (92).

- |      |              |   |         |
|------|--------------|---|---------|
| (89) | book /bʊk/   | → | /buk/   |
| (90) | cup /kʌp/    | → | /ka:bo/ |
| (91) | God /gɑd/    | → | /god/   |
| (92) | shirt /ʃə:t/ | → | /seti/  |

Diphthongs in English often correspond to a simple long vowel in the borrowed form, as seen in (93-95). In (93) and (84) the diphthong /ei/ corresponds to /i:/ or /ɛ:/. While these two words differ in the resulting vowel, the choice of vowel is consistent within a lexical item. This means that the forms /φɛɛ:ta/ and /φɛli:ni/ do not occur. It is unexpected that in these two words, /φɛli:ta/ and /φɛɛ:ni/, a simple vowel appears despite the existence of the diphthong /ei/ in Eibela's phonemic inventory.

- (93) **English** plate /pleɪt/, **Tok Pisin** plet /plet/ → **Eibela** /φɛli:ta/  
 (94) **English** plane /pleɪn/ → **Eibela** /φɛɛ:ni/  
 (95) **English** trousers /ˈtraʊzəz/, **Tok Pisin** trausis /trausɪs/ → **Eibela** /tra:sis/

The terms /φɛli:ta/ and /tra:sis/ likely originated from the Tok Pisin words *plet* /plet/ and *trausis* /tra:sis/ rather than the English words *plate* and *trousers*, which would explain the absence of a diphthong. Such an explanation is not forthcoming for the simple vowel in /φɛɛ:ni/, however, since Tok Pisin word for a plane, *balus*, is not derived from the English word *plane*.

The most dramatic differences between the forms of English or Tok Pisin loanwords in Eibela and the source language result from their differing syllable structures. The rarity of consonant clusters in Eibela has resulted in forms which epenthesize a vowel relative to the source form, as in (96) and (97).

- (96) story /stɔ:ji/ → /sɛdo:li/  
 (97) three /θɹi:/ → /tɛri:/

A vowel resulting from a consonant cluster in the source language is nearly always the mid front vowel /ɛ/. Additional vowels in Eibela forms of a loan word may also result from coda consonants in the source language. The rarity of codas in Eibela requires that an additional vowel be present following the consonant which corresponds to a final coda consonant in the source language as in (98) and (99).

- (98) cup /kʌp/ → /ka:.bɔ/  
 (99) shirt /ʃɜ:t/ → /sɛ.ti/

The Eibela form is then realized with an additional syllable in which the onset corresponds to the coda consonant in the source language.

## Chapter 3 Open Word Classes

### 3.1 Introduction

Words in Eibela can be categorized into eleven broad word classes in terms of morphological, syntactic, and phonological criteria. This chapter discusses nouns, adverbs and verbs, which are large, open word classes, and also allow words from adjacent languages to be borrowed into the class and incorporated into the Eibela grammatical categories. Meanwhile, the remaining eight closed word classes are pronouns, adjectives, demonstratives, determiners (including coordinators), quantifiers, predicate particles, interjections, and discourse markers. These eight classes are restricted to a small number of items, and will be discussed in the following chapter. Open classes contain a very large number of lexical items, such that it is often not feasible to list them exhaustively. Open classes are also more amenable to expansion through the addition of coinages, compounds, and loan words.

### 3.2 Nouns

Nouns are the prototypical head of the argument of a predicate, and as such they are unmarked in this position. Lexical items classified as nouns may be inflected for grammatical categories such as case, number, and possession in argument positions, and may not be inflected for predicate-related grammatical categories such as clause-chaining, tense, aspect, mood, or evidentiality when in a predicate position (see also §9.2.2 on verbless clauses).

#### 3.2.1 Morphosyntax

An unmodified noun may function as either an argument of a clause, as in (1), or as a predicate, as in (2) and (3).

- (1) **jɛ:bɛ**    ɛime    a:mi:    dijo:ɸo:  
tree    already    PRO:ASS    put:PST

‘The logs are already put there.’

(2) nɛ            ɛ:ja:      wi:-ja:      u:gei  
 1:SG:MOD    father    name-ABS    NAME

'My father's name is U:gei.'

(3) a. wo:ko        mo:nɛka:    dju:nija:    ni:ja:    ko:sɛ:            do:ge:        a:nɛ:=ja:  
 NAME        NAME        NAME    1:PL    sago.pulp:LOC    house:LOC    go:PST=TOP

b. wa:wi        sɛ:            jɛ:bɛsola:-jɛ:    ta:-nɛ:  
 NAME        beach    canoe-LOC    cross-PST

'Wo:ko, Monica, Junior (and I), we were going to the bush camp and went to the bank of the Wa:wi river and we crossed in a canoe.'

In an argument position, a noun may be optionally inflected for case, as shown in (4), where the name *bobosu:wo:* is suffixed by the ergative case-marker {-wɛ:}. In a predicate position, no grammatical categories associated with a predicate (e.g. tense, aspect, mood, etc.) are possible (see §6.2 on the properties of verbal predicates).

(4) **bobosu:wo:-wɛ:**    djɛ:bɛ      ku:dɛ:      hɛna:-nɛ:  
 NAME-ERG            tree        cut        DUR-MED:IPFV

'Bobosu:wo: was cutting down a tree and then...'

In argument roles, a noun may be modified by a following adjective or determiner as in (5) and (6) respectively (see also §8.2 on nominal argument structure).

(5) do:ma:      ho:go:ja:-ja:      φili:-jo:            di-si  
 hill:ABS    big-ABS            ascend-COMP    PFV-MED:PFV

'We finished climbing a big hill and then...'

(6) hɛlɛna:        ɛna:        nɛ:-mo:      dija:      jɛ:=bi:            kɛi  
 fish.sp:ABS    DEM:ABS    1:SG-DAT    take    come=DEL.IMP    ASSERT

'Bring that Helena fish to me!'

A noun may also function as a modifier of an argument, as in *ɛ:ja: wi:* shown in (7). In this function, the noun may be uninflected as in (7), or inflected with the locative case, as in (8).

(7) nɛ            ɛ:ja:      wi:-ja:      u:gei  
 1:SG:MOD    father    name-ABS    NAME

‘My father’s name is U:gei.’

(8) u:sɛ:            φo:ge:-mi:      da:sɛ=ta:      la:-bi:      bo:bo:      kei  
 middle:LOC    side:LOC-ASS    stand=TEL    be-D.S    see      ASSER

‘We saw it (the pig) standing in the middle of the side of the hill.’

This nominal modification is morphologically distinct from possession, although modifiers of the type shown in (7) and (8) are sometimes used to show relationships of possession.

In order to derive a possessive anaphor from the noun referencing a possessor, the suffix *-na:* may be used. This derived form references something owned by or associated with the root noun.

(9) **[[keisa:le-na:]<sub>o</sub>** [mɛ:le-li:    a:nɛ:=ja:]<sub>PREL</sub>TOP    [ta:le-ta:]<sub>PREL</sub>FIN  
 woman-POSS    tie-SIM    go:PST=TOP      finish-TEL

‘Continue to tie on the women’s (sleeping area) and finish it.’ (A.2.85)

For example, in (9), the noun *keisa:lena:* references the part of a sleeping surface being built for the women to sleep on.

### 3.2.2 Noun Classes

Four different noun classes can be identified based on differing morphological processes. The largest class is nouns which are suffixed concatenatively, without any fusion of the stem and morphemes. Two other classes of nouns present fusion in either case forms or pronominal possession. A final noun class contains lexical items with human reference which present number as a grammatical category.

The largest class of nouns does not inflect for number, pronominal possession is expressed periphrastically, and case-marking suffixes are easily segmentable from the noun stem. For example, the noun *wi:* in (7) is clearly segmentable from case morphemes. Possessive pronouns have the same form as personal pronouns, though with a shortened final vowel. In

the previous example (7) the possessor in the phrase *nε ε:ja:* is the similar to the pronoun {nε:}, which functions as a first person singular argument.

### 3.2.2.1 Fusional Noun Inflections

Deviating from these patterns are two fusional classes of nouns. The first type of fusion presents as a class of approximately 50 nouns which express case through changes in the final vowel rather than concatenative affixation (see table 1 for all attested nouns of this class). For example, the nouns *do:go* ‘house’ and *εnε:bε* ‘leg’ in (10) has three non-concatenative case forms, which are all variations of the final vowel. Note that the locative and ergative cases are homophonous.

(10)	<i>do:go</i>	‘house’	<i>εnε:bε</i>	‘leg’
	<i>do:ga:</i>	‘house:ABS’	<i>εnε:ba:</i>	‘leg:ABS’
	<i>do:gε:</i>	‘house:ERG/LOC’	<i>εnε:bε:</i>	‘leg:ERG/LOC’

The second fusional noun class is a very small group of four kinship terms with fusional possessed forms for first and second person possessors. These are shown in table 2 below. These fusional possessed forms, including two synonymous terms for mother, can be compared to periphrastic possession constructions in other nouns, in which a personal pronoun referencing the possessor precedes a possessed noun, albeit with a shorted vowel, as in (11) below (see also §8.2 on nominal argument structure).

(11) a.	<i>ε:ja:</i>	b.	<i>nε</i>	<i>ε:ja:</i>	c.	<i>gε</i>	<i>ε:ja:</i>	d.	<i>ε</i>	<i>ε:ja:</i>
	father		1:SG:MOD	father		2:SG:MOD	father		3:SG:MOD	father
	‘father’		‘my father’			‘your father’				‘his/her father’

Table 1: Nouns with Fusional Case Forms

Noun	Gloss	Noun	Gloss	Noun	Gloss
a:ge	'today'	ha:ne	'water'	o:fo	'sun'
be:se:	'tooth'	ha:gene	'light'	fo:gono	'other.side'
beja:ge	'cuscus'	he:lene	'side'	fo:no:	'hair'
da:φene	'oar'	he:φe:	'half'	fo:su	'back'
dabe	'arm'	he:neφe	'bamboo.type'	φu:su	'bamboo'
demu:gu	'firewood'	he:lene	'fish.sp'	segaφe	'short.post'
do:mo	'hill'	ho:gu	'bottom'	sogo	'bowl'
do:fo	'snare'	je:be	'tree'	te:gelib	'walkway'
dogo	'house'	jo:fo:	'tree.trunk'	togo:	'clay'
du:nu	'nest'	juguφu	'snake.sp'	togo:lo	'path'
e:se	'string bag'	jukunu	'sheet'	u:su	'middle'
ene:be	'leg'	ka:φe	'skin'	wa:le	'step'
geφe	'neck'	me:bi	'leafy green vegetable'	wε:le:bi	'first-born'
go:bo	'leaf type'	me:ge	'tree.bark'	wo:bo	'sleeping.surface'
go:no	'intestines'	mo:go	'top.of.house'		
gono	'rapids'	mufugu	'top'		

Table 2: Fusional Kinship Possession

	First Person Possessor	Second Person possessor	Third Person Possessor /Unpossessed
Mother	no:no: 'my mother'	go:no: 'your mother'	o:no:
Mother	na: 'my mother'	ga: 'your mother'	na:
Brother	no:lo: 'my brother'	go:lo: 'your brother'	o:lo:
Younger Sister	no:do: 'my sister'	go:do: 'your sister'	o:do:

### 3.2.2.2 Number Deriving Nouns

Number is not an inflectional category of nouns, but it is rarely possible for number to be optionally expressed on a small number of nouns with human reference. An exhaustive list is given below in table 3.

Table 3: Nouns with Plural Forms

	<b>Singular</b>	<b>Plural</b>
Man	ko:lu	ko:luwa
Woman	kɛisa:lɛ	kɛisa:lɛ-gi
Old man/Ancestor	kɛga:da:	kɛga:da:-gi
Boy/Child	sa:wa	sa:wai

The fact that number marking is limited to higher animates, namely humans, follows the nominal hierarchy described in Smith-Stark (1974) and Dixon (2012, p. 87). The plural terms for woman and old man seem to share a plural morpheme {-gi}, but the other plural forms are not predictable or productive. Other nouns can only be specified for number using quantifiers or numerals, as shown in (12).

- (12) a:gɛ:            'dog(s)'  
      a:gɛ: ɛ:mɛli:    'one dog'  
      a:gɛ: a:nɛ      'two dogs'  
      a:gɛ: ma:li:    'many dogs'

### 3.2.2.3 Temporal Nouns

Nouns with temporal reference are limited in their syntactic and morphological behavior. These nouns specify when an action takes place by serving topical or adverbial roles within a clause, and do not appear as core participant arguments of a clause. These temporal words share most features of nouns. These nouns are listed in table 4, and include terms for various periods of time including parts of the day, different days, years, a generic term {ha:gɛ:}

for a period of time or moment in time, and a generic term for a later time. Three of these terms are relative to a reference time, which is determined by the context of the utterance. The terms {a:li} refers to the day before or after the reference time. In contexts where the reference time is the same as the moment of the utterance, this term may be translated as either yesterday or tomorrow. The term {a:li eneli:} is similar except that it refers to a day removed from the reference time by two days.

Table 4: Temporal Nouns

Parts of the day	Periods of time	Generic/Non-specific
<i>disi</i> 'mid-day, daytime'	<i>a:ge</i> 'today, now'	<i>ha:ge:</i> 'time, day, light'
<i>ha:genεbo:ja</i> 'morning'	<i>a:li</i> 'previous or subsequent day'	
<i>ga:lo</i> 'afternoon, evening'	<i>a:li eneli:</i> 'two days before or after'	
<i>nulu</i> 'night'	<i>φυφα</i> 'year'	

Like other nouns, these may function as a preceding modifier of an argument as in (13) as well as the head of an oblique argument, as in (14).

- (13) a. **a:ge** ha:ge:=ja: weβε:na:-mi:  
 now time=TOP PROX:DEM:ANA-ASS

'Now around this time,...'

- b. ε-φειja: ka: **a:ga:** momo di-mε:na:=ta:  
 do-PERF FOC today:ABS begin make-PURP=TEL

'After that has happened, now (we) will start to build.'

- (14) *body la: ha:ge:=ja: ja: do:-si:=ja:*  
 vote DEF time=TOP come STAT-MED:PFV=TOP

'It (The patrol) came at voting time.'

Quantifiers and determiners may modify a temporal noun, as in (15), with the quantifier *a:ne* 'two', and (16), with the indefinite determiner *no:*.

- (15) *ha:genebo:ja a:ne a:li di-si*  
 morning two sleep PFV-MED:PFV

'I slept there two days and then...'

- (16) *ha:ge: no:=wa: ja:-nege:*  
 time INDEF=TOP come-MED:IPFV

'On another day (lit. 'time'), I came and...'

Arguments headed by one of these temporal nouns are limited to four syntactic positions at the level of a clause: syntactic topic, intransitive subject, adverbial, and predicate. Syntactic topics are a clause-level grammatical relation which corresponds to the pragmatic role of a clause-level topic, and is discussed further in §5.8. This should not be confused with a broader understanding of a discourse topic as a purely pragmatic notion which does not have a specific set of morphosyntactic properties associated with a grammatical relation. Temporal nouns do not occur in object or transitive subject positions, nor do they allow the possessive morphology demonstrated in §3.2.1. The two most common argument positions are that of a topic, as in examples (13)a, (14), and (16) above, and that of an uninflected adverbial argument immediately preceding the predicate as in (13)b and (15) above and (17) below.

- (17) *ga:ga:=ja: a:li di-me:na: do:-wa:=ja: ka: ma: di*  
 2:DU=TOP day.removed take-FUT STAT-PST=TOP FOC NEG take:PST

'You two were supposed to get it yesterday but didn't.'

Less commonly, a temporal noun can function as the subject of an intransitive equative clause as in (18). Note that the term *a:ge* is unique among the temporal nouns in having a suppletive form *a:ga:*, which is used in all argument positions, e.g. topic and adverbial roles, without

further affixation. The form *a:ge* is limited to the function of a non-inflected noun modifier, as in (13)a.

- (18) [a:ga:]s [ε:lεmε:ntri: ha:gε:=ja:]<sub>PRED</sub> kεi  
 now:ABS elementary time=TOP ASSER  
 ‘Now is the time for an elementary school.’

A temporal noun may also head a predicate as in (18) above and the series of clauses in (19) below. In (18), the noun phrase *ε:lεmε:ntri: ha:gε:ja:* function as the predicate of the clause, whereas in (19) *ha:gεnebo:ja* forms an existential clause consisting of only the one word.

- (19) [dijo:=ta: adi]<sub>FIN</sub> [ha:gεnebo:ja]<sub>FIN</sub>  
 put=TEL sleep:PST morning  
 ‘Having put it(the bedsheet) up, I slept. (Then it was) morning.’

### 3.2.2.4 Proper Nouns

Proper nouns are names with inherently definite reference to a specific entity. In Eibela, these nouns are characterized by a lack of post nominal modification, vocative inflection, and associative plural marking. Place names have the additional tendency to be almost exclusively used as nominal modifiers to form compounds with more general nouns.

#### 3.2.2.4.1 Modification of Proper Nouns

Names are not observed with modifying adjectives, and demonstrative determiners are uncommonly used. The noun *kεga:da:* ‘old person’ may form a compound with a proper name as in (20), but similar compounds with nouns such as *ko:lu* ‘man’, *kεisa:le* ‘woman’, *sa:wa* ‘child’, etc. have not been observed (for more on compounding, see §8.2).

- (20) a. [kεga:da: wo:nwε] wεbε:na: ε-si=ja:  
 old.person NAME PROX:DEM:ANA do-MED:PFV=TOP  
 b. nε: susu di=ja: i:sa:-ja: sa:-ta:-bi:  
 1:SG grab PFV=TOP ground-ABS throw-TEL-D.S  
 ‘This old man Wo:nwe did that, he grabbed me and threw me to the ground.’

Both proximate and distal determiners are used as anaphoric determiners, and may be used in this function with proper names in contrastive environments, as in (21) and (22).

- (21) [u:gei ena:] a:mi: mi-ja:=bo:  
 NAME DEM:ABS] PRO:ASS come-PST=INF

‘That U:gei came there.’

- (22) [oso:luwa we] ε:mεε: ena: la:-mi: hεnε-sa:-bi:  
 NAME this back father DEF-ASS go-3:DR-D.S

‘I saw Osoluwa go back to her father.’

Names referring to human referents may be used with a modifier specifying associative plural. This specifies that the argument refers to the named individual as well as unspecified individuals who are accompanying this person or associated with this person in some way, as in (23) where *diki:no: do:sa:* refers to a man named Diki:no: and his family.

- (23) diki:no: do:sa: ma: εga:lima: do:-ba:be  
 NAME ASS.PL NEG nothing STAT-CF

‘None of Dikino’s people would be alive.’

This associative plural marker almost certainly originates from a clausal construction using the verb *do:* ‘to be in a state or at a place’, and the plural suffix *-sa:*. This would mean that the argument *diki:no: do:sa:* in (23) would have originated from a clause meaning ‘those staying with Diki:no:’. The use of the associative plural is exclusively attested with proper names, which is consistent with the cross-linguistic generalization presented in Moravcsik (2003) that proper names are the preferred locus of an associative plural construction.

#### 3.2.2.4.2 Proper Nouns as Modifiers

Proper nouns may be used as modifiers of a head noun in two prominent constructions. The first of these is pronoun elaboration (see also §8.4), which is very similar to the associative plural construction discussed above. Pronoun elaboration is possible with generic nouns, but much more common with proper names, and is formed by a non-singular pronoun which is modified by a noun. This construction uses the modifying noun as a known and definite

reference point for an argument which includes other indefinite or backgrounded members of a group being specified. This is most often done with proper names, such as *sulo:bo* in (24), but may also be observed in highly topical and definite animate nouns such as *a:ge:* in (25). See also the discussion of inclusory constructions in Oceanic by Brill (2004).

- (24) **sulo:bo** **ne:na:** o:ga:      ε            gε-mε:na:-ta:=nεge:  
 NAME    1:DU    pandanus seedling plant-PURP-TEL=MED:IPFV

‘Sulo:bo and I were planning to plant pandanus seeds and then...’

- (25) a:nε:=ja:      do:gε:      no:      wε            **a:gε:**    **i:ja:**  
 go:PST=TOP    house:LOC    INDEF    DEM:PROX    dog      3:PL

‘They went to the house, this one, this dog and the other ones (dogs).’

(lit. ‘Having gone, at the house (were) this one, the dog (and) them.’)

In addition to pronoun elaboration, proper names denoting locations are frequently used as modifiers in noun compounds. In these location names, a proper name modifies a generic term for the type of location being named. Examples include camps, as in (26), and topographical features, as in (27).

- (26) hεna:      **ika:tobola:**    **do:gε:**  
 go            NAME            house:LOC

‘We went to the Ika:tobola: house.’

- (27) i:sa:      wi:-ja:      **ε:snawaija**    **dogono**  
 place      name-ABS    NAME            mountain

‘The place is named E:snawaiya mountain.’

Locations are much more often specified using this type of compound, formed from a name and a generic noun, than solely the proper name as in (28). This is likely due to the cultural practice of naming people after geographical features as well as the reuse of certain names, which may make proper names ambiguous without further specification.

- (28) **so:wi:-ja:**      ta:-nɛ:  
 NAME-ABS    cross-PST  
 ‘We crossed the So:wi: (river).’

One striking deviation from the general pattern of modifying a generic noun is the construction used for creeks and rivers. The term for rivers of any size is the same as the generic word for water, {ha:nɛ}, and *precedes* the proper noun in compound constructions, as seen in examples (29) through (31).

- (29) ti-nɛ:=ja::                      **ha:nɛ** **kalebija**-ja:    ta:-mɛ:      hɛnɛ   dɛnɛ   kɛi  
 descend-PST=TOP:DUR    river    NAME-ABS    cross-PURP    go    PROG    ASSERT  
 ‘While we were going down, we were going to cross Kalibija creek.’

- (30) ja:            **ha:nɛ**    **mɛ:sinɛ**    ja:            ta:            do:            la:  
 DIR:VEN    river    NAME    DIR:VEN    cross    STAT    COP  
 ‘We had come and crossed Me:sine creek.’

- (31) **ha:nɛ**    **dɛlɛ:ga**    ta:            do:=si  
 water    NAME    cross    STAT=MED  
 ‘We had crossed Dilega river then...’

Proper names which refer to a location do allow the locative suffix {-jɛ:}, though it is optional. For example, in noun phrases consisting of solely a proper noun referring to a location, such as in (28) or (32), the locative case is very often omitted. As seen in (33), however, the locative case is used on occasion with inherently locative proper names.

- (32) **wɛ:lijo**    a:li            di-si  
 NAME    sleep    PFV-MED:PFV  
 ‘I slept at Welijo and then...’

- (33) **kɛsɛ:gi-jɛ:**    hɛna:            φili:            do:-si-ki:  
 NAME-LOC    go            ascend            STAT-MED:PFV-CONT  
 ‘I had gone up to Kesigi and then...’

In phrases with a generic noun following a proper name, as in (26) to (27) the locative case-marker is more frequently used, though it remains optional.

### 3.2.2.5 Relational Nouns

Another set of nouns with a unique functional distribution are relational nouns which refer to a position or location in relation to another entity. There are seven such nouns in Eibela: {wɛ:lɛ} ‘top/above’, {ho:gu} ‘bottom/below’, {φo:su} ‘back/behind’, and {su:} ‘inside’, {u:su} ‘inside’, {to:mulu} ‘front’, {φo:go} ‘side’, {φo:gono} ‘other side’, {ko:φo:} ‘downstream area’, and {ɛlɛ:bɛ:} ‘upstream area’. Several of these mark case fusionally as described in §3.2.2.1. These relational nouns function as the head of an argument denoting a location, as in (34).

- (34) nojɛ      φa:=ja:      nojɛ      φa:      wɛ:lɛ      ɛna:      dijo:-ta:-si  
 tree.type   leaf=TOP   tree.type   leaf   top   there   put-TEL-MED:PFV

‘We put it there on top of black palm leaves and then...’

In this example, the nominal modifier *φa:* specifies an entity as a spatial reference point, and the head noun *wɛ:lɛ* specifies a spatial relation to that reference point. These relational terms are treated as nouns primarily due to case inflection such as the example given in the alternation in (35) and (36) below.

- (35) jɛ:      ka:φo      ka:      **ho:gu**      di      ja:-nɛ:-si-jɛ:-mi:  
 tree   skin   FOC   bottom   take   come-PST-MED-LOC-ASS

‘Because the tree bark slipped off (while someone was trying to climb the tree).’

- (36) ka:wo-wɛ:      so:bu      no:-wa:      ɛlɛwɛlɛ      **ho:gɛ:**      dɛnɛ      hɛna:-si  
 NAME-LOC   hut   INDEF-ABS   NAME   bottom:LOC   possess   DUR-MED:PFV

‘Ka:wo had a hut there below Elewele.’

When one of these relational nouns appears in a non-inflected form immediately preceding the predicate, as in (35), it may not make reference to any particular entity as a landmark, and may have a variety of conventionalized meanings. In (35), *ho:gu* does not refer to the bottom of the tree or to a point below any particular entity. Instead, in this construction,

*ho:gu* simply means downwards in an absolute sense rather than being relative to some other entity. Similarly, the uninflected term *su:* in (37) refers to movement out of some enclosed space, in this case from within a string bag. If *su:* is inflected with the locative case, as in (38), it refers to a specific location.

- (37) kosu:wa: ka:ɸa: ɛ:-mo: wa: **su:** mi: di-si  
 cassowary skin:ABS 3:SG-DAT DIR:AND inside give PFV-MED

‘I gave him the cassowary skin from inside (the bag) and then...’

- (38) jɛ:bəsola: **su:-wɛ:** dijo: do:-si-ki:-jɛ:-mi:  
 canoe inside-LOC put STAT-MED:PFV-CONT-LOC-ASS

‘While (they) were putting (me) inside the canoe...’

In contrast, when inflected for locative case and modified by a noun, as in (36), the relational noun refers to a spatial relationship to a specific entity, in this case a hilltop named Elewele. Even in instances where there is no nominal modifier of the relational noun, locative case-marking differentiates a more generic absolute reference to relative reference to some elided entity which is known from previous discourse. For example, in (39) below, the locative case-marked noun *ɸo:sɛ:* refers to the relation between two individuals, the speaker and another man *Bubusu:wo:*, who is mentioned in the previous clause.

- (39) a. a:mi: bubusu:wo: hɛna: bɛda:-nɛ:  
 PRO:ASS NAME go CONS-MED:IPFV

‘Then *Bubusu:wo:* left, and then...’

- b. nɛ **ɸo:sɛ:** na:gɛ ja: lo: lɛ hɛnɛ-jɛ:-mi:  
 1:SG behind:LOC run come AFF IPFV DUR-LOC-ASS

‘...while I was running after him...’

One exception to this is the term *u:su* ‘middle’, which even when inflected for locative case has a strong conventionalized meaning of ‘in the forest’ or ‘away from a settlement’ whenever there is no other obvious reference given, as in (40), but may refer to the middle of another reference point if this is made explicit as in (41).

(40) u:ɛ:            gu:du:    ti            la:-bi:    di  
 middle:LOC   die            descend   COP-D.S   take:PST

‘It was dead in the middle (of the bush) and I took it.’

(41) kosu:wa:    u:ɛ:            buta:  
 cassowary    middle:LOC   chop:PST

‘We chopped the cassowary apart in the middle.’

(‘We chopped the cassowary in half’)

Thus far, relational nouns have only been shown as adverbial oblique arguments, and this is by far the most common role for these nouns. It is possible, however, for these nouns to function as direct objects, as in (42).

(42) wo:bu    **φo:gona:**        wɛjo:gu:    di-mɛ:na:    la:=ja:    a:mi:    dɛ:φɛja-φɛi  
 tree.bark   other.side:ABS   do.like.this   build-PURP COP=TOP   there   measure-HYPO:COMP

‘Measure there, where the other side of the sleeping space will be built.’

Additionally, the term *φo:su* may also refer to the back of a person or animal, in which case the reference is more definite and concrete than a purely relational meaning, which lends itself more easily to other semantic roles such as the patientive object role seen in (43).

(43) jɛ:    ma:sɛ-kɛi    **φo:su**    ja:bi:    bo:la:  
 tree   branch-INST   back    DIR:VEN   hit:PST

‘A tree branch hit (me) here in the back.’

Apart from this interesting semantic function of representing relative position to another referent, relational nouns function similarly to other nouns and are able to form arguments, appear with determiners, modify other nouns, and inflect for case. There are no examples of adjectives modifying a relational noun, but this may simply be due to a lack of data in the corpus.

### 3.2.3 Borrowings

Words from unrelated or distantly related languages are relatively commonly adopted into the class of nouns. For example, the English word *plane*, as in (44) below.

- (44) **φελε:ni**-ja: to:di=ja: ja:-bi:  
 airplane-ABS bring=TOP come-D.S  
 'A plane came bringing him.'

Other examples from English or Tok Pisin include *sedo:li* from *story/stori*, *ti:sa* from *teacher/tisa* or *pa:sta* from *pastor/pasta*. Kamula or Kaluli borrowings are also common, such as *kowa:* 'canoe' from Kamula, and *do:* 'father' from Kaluli.

### 3.3 Verbs

Verbs constitute the word class which most often functions in a clause as the predicate. In Eibela, verbal predicates may be inflected for morphological categories such as tense, aspect, mood, modality, and evidentiality, as well as clause combining morphology associated with clause chaining and subordination. Verbs also have more syntactic functionality in a predicate position, such as the possibility of being transitive as well as intransitive, and functioning as the head of a subordinate predicate. While non-verbs may function as a predicate, they are very restricted in the morphological inflections available, and are limited to intransitive argument structures. Non-verbal predicates must also be combined with a verbal copula when functioning as the predicate of a subordinate clause or in order to enable the use of verbal morphology such as tense, aspect and mood-marking suffixes. Auxiliaries may be considered a subclass of verbs, but are not discussed in this section since they are discussed in depth in §6.4.3. Verbal borrowings are attested from a variety of languages, including *dowa:* in (45) borrowed from Kaluli, and *ɾɛ:dʒɛsta:* in (46) borrowed from English.

- (45) ke:-ja: **dowa:**-φo:  
 pig-ABS bake-COMP  
 'We baked(mumued) the pig.'
- (46) **ɾɛ:dʒɛsta:**-mɛ:na:-ta: mo:ti la: kei  
 register-FUT-N.TEL close COP ASSER  
 "(It) is close to being registered."

In both of these examples, the verbal borrowings show the morphology which is associated only with verbal predicates in Eibela, and therefore are morphologically equivalent to native Eibela verbs.

### 3.3.1 Morphosyntax

Both verbs and non-verbs may function as the predicate of a clause, but verbs may express more morphological categories and be used in a wider variety of clause types than non-verbs in the predicate position. For example, a non-verbal predicate like the one in (47) may not be inflected with any morphology expressing tense, aspect, mood, evidentiality, or clause linking, and is limited to equative or attributive clause types.

- (47) [nɛ wi:-ja:]<sub>S</sub> [sa:da]<sub>PRED</sub>  
 1:SG:MOD name-ABS NAME

‘My name is Sa:da.’

- (48) a. [wola:nɛ]<sub>ADV</sub> [tile-si-ki:]<sub>PRED</sub>  
 out.of.control descend-MED:PFV-CONT

‘...and falling out of control...’

- b. [φo:su]<sub>ADV</sub> [ka: su:da: ti-nɛ:]<sub>PRED</sub>  
 back FOC fall descend-PST

‘I fell back down...’

In contrast, a verb such as *ti* ‘descend’ may be present with a variety of clause linking, aspect, and tense morphology, as demonstrated in (48)a and (48)b. Additionally, reduplication as a morphological process is only attested for verbs (see also §5.5.2.3 on verbal reduplication), and has the meaning of multiple repetitive actions, as in (49) and (50).

- (49) [φu:sa:]<sub>o</sub> [hɛ:nɛfa:]<sub>o</sub> **gɛgɛ** di-mɛi  
 bamboo:ABS bamboo.type:ABS cut:MULT PERF-HYPO:N.1

‘One should cut up many pieces of strong bamboo.’

- (50) **sɛ:li**      **buta:buta:**  
 properly chop:MULT  
 ‘He/she/they chopped it/them.’

In argument roles, or roles as an argument modifier, verbs must be nominalized by the suffix *-sɛnɛ*, which may function to mark habitual aspect, as in §7.4.3, or as a class changing derivation as in §9.3.1. For example, in (51) below, the verb-headed phrase *ha:na: ma: na:sɛnɛ* functions as a preceding argument modifier, which is a morphologically unmarked role for nouns, but requires the addition of {-sɛnɛ} for a phrase headed by a word belonging to the verb class.

- (51) **ha:na:**      **ma:**    **na:-sɛnɛ**      ha:gɛla:  
 water:ABS    NEG    consume-NOM    law  
 ‘a law prohibiting the drinking of water’

Similarly, verbs suffixed by {-sɛnɛ} may function as arguments in a clause, and refer to an argument of the nominalized verb. For example, in (52) below, the argument *wa:lɛsɛnɛ* refers to the agent of the verb, i.e. a teacher. Such nominalizations can also refer to other semantic arguments of the verb, such as an instrument in (53), a location in (54), or the action itself as in (55) and (56).

- (52) **ma:nɛ**      **wa:lɛ-sɛnɛ**  
 gospel      teach-NOM  
 ‘Pastor’

- (53) **ga:lɛ-sɛnɛ**  
 cover-NOM  
 ‘Cloth cover (for food)’

- (54) **jɛ:bɛsola:**    **la:**    **dijo:**    **di-sɛnɛ-jɛ:-mi:**  
 canoe      DEF    put      PFV-NOM-LOC-ASS  
 ‘at the place where people put canoes’

(55) ne            kɛga:da:-gi        dɛ            **wa:lɛ-sɛnɛ**    molu:wa:    kuda-ja:    wa:m  
 1:SG:MOD   old.person-N.SG   bow.arrows   tell-NOM        old            story-ABS   that's.it

'My telling of the old people's old story about bows and arrows is finished.'

(56) ne        **da:no**    **ga:lɛ-sɛnɛ**    wa:lɛ-mɛ:ni:-jo:gu:  
 1:SG    bow    carve-NOM    tell-PURP-INCH

'I want to tell about bow carving.'

In (54), case-marking can be seen as well on the nominalized verb *disɛnɛ*, further showing these derived forms to be nominal in character by virtue of both morphology and functional distribution. Relative clause structures and complement clauses also allow a noun to be modified by a clause which is headed by a verb, but these constructions differ formally and semantically from the nominalized phrases shown here. For more discussion of relative clauses and complement clauses, see §9.3.

### 3.3.2 Verb Classes

Several classes of verbs can be distinguished based on various morphological and syntactic criteria. These verb classes are generally characterized by variations on the general verbal properties discussed above. A class of interrogative verbs exists as well, which is discussed in §7.5.3.4 on interrogative predicates rather than the current section.

#### 3.3.2.1 Transitivity

Verbs in Eibela may be categorized into five transitivity classes: intransitive, transitive, ditransitive, S=O ambitransitive, and S=A ambitransitive. These classes are based on the number and type of core arguments which must be identifiable for the verb to be used felicitously. Intransitive verbs only require a single core argument which is often an agent, but may have other semantic roles as well. Transitive verbs require two core arguments which prototypically assume the roles of agent and patient although variations occur. Ditransitive verbs require three arguments, and only one verb, {dimi:} 'give', fits this criterion in Eibela. The verb requires an agent, the giver, a receiver or recipient, and a theme or the given object. Ambitransitive verbs may have one or two arguments, functioning as either transitive or intransitive verbs. These verbs may be considered to be a subclass of intransitive verbs in the

sense that only one core argument is obligatory, and the inclusion of a second argument is not necessary for a felicitous utterance. Obligatory arguments are those which must be identifiable in the discourse context, although they are very often elided and left unexpressed in the clause. When a core argument is expressed, they are optionally case-marked by the ergative or absolutive case-markers and may bear no morphological marking whatsoever.

Each verb will describe an event with a minimum number of participants with a particular semantic role in that event. In cases where multiple arguments are present, syntactic and morphological properties serve to specify which arguments correspond to which semantic role in the verb's event structure. The current section primarily discusses the semantic event structure of verbs, while syntactic and morphological properties of clausal constituents, including principles such as subjecthood and objecthood, are further discussed in chapter 5.

### 3.3.2.1.1 Intransitive Verbs

Intransitive verbs require only one core argument, but may optionally have additional oblique arguments specifying time, location, or additional participants. For example in example (57) and (58) the verbs *gu:du:sa:bi:* 'die', and *a:nɛ:* 'went' each have only a single argument which is expressed as a noun phrase in (57) and a pronoun in (58). When the only argument is overtly expressed as a noun phrase, it may optionally be marked by the absolutive case-marker {-ja:} as in (57).

- (57) a. [[lɛ hɛna:]<sub>PRED</sub>]<sub>MED</sub>  
do DUR  
'I did that then...'
- b. [[kɛ:-ja:]<sub>S</sub> [ka: gu:du:-sa:-bi]<sub>PRED</sub>]<sub>FIN</sub>  
pig-ABS FOC die-3:DR-D.S  
'that pig died.' (A.3.30-31)
- (58) a. [[ɛ:]<sub>S</sub> [ɛ:mɛɛ:]<sub>X</sub> [ti:φɛ:]<sub>X</sub> [a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
3:SG back afterwards go:PST  
'He went back after him (Ka:la:ma:be:).'

b. [[ka:la:ma:be: do:sa:]<sub>S</sub> [a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME ASS.PL go:PST

‘He went after Ka:la:ma:be: and the others.’ (A.1.32-33)

It is extremely common for an argument to be elided when the participants in an action are clear from the discourse context, as in (59). The argument is still obligatory in the sense that the event must be interpreted as involving an argument, and the identity of this argument must be clear.

(59) [[ka: **φa**:-ja:]<sub>PRED</sub> [jɛ: la:-bi:]<sub>X</sub>]<sub>FIN</sub>  
 FOC sleep:PL-PST DIR:VEN COP-D.S  
 ‘Having come, (they) slept.’ (A.1.18)

Examples (60) and (61) show that these verbs may include one or more oblique arguments which must be morphologically marked by an oblique case-marker (see also §5.7 on oblique case-marking).

(60) [[ɛ:na:]<sub>X</sub>[nɛ:]<sub>S</sub> [do:gɛ: su:-wɛ:]<sub>X</sub> [a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 DEM 1:SG house:ALL inside-LOC go:PST  
 ‘Then I went inside the house.’

(61) [[ja:]<sub>X</sub> [ka: φa:lɛ-mɛ:na: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 DIR:VEN FOC sleep:PL-FUT:1 ASSER  
 ‘‘We will sleep here.’’ (A.3.62)

In (60) and (61) above, these extra oblique arguments specify a location, and in (62) an oblique argument specifying a time is present. These oblique arguments are not required in that a specific time or place does not need to be specified or identifiable from context.

(62) [[nɛ: la:]<sub>S</sub> [a:ga:]<sub>X</sub> [mi-jɛ:na: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG DEF today:ABS come-1:FUT ASSER  
 ‘I said) “I will come today.”’ (A.4.50)

Unlike the ergative and absolutive case-markers which optionally appear on core arguments, the case-markers on these optional oblique arguments is obligatory.

### 3.3.2.1.2 Transitive Verbs

Transitive verbs require two identifiable arguments, which may or may not be expressed in a sentence. Like intransitive verbs, these verbs may take additional oblique arguments. In examples (63) and (64), the verbs *dijo:* and *sena:* require two participants to be identifiable, either as arguments present in the clause or as participants identifiable from the discourse context. In both examples, the agent of the clause is marked by the ergative case-marker {-jɛ:}.

- (63) [[ba:gɛ ɛna:]<sub>o</sub> [ko:lu-wɛ: ka:]<sub>A</sub> [di-jo:]<sub>PREDS</sub> [la:-bi:]<sub>PREDFIN</sub>  
 kina.shell that:ABS man-ERG FOC take-COMP QUOT-D.S

‘So the man took that kina shell, so they say’

- (64) [[nɛ:]<sub>o</sub> [sɛgai-jɛ:]<sub>A</sub> [sɛna:]<sub>PREDS</sub> [ma: kɛi] <sub>PREDFIN</sub>  
 1:SG NAME-ERG kill:PST NEG ASSER

‘Sigai did NOT hit me.’

It is actually very uncommon for both arguments of a transitive verb to be overtly expressed in a clause, and both of the examples above are pragmatically marked to signify a contrastive subject and a topical object. This is represented both by the expression of both arguments and by the marked constituent order of the object preceding the subject.

It is far more common for the agent to be a topical referent in the discourse which is easily identified and predictable, and which is therefore elided, as in example (65). In this example, the agent is the narrator, who has performed a series of actions in the discourse episode, and is the predictable agent of the clause shown in (66).

- (65) [[kɛ: ɛna:]<sub>o</sub> [ka: o:la:]<sub>PREDFIN</sub>  
 pig DEM:ABS FOC shoot:PST

I stabbed the pig.’ (A.3.29)

It is also possible to omit both core arguments as in example (66). In this example, the narrator has been describing a hunting trip involving a cassowary, and the identity of both the hunter and the cassowary is clear from the discourse.

- (66) [[so:bo: bε:nε:-kɛi]x [ka: o:la:]<sub>PRE</sub>]<sub>FIN</sub>  
 knife arrow.type-INST FOC shoot:PST  
 'I shot it with a knife-headed broadhead arrow.'

The only argument expressed is therefore an instrumental argument describing the type of arrow used to shoot the cassowary. This is an optional oblique argument, which need not be included when using the verb *o:la:* to describe such an event. Other arguments such as a location in example (67) or a beneficiary in example (68) can also be present in a transitive clause in addition to the core arguments.

- (67) [[a:nε:=ja:]<sub>TOP</sub> [wa:wi sɛ:]<sub>X</sub> [**kowa**:-jɛ:]<sub>X</sub> [ta:-nε:]<sub>PRE</sub>]<sub>FIN</sub>  
 go:PST=TOP NAME shore canoe-LOC cross-PST  
 'I went to the bank of the Wa:wi and crossed in a canoe.'

- (68) [[a:mo: ka:]<sub>X</sub> [ba:gɛ-ja:]<sub>O</sub> [**a:mo**: ka:]<sub>X</sub> [dijo:φo:]<sub>PRE</sub>]<sub>FIN</sub>  
 PRO:DAT FOC kina.shell-ABS PRO:DAT FOC put:PST  
 '(He) put down the kina shell for him.'

These are considered oblique arguments since the verb of the clause does not require this argument to always be identifiable in an event predicated by that verb. For example, the verb in (68) may be used in a context where no beneficiary is present in the discourse context, as in (69). Additionally, the verb *ta:nε:* describes any act of crossing a river, even if no vehicle is used, as seen in (70).

- (69) [[jɛ:bɛ]<sub>O</sub> [ɛimɛ]<sub>X</sub> [a:mi:]<sub>X</sub> [dijo:φo:]<sub>PRE</sub>]<sub>FIN</sub>  
 tree already PRO:ASS put:PST  
 'The logs have all already been put there.' (A.2.7)

- (70) [[o:lona:]<sub>O</sub> [ta:-nε:]<sub>PRE</sub>]<sub>FIN</sub>  
 NAME cross-PST  
 'I crossed the O:lona:.' (A.3.17)

It is actually possible to interpret *dio:φo:* as an impersonal intransitive verb, or ambitransitive verb, since no agent is clear from the context (see also §3.3.2.1 on ambitransitive clauses).

### 3.3.2.1.3 Ditransitive Verbs

Only one verb has been found which consistently requires a beneficiary or recipient to be identifiable in addition to an agent and patient. This is the verb {dimi:} which describes the act of giving. This verb requires three core arguments representing the giver, the object given, and the recipient as seen in examples (71) and (72).

(71) [[kɛ:-mo:]<sub>x</sub> [ma: dimi:]<sub>PRED</sub>]<sub>FIN</sub>  
pig-DAT NEG give:PST

‘He didn't give it to the pigs.’

(72) [[no:su]<sub>A</sub> [da:no-wa:]<sub>o</sub> [wɛ]<sub>x</sub> [dija: dimi:]<sub>PRED</sub>]<sub>FIN</sub>  
KIN bow-ABS DEM:PROX take give:PST

‘My no:su (bride wealth contributor) took this bow, and gave it (to U:gei).’ (A.1.43)

Given that it is uncommon for even two arguments to be overtly expressed in transitive clauses, it is completely unattested for all three of these arguments to be present in a clause in the corpus of natural language. Despite this, the event structure assumes all three participants which must be clear from the discourse context. In examples (71), two of the arguments are overtly expressed, and the third argument, the giver, is clear from context. Similarly, in (72), the giver and the given object are specified, and the recipient is clear from the discourse context. Other verbs which describe the manipulation of arguments may also specify a beneficiary or recipient with a dative object, as with (68) above, but in these cases the dative object is optional, as shown in example (69) where no recipient or beneficiary exists in the event structure.

In addition to events describing a transfer of objects, speech-act verbs often specify a dative object as well, but again, this object is optional, and is therefore not considered to be a core argument. Speech-act verbs are therefore considered to be transitive, with the possible addition of a dative object in addition to the obligatory elements of the subject, a speaker, and object, a speech report (for more information on speech reports, see §9.5). In many instances, a bi-clausal presentation will be used, as in example (73).

- (73) a. [[wo:ko-mo:]<sub>X</sub> [sɛ:-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME-DAT say-PST
- b. [[[ɛ:sa: a:nɛ] [di-mɛ:ni:-jo:gu: kɛi]<sub>PRED</sub>]<sub>O</sub> [sɛ:-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 bilum:ABS two take-PURP-IMM ASSER say-PST

‘I told Wo:ko, I said, "I will take two bilums (string bags).”’

It is unclear whether or not both a speech report and an addressee could felicitously be present in a single clause, but in any event, such a clause has not been attested, and must therefore be greatly dispreferred if not ungrammatical. In both clauses in (73) a speaker is clear from the context and is therefore elided, while the speech content is unspecified in the first clause, it is immediately elaborated in the following clause.

### 3.3.2.1.3.1 Other Verbs with Oblique Dative Objects

Dative objects can also be used as optional arguments specifying an affected location or destination of movements, as in (74) and (75). This differs semantically from other object types marked by locative or absolutive case-markers. In (74), the dative object represents an affected object, but not a directly acted upon argument.

- (74) a. [[[i: **ɸuga:nɛ-mo:**]<sub>X</sub> [kɛgɛɛ-si-jɛ:-mi:]<sub>PRED</sub> ka:]<sub>X</sub>  
 3:N.SG:MOD penis-DAT scratch-MED:PFV-LOC-ASS FOC
- b. [bɛ:sɛ:]<sub>X</sub> [bulu dijɛ:-li:-sɛnɛ-jo:gu: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 tooth cut do-SIM-HAB-INCH ASSER

‘And when they scratch at their penises, their teeth nearly cut them off!’

- (75) a. [[ɛ-si=ja:]<sub>TOP</sub> [nɛ:]<sub>X</sub> [ɛ:mɛɛ:]<sub>X</sub> [mo:so:]<sub>X</sub> [jɛ:-li:]<sub>PRED</sub>  
 do-MED:PFV=TOP 1:SG back bare DIR:VEN-SIM
- b. [tɛ:di-ja:]<sub>S</sub> [nɛ:-mo: ka:]<sub>X</sub> [ja:-nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME-ABS 1:SG-DAT FOC DIR:VEN-PST

‘I did that and then while I was coming back without anything Teddy came to me.’

The event describes the habit of a dog to scratch around or near its penis, but not the penis itself. In (75), the distinction is likely one of animacy; the destination of movement is a person

rather than a location and the object is therefore presented in dative case typical for animate beneficiaries and recipients rather than a locative case.

#### 3.3.2.1.4 Ambitransitive

Ambitransitive verbs are verbs which may be used intransitively with one core argument, but may also be used with two arguments, a transitive subject, abbreviated A and most often corresponding to the semantic role of agent, and a transitive object, abbreviated O and most often corresponding to the semantic role of a patient. The additional argument in a transitive usage of an ambitransitive verb is not a core argument in the sense of being obligatory, but it corresponds to one of the core arguments of a transitive verb in terms of syntactic and semantic roles. This is distinct from other strictly intransitive verbs which may feature additional oblique arguments with obligatory case-marking rather than the optional ergative and absolutive case-marking seen in A and O arguments. For example, the verb *dijo:φo:* ‘put:PST’ is used intransitively in example (69) above with only one argument which is identifiable in the discourse context, whereas the same verb may be used with an A argument specifying the agent of the event as in example (76) below.

- (76) a. [[**do:-wε:** la:]<sub>A</sub> [ε:na:]<sub>O</sub> [dijo:φo:]<sub>PRED</sub> [owa:mi]<sub>O</sub> [sε:-ja:=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 father-ERG DEF DEM:ABS put:PST NAME say-PST=TOP
- b. [ε:mεε:]<sub>X</sub> [ja:-nε:]<sub>PRED</sub>]<sub>FIN</sub>  
 back come-PST

‘My father had that (child) and called (her) Owa:mi and then came back.’

(lit. ‘Father put (had) that (child); and he said “Owa:mi”; and he came back.’)

This additional A argument is formally equivalent to a transitive subject in that it is optionally marked by the ergative case suffix. Ambitransitive verbs may be split into two categories based on whether the obligatory argument in the intransitive usage, abbreviated S, corresponds to the A or the O argument of a transitive clause.

##### 3.3.2.1.4.1 S=O Ambitransitive Verbs

The most common type of ambitransitivity shows a correspondence between the S argument of an intransitive clause and the O argument of a transitive clause. The verb *dijo:φo:*

was shown above in example (69) and example (76). Other examples include *obu:lu* ‘get wet’ shown (77) and (78), and *kε:* ‘block’ shown in (79) and (80).

(77) [[seti]<sub>S</sub> **[obu:lu-mεi]**<sub>PRED</sub>]<sub>FIN</sub>

shirt get.wet-HYPO

‘Your shirt might get wet.’

(78) [[a:dε]<sub>O</sub> **[obu:la:]**<sub>PRED</sub>]<sub>FIN</sub>

sibling get.wet:PST

‘(You) got your sibling wet.’

(79) [[ha:na:]<sub>S</sub> **[kε:-φεija:]**<sub>PRED</sub>]<sub>FIN</sub>

river:ABS block-PERF

‘The river is blocked.’

(80) [[ko:lu-wε:]<sub>A</sub> [ha:na:]<sub>O</sub> **[kε:-φεija:]**<sub>PRED</sub>]<sub>FIN</sub>

man-ERG river:ABS block-PERF

‘The men blocked the river.’

In examples (77) and (79), these two verbs are used with only one argument, and no A argument is present to identify the agent, which is already identifiable from the given context. In examples (78) and (80), the same verbs are used as a transitive verb with both an agentive subject and a patient object. The patient argument is present as the S argument in the intransitive examples in (77) and (79), and as the O argument in the transitive examples (78) and (80).

In many instances, it may be difficult to determine whether or not an ambitransitive verb is transitive or intransitive. For example, the clauses in examples (77) and (78) appear essentially alike, with only a patient and a predicate overtly expressed. While S and O arguments may be differentiated in principle by syntactic criteria (see chapter 5 on grammatical relations), case-marking is not helpful in determining transitivity in these examples, and syntactic cues are not directly apparent in many clauses. Since the patient would be suffixed by the absolutive case in both the intransitive S role and the transitive O role, the only useful criteria is whether or not an agent is apparent from the discourse. Since argument elision is

very common with actors which are topical and given in a discourse, if the agent of a clause may be understood from the discourse context, then it may be elided, and the clause will still be understood to have two arguments. If there is no agent recoverable from the discourse context, and no agent expressed in the clause, then only one argument can be understood to be involved in the event, and the clause is therefore treated as intransitive.

#### 3.3.2.1.4.2 S=A Ambitransitive Verbs

The second possibility is that the S argument of an intransitive clause serves the same semantic role as the A argument in a transitive clause. These are less common than the examples of S=O verbs given previously, but one clear example is the verb *wa:lɛ* ‘tell, teach, show’ shown in example (81) and (82) below.

(81) [[nɛ:]<sub>A</sub> [wa:lɛ-mɛ:na:]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG tell-1:FUT

‘I will tell (a story).’ (A.3.1)

(82) [[ɛ-φɛija: ka:]<sub>X</sub> [nɛ ɛja:-jɛ:]<sub>A</sub> [wa:lɛ-bɛda:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
do-PERF FOC 1:SG:MOD father-ERG tell-CONS-MED

‘That happened, but my father explained (it) so...’

In these examples, the verb functions as either intransitive, as in example (81), or transitive, as in (82). Transitive clauses with an elided object may still be identified as transitive if the subject may be marked by the ergative case suffix as seen in (82). The object of a transitive clause is most often an addressee as in (83) where the object is *sa:wai*, the children being taught.

(83) [[a:]<sub>X</sub> [ni:ja:]<sub>S</sub> [wɛ:na:]<sub>X</sub> [sa:wai-ja:]<sub>O</sub> [ho:no:]<sub>X</sub> [wa:jɛ dɛ:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
HES 1:PL PROX:DEM:ANA child:N.SG-ABS there:LVL teach PROG

‘We were teaching the children there at that time’

When no overt object is present, the ergative case-marker may clearly designate the clause as transitive, as in (82), but an agentive argument marked by the syllable /ja:/, such as (84)b, may be interpreted as a topic or an intransitive subject, since the final syllable may be interpreted as the absolutive suffix {-ja:} or the homophonous topic enclitic {=ja:}. A topic may be

coreferential with an A, S, or O argument in a clause, while an absolutive-marked argument may serve the function of an S or O argument. Because of this, it cannot be conclusively determined whether or not this agent argument is an O, an S, or a topic based only on case-marking. In the absence of conclusive case-marking, the context of the utterance offers disambiguation (for more on case-marking and topic-marking, see §5.4 on core case-marking and §5.8 on topic-marking).

- (84) a. [[[ε:]<sub>X</sub> [wε:]<sub>X</sub> [dε:-jε:]<sub>X</sub> [wijo:gu: ti a:n:ε:=ja:]<sub>PRED</sub>]<sub>TOP</sub> la:]<sub>PRED</sub>]<sub>FIN</sub>  
 yes this fire-LOC do.like.this descend go:PST=TOP exist
- b. [[ε:na:]<sub>O</sub> [ili: bo:bo:]<sub>PRED</sub>]<sub>CC</sub> [ka: la:]<sub>PRED</sub>]<sub>FIN</sub>  
 that:ABS suffice see:PST FOC COP  
 ‘Yes, I know that, that I went down into the fire.’
- c. [[do:=wa:]<sub>TOP</sub> [wa:lε=bεda:-nε:]<sub>PRED</sub>]<sub>MED</sub> [[do:bu]<sub>CC</sub> [ka la:]<sub>PRED</sub>]<sub>FIN</sub>  
 father=TOP tell=CONS-MED:IPFV understand:PST FOC COP  
 ‘(Because) my father told (that story), I understood.’

The argument *do:* is the agent of the speech event being described, and the O argument of the clause is readily identifiable, referring to the story that has just been described. It may therefore be concluded that the clause headed by *wa:lε* in (84)b is transitive with a topical A and an elided O. The A argument is topicalized as a prominent actant in the discourse episode since the speaker is explaining at length that story he has recited was told to him by his father.

### 3.3.2.2 *Lexical Aspect*

Verbs may be classified into three aspectual classes based on the semantic and morphological behavior of the verb with regard to four verbal aspect suffixes: {-ta:}, {-φεija:}, {-jo:φo:}, and {-wε:}. These defining characteristics are summarized in table 5. The meaning of these suffixes is consistent across classes with the exception of {-ta:} and {-wε:}. The semantic effect of the aspectual suffix {-ta:} depends on the lexical aspect of the verb. A verb stem suffixed by {-ta:} results in a progressive aspect when attached to atelic activity verbs, a telic meaning when used with a stative verb, and a resultative meaning when used with telic verbs.

The suffix {-wε:} on the other hand is used exclusively with stative verbs to convey intensification or completion of the state.

Table 5: Properties of Lexical Aspect Classes

Properties	Atelic Verbs		Telic Verbs
	Atelic Activities	Stative Verbs	
<b>{-ta:} Telicity Modifier</b>	YES (Progressive)	YES (Telic)	YES (Resultative)
<b>{-wε:} Intensification</b>	NO	YES	NO
<b>{-jo:φo:} Completive</b>	YES	NO	NO
<b>{-φειja:} Perfect</b>	YES	NO	YES

Two of these lexical aspect classes, atelic activities and states, are considered atelic, with the third class encompassing telic verbs. These terms refer to the prototypical aspect of events described by verbs within that class, although there are exceptions which will be discussed below. Telic events are those which have an inherent goal or end point incorporated into the meaning of the lexeme.

### 3.3.2.2.1 Atelic Verbs

Atelic events may be classified into states, which represent a non-changing state of being, and activities, which are processes or actions involving dynamic actions over time. Both states and activities are said to be atelic, meaning that they do not describe an event with a goal or endpoint (Comrie, 1976, p. 44). For example, the verb *φili:nε:* in (85) describes an activity which takes place, but does not attain a goal upon completion. The act of ascending does not end upon reaching some inherent endpoint.

(85) [[momo di-ta: φili:-nε:]<sub>PRED</sub>]<sub>FIN</sub>  
begin do-TEL ascend-PST

I began to go up.' (A.3.3)

- (86) [[ha:nɛ sɛ:=ja:]<sub>TOP</sub> [ka: so:lo: di]<sub>PRED</sub>]<sub>FIN</sub>  
 river beach=TOP FOC darken PFV  
 ‘It got dark, at the riverside.’ (A.3.35)

In contrast, the predicate *so:lo: di* in (86) is telic, and the event of darkening has an inherent endpoint, in this case the moment the sun has set completely.

### 3.3.2.2.1.1 *Atelic activities*

Atelic activities such as the verb *ɸili:nɛ:* in (85) are a class of verbs which typically describe events with some duration, but no inherent endpoint. They are distinct from states in that they involve a dynamic event or activity. These verbs allow three aspectual suffixes: {-ta:}, {-jo:ɸo:}, and {-ɸɛija:}.

The suffix {-ta:} is a telicity modifying suffix which has differing interpretations depending on the aspect of the root verb. For example, a verb in the class of atelic activities assumes a progressive incomplete aspect when affixed with {-ta:} as in (87). The event is still in progress when the subsequent event takes place. This is in contrast to (88) where the event of movement is no longer in progress during the subsequent event.

- (87) [[to:mu-ta: a:nɛ:=ja:]<sub>TOP</sub> [hɛna: so:wi: sɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 precede-TEL go:PST=TOP:DUR go NAME beach  
 ‘Going first, we went, going to the shore of the So:wi: river.’

- (88) a. [[ɛ: a:si la:]<sub>X</sub> [mi-ja:]<sub>PRED</sub>]<sub>X</sub> [ɛ:na:]<sub>X</sub> [to:mu lɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 3:SG:MOD friend exist come-PST there precede do  
 ‘He came to his friends; He went ahead there, and...’

- b. [[ni:ja:]<sub>X</sub> [a:gɛlɛ-sa:-bi: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:PL laugh-3:DR-D.S ASSER  
 ‘(He said), “They laughed at us!”’

Some verbs may seem to semantically describe telic actions, such as {o:lo:} ‘shoot’, {sa:nɛ} ‘hit’, or {go:no:} ‘swallow’, but the structural and semantic characteristics of these verbs classifies

them as atelic activities with regard to these aspectual suffixes. Specifically, they allow all three suffixes, and may also be used if the intended goal is not completed, as in (89).

- (89) [[kɛ: ko:loφu-wa:]<sub>O</sub> [o:la:-lolu:=wa:]<sub>PRED</sub>]<sub>TOP</sub> [lɛ dɛnɛ kɛi]<sub>PRED</sub>]<sub>FIN</sub> [[ogota:]<sub>PRED</sub>]<sub>FIN</sub>  
 pig medium.sized-ABS shoot:PST-ASS.EV=TOP do PROG DECL miss:PST  
 ‘(I) shot (at) the pig and in doing that, (I) missed.’

### 3.3.2.2.1.2 Stative Verbs

Stative verbs are distinct from verbs denoting atelic activities. Semantically, states represent unchanging, static state of affairs rather than a dynamic event. In terms of the structural characteristics of the verb class in Eibela, the completive suffix {-jo:φo:} and the perfect suffix {-φɛija:} are not attested with stative verbs, although the suffix {-wɛ:} may be used with similar semantic affect. For example, the verb {ho:lo:} ‘know’ can be suffixed by {-wɛ:} to mean ‘know completely’, or ‘know very well’, but the form \**ho:lo:-wo:φo:* ‘know completely’ is not possible. Stative verbs may be combined with a pro-verb to form complex predicates with this suffix in order to describe perfective events with stative verb, as seen in example (90).

- (90) [[sɛga:lɛ ɛ-φo:]<sub>PRED</sub>]<sub>FIN</sub>  
 be.happy do-COMP  
 ‘We had a celebration.’  
 (lit. ‘We were happy.’)

In addition, the suffix {-ta:} changes the aspect of a stative verb to a telic event meaning ‘to assume the state of the verb’. For example, the verb *ho:lo:-ta:* means ‘to enter the state of knowing’, i.e. ‘to learn’. The suffix {-ta:} is an important criteria for defining the structural verb classes, since atelic activities and states overlap greatly in semantics. One example of this is posture verbs describing positions such as sitting, laying, standing, etc. In semantic terms, a sound argument could be made to treat posture verbs as either states or atelic activities, but in terms of how aspectual suffixes are used and interpreted, posture verbs are clearly atelic activities and not states, as can be seen in (91), (92), and (93).

(91) [[wejo:gu: kulu: sa:-ta: do:-wa: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
do.like.this with.head.bent sit-TEL STAT-PST ASSER

‘He was sitting like this, with his head down.’ (A.1.24)

(92) a. [[beja:ge ho:no ka:]<sub>S</sub> [a:gɛ:]<sub>X</sub> [moso:golo di-si]<sub>PRED</sub>]<sub>MED</sub>  
cuscus there:LVL FOC dog smile PFV-MED:PFV

b [[aka: do:-ta:]<sub>PRED</sub>]<sub>FIN</sub>  
PRO:FOC STAT-TEL

‘That cuscus there started to smile at the dog, and then he continued to do so.’

(93) [[mo:ti]<sub>X</sub> [kɛ:ga-ta:]<sub>CC</sub> [la:-li:-ki:]<sub>PRED</sub>]<sub>MED</sub>  
close stand-TEL COP-SIM-CONT

‘It was still standing close...’

In all of these examples, the verb stem suffixed with {-ta:} results in a progressive aspect rather than acquiring a telic interpretation. In contrast, verbs such as {ho:lo:} ‘know’, {a:li} ‘sleep’, or {na:gɛ} ‘be.sick’ become telic when suffixed with {-ta:}, resulting in the forms *ho:lo:ta*: ‘learn’, *a:lita*: ‘fall asleep’, and *na:gɛta*: ‘become sick’. This telic meaning associated with the suffix {-ta:} contributes to the definition of stative verbs as a class in Eibela.

Stative verbs resemble telic verbs more than other atelic verbs with regard to the meaning resulting from the suffixation of {-ta:}. The suffix {-ta:} results in a telic event of entering or initiating a state when used with a stative verb. When used with a telic verb, the event describes a state resulting from the telic event. Both of these uses may be considered resultative in a general sense, describing a state resulting from a telic event.

### 3.3.2.2.2 Telic Verbs

Telic verbs describe a goal-oriented event with a process leading to an inherent endpoint of the event. Some examples of a telic event are {ta:lɛ} ‘finish’, {ɛlɛ} ‘end’, and {ga:lɛ} ‘leave’. These verbs allow the suffixes {-ta:}, and {-φɛija:}, but do not permit the suffixes {-jo:φo:} or {-wɛ:}. As previously mentioned, when a telic verb is marked by the suffix {-ta:}, the resulting aspect is resultative. For example, in (94) the verb *ga:lita*: describes the state of

events resulting from the telic event of leaving. The event of leaving has already occurred, and *ga:leta:* describes the resulting situation.

- (94) a. [[bɛda:-lo:lu=wa:]<sub>TOP</sub>    [ka:]<sub>X</sub>]<sub>TOP</sub>  
           see-ASS.EV=TOP            FOC
- b. [[ka:lama:bɛ:-ja:]<sub>S</sub>    [ɛimɛ:]<sub>X</sub>    **[ga:li-ta:]<sub>X</sub>**    [ɛ:mɛlɛ:]<sub>X</sub>    [a:nɛ:]<sub>PRED</sub>  
           NAME-ABS            already    leave-TEL    back            go:PST
- c. [[[mumu:nu:]<sub>O</sub> [ta:-mɛ:]<sub>PRED</sub>]<sub>X</sub>    [tilɛ:    dɛ:nɛ:]<sub>PRED</sub>    ba:lɛ:]<sub>X</sub>]<sub>FIN</sub>  
           NAME            cross-PURP    descend    PROG            COORD

‘When my father was doing that, he saw that Ka:la:ma:bɛ: had already left (the path) while going down to cross Mumu:nu creek.’ (A.1.37)

Similarly, the verb *ɛleta:* in example (95) describes a situation in which the speaker had already finished the story, and is implying that he should no longer be recorded.

- (95) [[nɛ:    la:    wa:-ja:    ja:]<sub>S</sub>    [wa:]<sub>X</sub>    [ka:    hɛna:    ɛlɛ-ta:]<sub>PRED</sub>]<sub>FIN</sub>  
           1:SG    DEF    story-ABS    DIR:VEN    DIR:AND    FOC    DUR    finish-TEL

‘My story here has come to a stop there.’ (A.1.65)

It is probable that the suffix {-jo:ɸo:} may not be attached to verbs of this class since it would result in redundant semantics, as described in the following section. The suffix {-jo:ɸo:} essentially forms a telic verb from an atelic verb stem.

### 3.3.2.2.3 Aspect-Changing Morphology

Given the structural and semantic properties of these aspect classes, it is most appropriate to treat the suffix {-jo:ɸo:}, which signifies the completion of an event, as an aspect-class-changing derivation, which attaches to an atelic verb stem and results in a telic verb by introducing an endpoint, or goal to the semantics of the verb. Take the examples in (96) and (97) below using the atelic activity verb *ɸili:* ‘ascend’, which demonstrate the different aspects which result from differing morphological forms.

- (96) [[sɛgɛli=ja:]<sub>TOP</sub> [φili:-jo:-ta: hɛna:-gɛnɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 raft=TOP ascend-COMP-TEL go-MED:IPFV  
 ‘Having gotten off the raft, I left and...’

In (96) both a shortened allomorph of {-jo:φo:} and {-ta:} are suffixed to the atelic stem *φili:* ‘ascend’ resulting in a resultative aspect. This resultative aspect is consistent with the semantics of {-ta:} being attached to a the telic verb stem *φili:jo:φo:*, which is in turn formed from the atelic root verb *φili:* being made into a telic verb by the suffix {-jo:φo:}.

In (97) the verb *φili:* ‘ascend’ is observed in two aspectual forms. The first clause *φili:ta:* is composed of an atelic activity verb suffixed by {-ta:}, and describes a continuing atelic action, as expected by the semantics of the suffix {-ta:} when used with atelic activity verbs.

- (97) [[φili:-ta: φili:-jo:φo:]<sub>S</sub> [ka: ka:]<sub>PRED</sub>]<sub>FIN</sub>  
 ascend-TEL go.up-COMP FOC FOC  
 ‘(They) indeed continued going up until they reached the top.’  
 (lit. ‘It was the case that (they) were going up, and went up (to the top).’)

This is in contrast to the semantics of the derived form *φili:jo:φo:* which describes a telic event with a definite endpoint, in this case the arrival at the top of some geographical location, after which additional ascension would not be possible. Other such alternations may be seen in the verbs {sa:nɛ} ‘to assault’ and {o:lo:} ‘to spear’. The first verb {sa:nɛ} means ‘to strike, assault, or hit’ in its uninflected form, but as a derived from *sa:nɛjo:φo:*, the meaning is ‘to kill’, i.e. to assault until a terminal endpoint (i.e. death). Similarly, the root verb {o:lo:} means ‘to stab or shoot (with a bow)’, and the derived form *o:lo:wo:φo:* means that the victim of this activity has been killed by the action.

### 3.3.2.3 Motion verbs

Motion verbs are inherently atelic verbs which describe an animate being’s volitional change of location. In Eibela, several of these verbs are distinct from other verbs due to a number of syntactic and morphological properties. Specifically, these verbs are {tila:} ‘descend’, {φili:} ‘ascend’, {hɛna:} ‘go’ {ta:} ‘cross’, and {da:li} ‘run’.

### 3.3.2.3.1 Perfect Aspect Formation

In terms of morphology, the form of certain stem-suffix combinations in motion verbs differs in a predictable way from verbs of other semantic domains. First, the perfect aspect suffix {-φειja:} must appear fused with the completive suffix {-jo:φo:} when combined with a verb of motion, as exemplified in (98).

- (98) [[kowa:bo sa:ge            εna:]<sub>X</sub>      [φili:-**jo:φειja:**]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME      river.mouth    DEM:ABS    ascend-PERF

‘I had gone up to the mouth of Kowa:bo creek.’ (A.3.4)

The completive category forms a telic verb from an atelic verb stem, which is required for the perfect morpheme {-φειja:}.

### 3.3.2.3.2 Past Tense Morphology

An additional morphological feature which differentiates motion verbs from other verbs is the past tense morphology. Most verbs form the past tense with alternate stem ending in /a/ or the concatenative morpheme {-ja:}; and a minority of verbs have a suppletive past tense stem form. Motion verbs are set apart in that they have a separate and distinct concatenative past tense morpheme {-nε:}, as in (99) through (101) below.

- (99) [to:mule:    hε:li-jo:            di-si]<sub>MED</sub>            [doma:=ja:    **φili:-nε:**            to:ja-jε:]<sub>FIN</sub>  
 front:LOC    go.out-COMP    PFV-MED:PFV    hill=TOP    ascend-PST    hilltop-LOC

‘We went on out up the hill to the top.’

- (100) [nε:    wo:gu:    su:da:    ti-nε:]<sub>FIN</sub>            [su:da:    **ti-nε:**            κει]<sub>FIN</sub>  
 1:SG    do.thus    fall      descend-PST    fall      descend-PST    ASSERT

‘(I said) "I fell like that, I fell!"’

- (101) [[o:lona:]<sub>O</sub>    [**ta:-nε:**]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME            cross-PST

‘I crossed the O:lona:.’ (A.3.17)

A notable exception to this pattern of past tense marking is the verb {hεna:} ‘go’, which has a suppletive past tense form, *α:nε:* seen in (102) below. This leads to the hypothesis that the

suffix {-nɛː} is historically derived from a serial verb construction composed of a motion verb followed by the past tense form of {hɛnaː} ‘go’.

- (102) [[nɛː]s [[goːbaː kaː]o [tiː-mɛːniː]PRED]x [aːnɛː]PRED]FIN  
 1:SG leaf.type:ABS FOC pick-PURP go:PST  
 ‘I went to cut gobo leaves.’ (A.4.15)

This hypothesis is supported by the fact that all of these past tense verb forms may be paraphrased by the root and the past form of {hɛnaː} ‘go’, e.g. *taːnɛː* ‘crossed’ may be paraphrased as *taː aːnɛː*, *tinɛː* ‘descended’ may be paraphrased as *ti aːnɛː*, *φiliːnɛː* may be paraphrased as *φiliː aːnɛː*, and so on. The motion verb {sijɛ} ‘roam’ is conspicuously absent from this class of verbs due to its regular concatenative past tense formation *si-jaː* ‘roam-PST’.

Another feature of these verbs is an idiosyncratic interpretation of the counterfactual suffix {-baːbɛ}. In most verbs, this suffix is used to specify that an event did not occur, but could have. For example, in (103) the clause describes an event which was prevented from occurring by the actions of the protagonist.

- (103) [[kaːlaːmaːbɛː]A [ɛːnaː]o [sɛnaː-baːbɛ]PRED]FIN  
 NAME DEM kill:PST-CF  
 ‘Kaːlaːmaːbɛː would have killed that one.’ (A.1.60)

The event described could have happened, but did not. The semantic interpretation of this suffix with verbs of motion is quite different, however. When the suffix {-baːbɛ} is used on a verb of motion, the event described is understood to have occurred despite contrary expectations.

- (104) hɛnɛ-baːbɛ  
 go-CF  
 ‘He’s going (unexpectedly).’  
 (105) tilaː-baːbɛ  
 descend-CF  
 ‘He’s going down (unexpectedly).’

- (106)  $\phi$ ili:-ba:be  
ascend-CF

‘He’s going up (unexpectedly).’

For example, in (104) through (106) the interpretation is that these events did in fact occur, even though they were not expected. This meaning is essentially the polar opposite of the interpretation of other verbs, like in (103), where the expectation is that an event will occur, but some event prevents that occurrence.

### 3.3.2.3.3 Sentence Position in Complex Predicates

The final feature of the structural verb class formed by verbs of motion is a greater degree of flexibility of the positioning of the verb in a complex predicate construction. A complex predicate is a single predicate composed multiple lexical stems, as in example (107). Such a predicate is considered a single predicate, because each of the lexical stems share argument structure and predicate properties such as tense, aspect, and mood. See §6.4 for more discussion of the types and definition of complex predicates.

Motion verbs may function as the final constituent of a complex predicate, as in example (107), as the non-final constituent of a complex predicate, as in (108).

- (107)  $[[n\epsilon:]_A [ti:\phi\epsilon:]_X [o:ga: \epsilon\text{-}ja:]_O [o:g\epsilon: di a:n\epsilon:]_{PRED}]_{FIN}$   
1:SG afterwards pandanus seedling-ABS pick.up take go:PST

‘I went after him, taking the pandanus seeds in a bilum.’

- (108)  $[[kosu:wa:]_O [tila: i:\phi O:]_{PRED}]_{FIN}$   
cassowary descend cook:PST

‘(I) went down and baked the cassowary (and sago).’ (A.4.31)

- (109)  $[[tila:]_{PRED} [w\epsilon]_X [si:j\epsilon b\epsilon:ki: w\epsilon]_X [o:mani\text{-}ja:]_S [ma: a:n\epsilon:]_{PRED}]_{FIN}$   
descend here shin this blood-ABS NEG go:PST

‘There was no blood going down here on this shin.’

Finally, as seen in example (109), motion verbs may appear at the beginning of a clause and be separated from other elements of a complex predicate by intervening clause constituents. This

is a feature unique to the set of five motion verbs described in this section. Other verbs will require some sort of subordinating morphology such as clause-linking morphology in (110) or topicalization as in (111) in order to occur at the beginning of a clause.

- (110) [[a:nɛ:=ja:]<sub>TOP</sub> [**dodo-si**]<sub>PRED</sub>]<sub>MED</sub> [[[ɛ:mɛɛ:]<sub>X</sub>[mi-ja:=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ja: do:gɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 go:PST=TOP stand-MED:PFV back come-PST=TOP:DUR DIR:VEN house:LOC  
 ‘We went and stopped, and then we came back and arrived at the house.’

- (111) [[**na:** **di=ja:**]<sub>TOP</sub> [hɛna:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 consume PFV=TOP go-MED  
 ‘Having eaten, I went and then...’

The use of motion verbs in complex predicates has an additional aspectual characteristic which sets these verbs apart. When a motion verb is the final constituent of a complex predicate, the aspects of the event described by each lexical stem are understood to occur simultaneously, as in (107) where an object is being held and carried while the agent is traveling. On the other hand, in examples like (108) and (109), where the verb of motion is not the final constituent of the predicate, the motion is not simultaneous with the actions described by other constituents of the complex predicate, and the motion event precedes the actions described by a following constituent of the complex predicate. Despite this sequential event structure, such constructions are still considered to be a single event and a single predicate due to obligatorily shared argument structure, and a common time-frame for all of the aspects of the event. For instance, the act of baking in example (108) must have taken place immediately following the act of motion, and the act of motion must be understood to have been undertaken in order to accomplish the act of cooking.

#### 3.3.2.4 *Positional and Existential Verbs*

Four verbs will be discussed in this section which describe states of sitting, standing, lying, or existence. While there are other verbs with similar semantics, these four verbs are singled out due to similar grammaticalization paths and an interesting distribution of usage. Each of these verbs has a lexical usage as an independent predicate as well as a grammatical auxiliary function in complex predicates. These verbs are {*sa:*} ‘sit’, {*da*} ‘lie’, {*dodo*} ‘stand’, and

{/a:} ‘be’. These verbs may all be used for general statements of existence or location, but differ in the animacy of their subjects and their use of attributive complements. These verbs may also be used in clause linking constructions as discussed in §9.3.1 and §9.3.2.3, and in auxiliary constructions as described in §6.4.3.

{da} ‘lie, be (at a location), RELATIVIZER’

The verb {da} is used with two primary senses depending on the animacy of the subject. For animate subjects, the verb has the postural meaning ‘to lie’, while with inanimate subjects, the verb has a more general existential meaning. For example, in (112) the verb describes a human lying down in order to sleep, while in (113) the inanimate subject *du:nu* is simply asserted to exist.

- (112) [[[:ε:]<sub>A</sub> [ka: a:li dε:=bi: kεi]<sub>O</sub> [ε-si=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 3:SG FOC sleep lie=DEL.IMP ASSER say-MED:PFV=TOP

‘“Yes, you go ahead and lie down to sleep (here)” I said and then...’

- (113) [[mi-ja:]<sub>MED</sub> [okε:bi du:nu]<sub>S</sub> [da]<sub>PRED</sub>]<sub>FIN</sub>  
 come-PST:DUR bush.fowl nest be.at

‘I was coming, and then there was a bush fowl nest.’

As an auxiliary, {da} functions as a relativizer and nominalizer in embedded clauses. This is discussed at length in §9.3.2.4, and can be seen in examples (114) and (115).

- (114) a. [[[a:gε:]<sub>S</sub> [to:mu]<sub>CC</sub> [la:]<sub>PRED</sub> [da]<sub>PRED</sub> la:]<sub>S</sub> [to:dulu]<sub>CC</sub> [la: bεda:]<sub>PRED</sub>]<sub>MED</sub> [mεna:]<sub>PRED</sub>]<sub>S</sub>  
 dog precede COP be.at DEF drop COP CONS eat:PST  
 b. [sεsε bεda:]<sub>PRED</sub>]<sub>MED</sub>  
 whine CONS

‘The dog who had gone first ate (the sago) after it was dropped whined so...’

(lit. ‘That dog was there having preceded, (someone) dropped (the sago) so (the dog) ate (it), (that dog) whined, so...’)

(115) [[kɛga:da:-gi]<sub>s</sub>    **[dimi: da]<sub>PRE</sub>**]<sub>o</sub>    [molu:wa:]<sub>o</sub>    [wa:lɛ-mɛ:ni:-jo:gu:]<sub>PRE</sub>]<sub>FIN</sub>  
 old.person-N.SG    happen    be.at    old    tell-PURP-INCH

‘I am starting to tell an old story (about) what the old people did.’

In (114), the clause *to:mu la: da* forms a relative clause and modifies the noun *a:ge:* and forming an argument in the main clause.

{dodo} ‘stand, PERFECT’

The act of standing by an animate subject is described by the verb {dodo}, and is often used with a locative complement as in (116), though it may also occur without a locative argument as in (117).

(116) a. [[u:ludi:ja togo:lo    ɛna:]<sub>x</sub>    **[dodo-si]<sub>PRE</sub>**]<sub>MED</sub>  
 NAME    road    DEM    stand-MED:PFV

‘I was at the road going to U:ludi:ja and then...’

b. [[momo di-ta:    ɸili:-nɛ:]<sub>PRE</sub>]<sub>FIN</sub>  
 begin    do-TEL    ascend-PST

‘I began to go up.’ (A.3.2-3)

(117) [[[nɛ    ɛ:ja:    wɛbɛ:na:]<sub>A</sub>    [da:no    ɛna:]<sub>o</sub>    [ka:    di=ja:]<sub>PRE</sub>]<sub>TOP</sub>    **[dodo]<sub>PRE</sub>**]<sub>FIN</sub>  
 1:SG:MOD father    PROX:DEM:ANA    bow    that:ABS FOC    take=TOP    stand:PST

‘my father stood (there) having taken the bow.’

This literal positional meaning has grammaticalized into an auxiliary describing perfective or perfect aspects in complex predicates, as in (118). A similar usage may be seen in (117), where a subordinate topic clause describes an action which has immediately concluded, and *dodo* describes the state of the subject after these event is completed.

(118) [[wa:wi    sɛ:]<sub>o</sub>    [ta:    **dodo-si]<sub>PRE</sub>**]<sub>MED</sub>  
 NAME    beach    cross    PERF-MED:PFV

‘We had crossed to the shore of the Wa:wi and then...’

These two constructions on (117) and (118) are syntactically distinct in that {dodo} functions as the sole predicate in the clause in (117) and retains its concrete positional meaning, whereas in (118) a complex predicate is formed by *ta: dodosi*, and the concrete positional meaning is no longer apparent.

{la:} ‘EXISTENTIAL COPULA’

The copula {la:} is the most abstract verb discussed in this section in that it may only function as a copula indicating an attributive relation, or as a clause linking auxiliary in complex predicates. When forming a copula clause, {la:} may attribute a variety of complements to a subject, including adverbs (119), adjectives (120), and quantifiers (121).

(119) [[a:ge:=ja:]<sub>TOP</sub> [ke: ba:le:]<sub>X</sub> [do:ge:]<sub>X</sub> [ε:meli:]<sub>X</sub> [bo]<sub>X</sub> [la:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 dog=TOP pig COORD house:LOC together just COP-D.S

‘The dogs, they just lived in a house together with the pigs.’

(120) [[ho:go:ja:]<sub>CC</sub> [ka: la:]<sub>PRED</sub>]<sub>FIN</sub>  
 big FOC COP

‘It was big.’

(121) [[do:φu-wa:]<sub>CS</sub> [ma:li:]<sub>CC</sub> [la: kei]<sub>PRED</sub>]<sub>FIN</sub>  
 smoke-ABS much COP ASSERT

‘There is a lot of smoke.’

(122) [[ne eja:-ja:]<sub>CS</sub> [mumu:ne ε:le:bε:]<sub>CC</sub> [la:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG father-ABS NAME river.head COP-D.S

‘My father was at the head of Mumu:ne creek.’

Nouns may also be used to ascribe a location as in (122), but are not attested to assert the identity of the subject. Nouns may assert the identity of the subject by serving directly as the predicate (see §3.2.1 and §6.3 for more on nouns functioning as clause predicates).

As a copula, {la:} may be used to form embedded clauses, and as an auxiliary, {la:} may combine with lexical verbs to form embedded clauses as described in §9.3.2.3 and to form imperfective main clauses. For instance, in (123) {la:} is used to describe an ongoing state of

affairs which remains unresolved in the immediate discourse context. Similarly, in (124) an event is described as being in progress.

- (123) [[kosu:wa: ɛna:]<sub>o</sub> [jo:lo: la:-bi:-no:]<sub>pred</sub>]<sub>fin</sub>  
 cassowary that:ABS to.butcher COP-D.S-IRR  
 ‘We needed to butcher that cassowary.’

- (124) a. [[[no:]<sub>x</sub> [wɛ:]<sub>s</sub> [a:ge: kɛga:-ja: wɛ:]<sub>s</sub> [su:-wɛ:]<sub>x</sub> [da-li:=ja:]<sub>pred</sub>]<sub>top</sub>  
 DISJ this dog bony-ABS this inside lie-SIM=TOP  
 b. [wɛ:]<sub>o</sub> [dɛdɛ la:-bi:]<sub>pred</sub>]<sub>fin</sub>  
 this hear COP-D.S

‘This one, this bony dog who was still inside was listening to this.’

In both of these clauses, tense is not marked, and the clause can conceivably be interpreted as present or past tense. In this way, such clauses are morphologically deficient and resemble embedded clauses or medial clauses, although they may occur in isolation as a main clause, and may be suffixed by other morphology which only occurs on main clauses such as modal and evidential morphemes.

In discourse, {la:} may have a topicalizing function which resembles clefting, seen in example (125).

- (125) a. [[do:ga:]<sub>cs</sub> [i:sa: do:go:]<sub>cc</sub> [ka: la:]<sub>pred</sub>]<sub>fin</sub>  
 house:ABS ground house FOC COP  
 ‘That house was a house on the ground.’  
 b. [[ɛ:na:]<sub>x</sub> [nɛ:]<sub>s</sub> [do:ge: su:-wɛ:]<sub>x</sub> [a:nɛ:]<sub>pred</sub>]<sub>fin</sub>  
 DEM 1:SG house:LOC inside-LOC go:PST  
 ‘I went there, inside the house.’

In this function, a copula clause occurs with {la:}, which then introduces and highlights an argument in the following proposition.

{sa:} ‘sit, stay, DIRECT’

The lexical meaning of the verb {sa:} is to be seated, or to be at a location for an extended period of time. It can also be used to mean resting or being inactive. This can be seen in (126) where it may be understood in the most literal way as a human agent being seated. In (127) the verb has a more abstract meaning of resting for some time, though not necessarily being seated, and finally in (128) the most abstract extension of the meaning is shown which describes where an individual lived for a period of years.

(126) [[o:gu:-bi:=ja:]<sub>TOP</sub> [nɛ:]<sub>S</sub> [ɛna]<sub>X</sub> [ka: **sa:-bi:**]<sub>PRED</sub>]<sub>FIN</sub>  
do.thus-D.S=TOP 1:SG still FOC sit-D.S

‘I was like that, I was still sitting.’

(127) a. [[ga:lo]<sub>X</sub> [**sa:-nɛgɛ:**]<sub>PRED</sub>]<sub>MED</sub>  
afternoon sit-MED:IPFV

‘(I) sat (there) in the afternoon and...’

b. [[do-si]<sub>PRED</sub>]<sub>MED</sub>  
STAT-MED:PFV

‘(I) was there and then...’ (A.4.34-35)

(128) [[ni:ja:]<sub>S</sub> [naimo:bo:]<sub>X</sub> [kɛsɛ:gi:]<sub>X</sub> [**a:si**]<sub>PRED</sub>]<sub>FIN</sub>  
1:PL previously NAME stay:PST

‘We were living at Kese:gi before.’

These three main uses represent a progressively abstract extension of the core meaning of ‘sit’, ranging from the notion of being literally seated and remaining in a single spot in (126), to remaining in a home or small area in (127), or finally simply the abstract notion of living in a general area in (128), where the suppletive past tense form *a:si* is used referring to living in the village Kese:gi for an extended period of time.

An evidential suffix, {-sa:} is used to specify actions witnessed by the speaker, as in (129), and may be historically derived from the posture verb {sa:} (see §7.6.1 for more on how this relates to evidentiality in Eibela).

(129) [[segai]<sub>o</sub> [ka: sɛɛ:na:]<sub>x</sub> [ɸulu-sa:-bi:]<sub>pred</sub>]<sub>fin</sub>  
 NAME FOC hit:PURP chase-3:DR-D.S

‘She chased Segai in order to hit him.’

While the semantics of this usage is very different from the postural or positional usages, the tendency for other postural verbs to grammaticalize into auxiliaries sets a precedent that this construction with {sa:} greatly resembles, and the construction of a verb followed by {sa:} is therefore included here to accompany the discussion of other clearer grammaticalization paths.

### 3.3.2.5 *Speech-act Verbs*

There are two speech-act verbs, which vary in their syntactic and morphological properties. These verbs are {sɛɛ} ‘say’ and {wa:lɛ} ‘tell, teach’. The pro-verb  $\epsilon$  is not included in this discussion, although it may also be used to describe speech-acts among many other functions. The discussion of  $\epsilon$  may be found in §9.5.3. The two verbs {sɛɛ} ‘say’ and {wa:lɛ} ‘tell, teach’ are presented here as a semantic class of verbs, although, they do not have the common morphological or syntactic properties which would allow them to be considered a structural class of verbs. There are however syntactic properties of speech act constructions which are described in §9.5.

{sɛɛ} ‘say’

Since the object of a speech-act verb is often a speech report in the form of an unmarked speech report or complement clause, some exploration of the transitivity of this verb is warranted. The subject and the object may both follow the case-marking pattern of a transitive verb when these arguments are noun phrases. For example, in (130), the speaker argument features the ergative form of the demonstrative  $\epsilon m\epsilon$ : which is used for the subjects of transitive clauses.

(130) a. [[no:]<sub>x</sub> [pa:sta  $\epsilon\epsilon$   $\epsilon m\epsilon$ :]<sub>A</sub> [sɛɛ-si=ja:]<sub>pred</sub>]<sub>top</sub>  
 DISJ pastor daughter that:ERG say-MED:PFV=TOP

b. [wai-jɛi]<sub>x</sub> [ko:]<sub>x</sub> [a:binɛ:]<sub>A</sub> [sɛna:-jɛi]<sub>pred</sub>]<sub>fin</sub>  
 hey-EMPH EMPH who:ERG attack:PST-Q:N.PRS:EMPH

‘The pastor’s daughter said “Hey! Who hit you?”’

- (131) [[to:-wa:]<sub>o</sub> [sɛ: jo: di-si]<sub>PRE</sub>]<sub>MED</sub>  
 language-ABS say AFF PFV-MED:PFV  
 ‘They planned and then...’  
 (lit. ‘(They) spoke words...’)

Similarly, in (131), the speech-act is presented as a noun phrase within the clause predicated by the verb {sɛɛ}, and this object is suffixed by the absolutive suffix {-ja:} and precedes the verb, just as an object in another transitive clause would be. The type of transitive construction in (131) can also be seen in the petrified compound construction *to: di* ‘to converse (literally ‘take words’)', seen in example (132).

- (132) [[i:ja:]<sub>s</sub> [wɛ:sli ba:lɛ]<sub>x</sub> [ja: to: di]ɛ: dɛn=o:bo:]<sub>PRE</sub>]<sub>FIN</sub>  
 3:PL NAME COORD DIR:VEN language take PROG=INF  
 ‘They came with Wesley and were talking (with him).’

An addressee may be specified for the verb *sɛɛ* as a dative object, as seen in (133), though this argument is often omitted.

- (133) a. [[nɛ ɛ:ja:]<sub>A</sub> [sɛɛ-ki:=ja:]<sub>PRE</sub>]<sub>TOP</sub>  
 1:SG father say-CONT=TOP  
 b. [[ha:bila: gi:ja:]<sub>A</sub> [to:-wa: kulu-φɛija:-ja:]<sub>o</sub> [nɛ:-mo:]<sub>x</sub> [sɛɛ=ta:b ma: kɛi]<sub>PRE</sub>]<sub>FIN</sub>  
 NAME 2:PL language-ABS angry-PERF-ABS 1:SG-DAT say=PROH NEG ASSER  
 ‘My father said, “You Ha:bila:, don't speak angry words to me.”’ (A.1.63)

Although this dative addressee argument is often omitted, the identity of the addressee is typically clear from context.

{wa:lɛ} ‘tell, teach’

The verb {wa:lɛ} differs semantically and structurally from {sɛɛ} primarily in the absence of the type of dative addressee argument seen in (133). Transitive clauses with a speaker as the subject, and a speech-act as a subject have a similar argument structure to {sɛɛ} as shown in examples (130) and (131). This can be seen in (134) to (137).

- (134) [[nɛ:]<sub>A</sub> [wa:lɛ-mɛ:na:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG tell-1:FUT  
 ‘I will tell (a story).’ (A.3.1)
- (135) [[molu:wa:]<sub>O</sub> [wa:lɛ-mɛ:na:]<sub>PRED</sub>]<sub>FIN</sub>  
 old teach-FUT:1  
 ‘I will tell an old (story).’
- (136) [[nɛ:]<sub>S</sub> [wa:-ja:]<sub>O</sub> [ɛimɛ]<sub>X</sub> [wa:-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG story-ABS already tell-PST  
 ‘I already told a story.’
- (137) [ɛ-φɛija: ka:]<sub>MED</sub> [nɛ ɛja:-jɛ:]<sub>A</sub> [wa:lɛ-bɛda:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 do-PERF FOC 1:SG:MOD father-ERG tell-CONS-MED:IPFV  
 ‘That happened, but my father explained (it) so...’

In (134) the speech-act is a clause without any case-marking, and the speaker is expressed as a subject pronoun. In contrast, the speech-act in (134) is a noun phrase, but still shows no case-marking, and the subject is elided. It is only in (136) and (137) where case-marking offers clearer expression of grammatical relations.

As previously mentioned, dative objects may not be used to introduce an addressee argument into a clause using {wa:lɛ}, but there are two alternative constructions for specifying an addressee using this verb. The first is a construction with two main clauses as seen in (138), where the first clause described the act of speaking, and the second clause describes the act of hearing.

- (138) [[do:=wa:]<sub>TOP</sub> [wa:lɛ bɛda:-nɛ:]<sub>PRED</sub>]<sub>MED</sub> [[do:bu: ka: la:]<sub>PRED</sub>]<sub>FIN</sub>  
 father=TOP tell CONS-MED understand:PST FOC COP  
 ‘My father told that story, so (I) understood.’

It is only by using two separate clauses that the speaker, speech-act, and addressee may all be specified. It is also possible to express the speaker and the addressee in a single clause, with the argument referring to the speech-act being absent, as in (139).

(139) [[a:]<sub>x</sub> [ni:ja:]<sub>A</sub> [wɛ:nɑ:]<sub>x</sub> [sa:wai-ja:]<sub>o</sub> [ho:no:]<sub>x</sub> [waijɛ dɛ:nɛ:]<sub>pred</sub>]<sub>fin</sub>  
 HES 1:PL PROX:DEM:ANA child:N.SG-ABS there:LVL teach PROG

‘We were teaching the children there at that time’

In (139), the speaker is still the subject of the clause, as in (134) to (137), but the direct object is the addressee rather than the speech-act. This differing argument structure may signify that {wa:lɛ} ‘tell (a story)’, and {wa:lɛ} ‘teach, tell (somebody)’ are separate homophonous verbs with differing argument structures.

The realization of the speech-act in clauses with {wa:lɛ} are more syntactically limited than the speech-acts present in clauses with {sɛlɛ}. Speech-acts in clauses predicated by {sɛlɛ} may be expressed by noun phrases in a pre-predicate argument position as in (131), or be expressed as a separate subsequent clause. In (130) the speech-act is absent from the subordinate clause predicated by {sɛlɛ}, and is instead realized as a main clause which follows. This type of construction does not occur with {wa:lɛ}, and as in examples (134), (136), and (140) the speech-act is present as an argument of a main clause predicated by {wa:lɛ}.

(140) [[[nɛ:]<sub>s</sub> [ko:sɛ: do:gɛ:]<sub>x</sub> [a:nɛ:]<sub>pred</sub>]<sub>o</sub> [wa:lɛ-mɛ:na:]<sub>pred</sub>]<sub>fin</sub>  
 1:SG bush.camp:LOC house:LOC go:PST tell-1:FUT

‘(I) will tell about when I went to a bush camp.’ (A.4.1)

As shown in (140), this speech-act may be a clause rather than a noun phrase, but the position following to subject and preceding the predicate is consistent with a nominal object rather than a position outside of the clause as in the example in (130) with {sɛlɛ}.

### 3.3.2.6 *Onomatopoeic Ideophonic Verbs*

There are a small number of onomatopoeic verbs with unique phonological, semantic, and morphological characteristics. These verbs typically describe sounds and accompanying actions in animals or people, and all attested examples are listed in table 6.

Table 6: Ideophones

hõ::lo:	the sound and action of a pig attacking
sẽ::sẽ:	the sound and action dog whining
hã::	the sound and action of a cassowary attacking
gã::	the sound and action of a dog crying in pain or surprise
gu:lo::	a loud boom, particularly from a large falling object (such as a tree), or the sound of thunder
bo::	the impact of hitting a person with a blunt instrument
bu::	the impact of a person falling to the ground
gõ::gõ::	the sound of beating a kundu drum
kekeke	laughter

Semantically, these onomatopoeic ideophones all describe actions and events that prominently display a particular sound accompanying an action. In terms of phonological characteristics, these verbs are distinguished by exceptionally long vowels, nasalization, and reduplication. The syllable structure for most of these verbs is a simple CV structure, with longer examples being a reduplicated CV structure, as in {gõ::gõ::} and {kekeke}. The verb {gã::} is additionally unusual for having the central vowel /ə/ which is not attested in any other lexical item apart from the interjection {(?)ə} in §4.7. These verbs are additionally slightly morphologically deficient.

- (141) [[kɛ:]<sub>s</sub> [ho::lo:-sɛnɛ=ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 pig squeal-NOM=Q:N.PRS  
 ‘Does that pig attack?’  
 (lit. ‘Is that pig one that attacks?’)

Interrogative and cautionary modalities are not possible, and aspect changing morphology, using the morphemes {-ta:} and {-jo:φo:}, is not possible. Questions may only be formed through nominalization, however, as in (141).

### 3.4 Adverbs

Adverbs are a class of non-inflecting, pre-predicate modifiers, which most often describe the manner or place of an event, but can also express modal meanings as seen in (149). Approximately 100 adverbs are attested in the research corpus, which is considerably fewer than the number of verbs and nouns attested, but much larger than any of the closed classes listed in chapter four. The status of adverbs as an open class is due to the large number of lexical items, and the fact that new terms may be borrowed into Eibela to function as adverbs. In (142), the adverb {ɛimɛ} ‘already’ describes the timing of the action described in the clause, and in (143), the adverb {mo:ti} ‘close by’ describes the relative location of the event. Adverbial functions can also be formed by oblique arguments formed from nouns or pronouns (e.g. *a:mi:* in (142) as discussed in §4.1 on pronouns, or adverbial clauses, as discussed in §9.3.3 on embedded adverbial clauses).

- (142) [[jɛ:bɛ]<sub>o</sub> [ɛimɛ]<sub>x</sub> [a:mi:]<sub>x</sub> [dijo:φo:]<sub>PRED</sub>]<sub>FIN</sub>  
 tree already PRO:ASS put:PST  
 ‘The logs have all already been put there.’ (A.2.7)

- (143) a. [[mo:ti]<sub>x</sub> [kɛ:ga:-ta: la:-li:-ki:]<sub>PRED</sub>]<sub>MED</sub>  
 close.by stand-TEL be-SIM-CONT  
 ‘It was still standing close, and...’

- b. [[so:bo: bɛ:nɛ:-kɛi]x [ka: o:la:]<sub>PRED</sub>]<sub>FIN</sub>  
 knife arrow.type-INST FOC shoot:PST  
 'I shot it with a knife-headed broadhead arrow.'

In many cases, an adverb can have both temporal and spatial reference, such as in (144), where the adverb *mo:ti* has a temporal reference to the near future rather than the spatial meaning seen in (143).

- (144) a. [[ə:]x [gi:ja: ho:go:ja:]<sub>s</sub> [sugu:lu:]<sub>s</sub> [a:la:]<sub>s</sub> [komu:nɛ:di: sugu:lu:]<sub>s</sub> [a:la:]<sub>s</sub>  
 HES 2:PL big school PRO.DEF community school PRO.DEF

- b. [lɛ:dʒɛsta:-mɛ:na:-ta:]x [**mo:ti**]x [la: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 register-PURP-TEL close COP ASSERT

"Your big one, the school, that one, the community school, that one, is close to being registered."

- (145) [[[kɛ:]x [ɛ:mɛ:]x [**ti:φɛ**:-mi:=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ɛiφo:st]<sub>o</sub> [a:ka:]<sub>o</sub> [di]<sub>PRED</sub>]<sub>FIN</sub>  
 okay DEM:LOC afterwards-ASS=TOP aid.post PRO:FOC build:PST

'Okay, after that we build an aid post.'

- (146) a. [[[a:nɛ:=ja:]<sub>TOP</sub> [hɛna: bɛda:-lo:lu=wa:]<sub>PRED</sub>]<sub>TOP</sub> [[ɛ:]<sub>CS</sub> [a:nɛ:]<sub>PRED</sub>]<sub>CC</sub>[la:-bi:=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 go:PST=TOP go see-comp=TOP 3:SG go:PST COP-D.S=TOP

'Then I left, and went and seeing that he was gone...'

- b. [[nɛ:]<sub>A</sub> [**ti:φɛ**:]x [o:ga: ɛ:ja:]<sub>o</sub> [o:gɛ: di a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG afterwards pandanus seedling-ABS pick.up.bilum take go:PST

'I went after him, taking the pandanus seeds (in a bilum).'

Similarly, the adverb {*ti:φɛ*:} 'after, behind, afterwards' may have both temporal and spatial reference, as shown in (145) and (146). In other cases, as in (147), the distinction of temporal and spatial reference is ambiguous.

- (147) [[ɛ:]<sub>s</sub> [ɛ:mɛlɛ:]x [ti:φɛ:]x [a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 3:SG back afterwards go:PST

'He went back after him (Ka:la:ma:be:).' (A.1.33)

Due to the particular semantics of {*ti:φɛ:*}, it is often difficult to disentangle the temporal and spatial meanings. In (147), the agent is said to follow after *Ka:la:ma:be:* and other men, and does not begin to pursue them until they have already left. The reference of *ti:φɛ:* in this case could refer to the act of following behind the other men, but could equally refer to the temporal delay between their departure, and the departure of the subject.

### 3.4.1 Morphosyntax

The most common and prototypical role of an adverb is as the modifier of a predicate, but they may also function as the modifier of a locative argument, as in (148), or even an object noun phrase as in (149).

- (148) [[*ε:meɪi:*]<sub>X</sub> [*ε:na:-mi:*]<sub>X</sub> [*u:se:*]<sub>X</sub>      [*isi-ja:*]<sub>O</sub>    [*a:mi:*]<sub>X</sub> [*so:lu:-mɛ:na:-mi:=ja:*]<sub>PRED</sub>]<sub>TOP</sub>  
 straight    there-ASS    middle:LOC    post-ABS    there    align-PURP-ASS=TOP

‘When the posts are cut down and the measurement stick is put straight, and where the posts will be aligned there in the middle...’

- (149) [[*duφɛ:=ja:*      *ka:*]<sub>TOP</sub> [*εbo:bo:*]<sub>X</sub> [*duφɛ:*]<sub>O</sub>    [*ta:lɛ-ta:-si*]<sub>PRED</sub>]<sub>MED</sub>  
 roof.ridge=TOP    FOC    not.really    roof.ridge    finish-TEL-MED:PFV

‘Finish (putting) the fake/temporary top roof stick, then...’

In all cases, the adverb precedes the phrase that it modifies, and does not allow any nominal inflection such as case, or verbal morphology such as tense, aspect, or mood marking. It is important to note, that an adverb does not always immediately precede the constituent it modifies, and may precede the object of a transitive verb while modifying the predicate rather than modifying the object directly. In (150) the adverb precedes both the object and predicate, but does not directly modify the noun phrase like the adverb *εbo:bo:* does in (149).

- (150) [[*ε:meɪɛ:*]<sub>X</sub> [*o:ga:*]<sub>O</sub>    [*gɛla:*]<sub>PRED</sub>]<sub>FIN</sub>  
 again      pandanus    plant:PST

‘I also planted pandanus (there).’

When appearing as a predicate modifier, an adverb precedes verbal particles, such as the negation marker {*ma:*}, or the marker of focus {*ka:*} as in (151).

(151) [[ε-lo:lu=wa:]<sub>TOP</sub> [εime]x [ka: a:gεlε:]<sub>PRED</sub>]<sub>FIN</sub>  
do-ASS.EV=TOP already FOC laugh:PRS

‘In doing that, they were already laughing.’

The only constituent which must precede an adverb is the subject, as in (152), and topic arguments, which are always clause initial.

(152) [[nε:]<sub>A</sub> [ε:mεlε:]x [dija: mi-jεib]PRED]<sub>FIN</sub>  
1:SG back take come-HYPO

‘I would bring it back.’

Multiple adverbs may appear as well, as in (147), where both adverbs modify a predicate. In this example, two adverbs each describe different aspects of the event by immediately preceding the predicate. Adverbs may be negated separately from the predicate of the clause through a clefted construction formed by an adverb and the copula {la:}.

(153) [[[ε:na:]x [o:la:-lo:lu=wa:]<sub>PRED</sub>]<sub>TOP</sub> [kεdε-jε:-mi:]x [[sε:li la:]<sub>S</sub> ma:]<sub>PRED</sub>]<sub>X</sub> [o:la:]<sub>PRED</sub>  
DEM shoot:PST-ASS.EV=TOP shoulder-LOC-ASS properly COP NEG shoot:PST

‘As (I) shot it, I shot while my shoulder was not in proper condition(injured).’

As in (153), the copula construction consisting of the adverb followed by copula {la:} is followed by the negated predicate. While the negator {ma:} is in the same syntactic position in adverb negation as in predicate negation, the clefted focalization of the adverb creates the inference that the event described by the predicate did in fact occur, but not in the manner described by the adverb.

A final construction of note is the use of the adverb {εna} ‘still’, which can be used both to signify that an action is ongoing, and as an intensifier of a following adverb. For example, in (154), the adverb {boba:gε:} ‘quickly’ is intensified by {εna} as a preceding modifier.

(154) [[ε:na: boba:gε:]x [ma:lo:]<sub>PRED</sub>]<sub>FIN</sub>  
still quickly go:ST.IMP

‘Go even faster!’

This periphrastic construction is the only known strategy of forming something resembling a comparative construction in adverbial expressions.

### 3.4.2 Loans

Expressions from other languages may be used as adverbs, particularly expressions of time, place, and manner. For example, in (155), the loan *φa:nε:* derives from English *funny*, or Tok Pisin *fani*, and describes the manner of the speech-act.

(155) a. [[*φa:nε:*]<sub>X</sub> [sa:-bi:]<sub>PRED</sub>]<sub>FIN</sub> [[[wai-jɛi]<sub>X</sub> [wa-jɛi]<sub>X</sub> [gɛ:]<sub>S</sub> [hɛ:ga:=ja:]<sub>PRED</sub>]<sub>O</sub>  
 funny say-D.S Hey!-EXCL Hey!-EXCL 2:SG how:PST=Q.N.PRS

b. [sa:-bi:]<sub>PRED</sub> [nɛ:-mo: ka:]<sub>X</sub>]<sub>FIN</sub>  
 say-D.S 1:SG-DAT FOC

‘He joked, "Hey! Hey! What happened to you?", he said that to me.’

(156) [[o:φɛ:si:=ja:]<sub>TOP</sub> [*wa:nokla:ko*]<sub>X</sub> [dimi hɛna: bɛda:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 time=TOP one.o'clock happen DUR CONS-MED:IPFV

‘It was about one o' clock so...’

Similarly, the time expressions from English, such as *one o' clock* in (156), are often used, though these terms are likely borrowed via the English lexifier creole Tok Pisin.

### 3.5 Conclusion

These three open classes reflect three core syntactic roles within a clause, that of an argument, a predicate, and a predicate modifier. As seen in Table 7, there is some flexibility regarding nouns and verbs, which can both function in various roles, but these two classes both have a clearly unmarked roles as either part of an argument or predicate respectively.

Table 7: Syntactic Roles of Open Classes

Word Class	Function			
	Argument	Argument modifier	Predicate	Predicate Modifier
Nouns	YES	YES	YES*	NO
Verbs	YES**	YES**	YES	YES***
Adverbs	NO	NO	NO	YES

\* Limited morphological possibilities show this word class to be deficient in this role.

\*\* This word class may function in this role with specific derivational morphology.

\*\*\* Verbs functioning directly as a verbal modifier are considered complex predicates as discussed in §6.4

This unmarked status is apparent in the limited morphological syntactic possibilities available to non-verbal predicates, and the obligatory morphological derivation needed for a verb to function within an argument (for more on verbs in argument and argument modifier roles, see §9.3). Adverbs are more limited, with no morphology and no possibility of functioning outside of the role of a predicate modifier.

## Chapter 4 Closed Word Classes

There are eight closed classes represented in Eibela. These eight classes each have varying sets of morphological properties, functional roles, and semantic properties which are shared by a finite limited number of lexical items. These word classes are less likely to include borrowed items or coinages, and are more frequently found in grammatical functions. The number of lexical items in each closed class ranges from the largest closed class, adjectives, having approximately 40 lexical items, and the smallest classes which have just four members each, i.e. quantifiers, determiners, and discourse markers.

### 4.1 Pronouns

Pronouns are a closed class of lexical items with many of the same syntactic roles and morphological possibilities as nouns. This includes functioning syntactically as core and oblique arguments, argument modifiers, and predicates, and appearing with limited case and possession morphology. The Eibela pronominal system shown in table 1 is organized into first, second, and third person forms. Each of these persons has singular, dual, and plural number, and in the first person, there is an additional paucal form for an undefined small number of individuals. The third person forms are only used with animate reference, except for the bound root {a:-} which may be used for inanimate reference. For plural number, there are additional emphatic and partitive forms for all persons, and first and second persons have an additional non-volitional form for patientive arguments. The paucal form *negedi* likely originates from a fused coordinate construction of *nε*: '1:SG' and *gε*: '2:SG', and the coordinator *di*, but the contemporary semantics have broadened to a first person paucal meaning rather than a literal interpretation of 'me and you' (see §4.4.1 on coordinators). Additionally, there are two possessive pronouns shown in table 2 which may function in an argument role, and refer to an entity that has either a first person possessor or a second person possessor. These are {na:nada:} 'mine', and {ga:nda:} 'yours'. No dedicated third person possessive form or plural form has been identified, though a similar function may be served through possessive forms derived from third person or plural pronouns using the possessive suffix {-na:} described in

§3.1.1 with regard to nouns and in §4.1.8. These derived forms reference an anaphor that is possessed by or associated with the referent of the pronominal stem.

Table 1: Pronouns

Person	Pronouns Used as Modifiers		Basic Pronouns				Emphatic Subject pronouns	Partitive Object pronouns	Non-volitional pronouns
	Singular	Non-singular	Singular	Dual	Paucal	Plural		Singular	
1	nɛ	ni	nɛ:	na:nɛ <sup>2</sup>	negedi	ni:ja:	nili:	ni:je:	na:na:
2	gɛ	gi	gɛ:	ga:ga:	-	gi:ja:	gili:	gi:je:	ga:na:
3 (animate)	ɛ	i	ɛ:	ɛja:lɛ:	-	i:ja:	ili:	i:je:	-
3 (inanimate)	a:-								

Table 2: Possessive Pronouns

	Possessive pronouns
Person	Singular
1	na:nda: 'mine'
2	ga:nda: 'yours'

#### 4.1.1 Morphosyntax

In general, pronouns serve the same syntactic roles as nouns, and have some of the same morphological categories, although case-marking is notably more limited among pronouns and only marked in certain classes of pronoun.

<sup>2</sup> The first person dual pronoun has several variants, which have not been found to have clear conditioning factors. These are *nɛ:na:*, *nɛ:nɛ*, and *na:nɛɛ:*. The form *na:nɛɛ:* is likely at least partially due to language contact with Kaluli, which features the first person dual form *naniasi* (Grosh and Grosh 2004a).

#### 4.1.2 Core Argument Roles

The basic pronouns for singular, dual, paucal, and plural number are used in both subject and object argument roles in both transitive and intransitive roles. For example, the pronoun *ni:ja:* can be used for plural subject arguments, both in intransitive clauses as in (1) and in transitive clauses as in (2), as well as in object roles, as in (3).

- (1) *i:ja:*        *ba:ma*    *to:ja*    *wa:*        *ka:*        *sɛnɛ=jo:bo:*  
       3:PL:BAS<sup>3</sup>    NAME    hilltop    DIR:AND    FOC        stay:PST=INF  
       ‘They were sitting there at the top of Ba:ma hill.’
- (2) *ɛ-ta:-bi:=ja:*        ***ni:ja:***        *sugu:lu:*        *ho:go:ja:*        *di-ja:*  
       do-TEL-D.S=TOP    1:PL:BAS    school        big                get-PST  
       ‘So we got the big school.’
- (3) [[*wo:ko*    *la:*        ***i:ja:***        *ka:]*<sub>O</sub>        [*tɛkɛ*        *di-sa:-lɛ]*<sub>PRED</sub>]<sub>FIN</sub>  
       NAME    TOP        3:PL:BAS    FOC        pass.by        PFV-3:DR-S.S  
       ‘(I) went past Wo:ko and them.’

Singular and dual basic pronouns follow this same pattern with no limitation to their core argument functions. However, emphatic and partitive plural pronouns are limited to specific grammatical roles. As shown in (4), emphatic plurals are limited to transitive subjects.

- (4) *na:*        *wɛ*        ***nili:***        *di=moko:no:=wo:bo:=la:*  
       meat    this    1:PL:FOC    take=DEO=INF=Q:PRS  
       "Do you want to give us that meat?"

These emphatic plural forms are not attested in any other core argument roles. The partitive set of pronouns may be used in subject roles as in (5) or object roles as in (6).

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<sup>3</sup> Basic pronouns will be glossed as BAS in this section for added clarity in the discussion comparing basic, modifying, emphatic, partitive, and non-volitional pronouns. Elsewhere, basic pronouns will be unmarked, e.g. the pronoun *ɛ:* is glossed “3:SG:BAS” in this section, but in other sections the gloss is shortened to “3:SG”.

(5) gɛ:sa jɛ:niba: kowa:bo i:jɛ: ɛ:na: dɛ: gi:jɛ: hɛɛ sɛɛ=jo:bo:  
 NAME NAME NAME 3:PART DEM fire build.fire DUR stay:PST=INF

‘Gisa, Jennifer, and Kowa:bo, some of them had made a fire and were sitting there.’

(6) nɛ:na: i:jɛ: o:-mɛ:na:  
 1:DU:BAS 3:PART shoot-FUT:1

‘We two will shoot at them.’

(or ‘We two will shoot some of them.’)

These partitive pronouns describe a plural object which is only partially affected by the event. Non-volitional pronouns function similarly to basic pronouns, with the exception that they are not attested to function as transitive subjects. They are limited to intransitive subject roles, as in (7), and transitive object roles, as in (8).

(7) ɛ-φɛija: na:na: la: ba:ba:le do:-wa:  
 do-PERF 1:PAT DEF not.know STAT-PST

‘That had happened and I didn’t know.’

(8) na:na: ma: do:bu:  
 1:PAT NEG hear:PST

‘(He) didn’t ask me.’

(lit. ‘(He) didn’t hear me.’)

The lack of non-volitional pronouns in transitive subject roles is likely due to the prototypically agentive nature of the transitive subject role, which inherently must be the more agentive core argument in Eibela. It is important to note that the choice between a basic or non-volitional pronoun in subject and object roles shows some flexibility, with the choice of a non-volitional argument attributing a lack of control or agentivity that an argument has over an event.

(9) ɛ: nɛ: ma: do:bu:  
 3:SG:BAS 1:SG:BAS NEG hear:PST

‘(He) didn’t ask me.’

(lit. ‘(He) didn’t hear me.’)

For instance, the clause in (8) could be closely paraphrased by (9). This alternation closely resembles the process of optional case-marking discussed in §10.3.2, where the role of an argument is more likely to be overtly marked in ambiguous contexts. If a basic pronoun were used in the clause shown in (8), where the subject is elided, the pronoun *nɛ*: ‘I/me’ could easily be mistakenly understood to refer to the subject of the clause, resulting in the erroneous interpretation “I asked/listened.”

#### 4.1.3 Oblique Argument Roles

Oblique argument roles may be expressed by basic pronouns, non-volitional pronouns, and the bound root {*a:-*}. First and second person basic and non-volitional pronouns may appear in oblique argument roles, where they must be suffixed by the appropriate oblique case-marking suffix, as is the case with nouns. For example, in (10) the basic pronoun *nɛ*: appears as an allative argument cast in the dative case by the oblique dative case-marker {-*mo:*}.

- (10) a. *ɛ-si=ja:*                      *nɛ:*                      *ɛ:mɛɛ:*    *mo:so:*    *jɛ:-li:*  
do-MED:PFV=TOP    1:SG:BAS    back    bare    DIR:VEN-SIM

‘I did that and then while I was coming back without anything ...’

- b. *tɛ:di-ja:*                      ***nɛ:-mo:***                      *ka:*    *ja:-nɛ:*  
NAME-ABS    1:SG:BAS-DAT    FOC    DIR:VEN-PST

‘Teddy came to me.’

- (11) ***na:na:-mo:***                      *dija:*                      *jɛ:=bi:*  
1SG:PAT-DAT    take    come=DEL.IMP

‘Bring it to me.’

Similarly, a non-volitional pronoun appears as a recipient argument suffixed by the same dative case-marker in (11). Oblique arguments with third person animate reference may be expressed by the basic third person pronoun {*ɛ:*}, as in (12), or by the oblique pronoun {*a:-*} as in (13).

- (12) a      nɛ:            sɛlɛ      ɛ:-mo:            ma:      sɛ:-ja:  
oh!    1:SG:BAS    say    3:SG:BAS-DAT    NEG    say-PST

‘Oh! I said... - I didn't speak to him.’

- (13) amo:            ka:    ba:ɣɛ-ja:            amo:            ka:    dijo:ɸo:  
PRO:DAT    FOC    kina.shell-ABS    PRO:DAT    FOC    put:PST

‘To that (man), (he) put down the kina shell for that (man).’

The root {a:-} does not occur unaffixed, and appears exclusively in oblique argument roles with an oblique case-marking suffix. For inanimate reference, such as oblique arguments referencing a time, place, or speech report, the basic pronoun {ɛ:} is not possible, and only the bound root {a:-} is possible. For example, the associative case *-mi:* in (14) and (15) describes a time or place, and as such does not occur with animate pronouns such as the third person {ɛ:}.

- (14) [[a:mi:]<sub>X</sub>      [sɛɣaɸa:]<sub>O</sub>      [a:mi:]<sub>X</sub>      [ɣɛ-mɛi]<sub>PRED</sub>]<sub>FIN</sub>  
PRO:ASS      short.post:ABS    PRO:ASS      plant-HYPO

‘When the banta are tied on, plant the short posts there.’ (A.2.27)

- (15) a:la:            a:mi:            sa:-lɛ  
PRO:DEF    PRO:ASS      put.in-S.S

‘...then we put that one in there.’

- (16) a:ka:            wa:lɛ-mɛ:na:-ta:    ɛɣai            ka:m    ɛ:  
PRO:FOC    tell-FUT-TEL      prepare    finish    yes

‘So that one (story) I prepared to tell is finished, eh?’

- (17) a. [[[ka:la:ma:bɛ:=ja:]<sub>TOP</sub> [a:ka:    la:]<sub>O</sub> [sɛlɛ-si=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
NAME=TOP            PRO:FOC    DEF    say-MED:PFV=TOP

- b. [nɛ            ɛ:ja:    wɛbɛ:na:=ja:]<sub>TOP</sub> [da:no-ka:]<sub>X</sub> [bo:la:    kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG:MOD    father    this=TOP            bow-INST    hit:PST    ASSERT

‘Ka:la:ma:be: said that, and he hit my father with his bow.’ (A.1.42)

Instead, the argument is formed with the bound root {a:-}. This root may also appear with some determiners, such as the definite determiner {la:}, as in (15), the additive determiner {la:la:}, and the focus particle {ka:} which may function similarly to a determiner when modifying a

noun phrase, as in (16). These two may co-occur as well to present a contrastive definite anaphor referencing a speech report, as in (17).

#### 4.1.4 Argument Phrase Structure

Arguments formed by pronouns are more limited in their phrase structure possibilities than noun phrases. Specifically, they may not be modified by adjectives or the indefinite determiner *no:*. The incompatibility with the indefinite article may be justified by the semantic incompatibility of an indefinite-marker with an inherently definite anaphor. Additionally, pronouns may not be possessed by a preceding nominal or pronominal possessor. Nouns, particularly proper names may be combined with a pronoun to form pronoun elaboration constructions (see also §8.4, Bril [2004], and Lichtenberk [2000] for cross linguistic review of similar constructions). In these constructions, a noun is followed by a non-singular pronoun, and references a group which includes the referent of the noun. For example, in (18), a series of proper names is followed by the first person plural pronoun *ni:ja:*, and references the named individuals and the narrator.

- (18) a. wo:ko    mo:neka:    dju:nija:    ni:ja:    ko:sɛ:    do:ge:    a:nɛ:=ja:  
           NAME    NAME        NAME        1:PL:BAS    sago.pulp:LOC    house:LOC    go:PST=TOP
- b. wa:wi    sɛ:        jɛ:besola:-jɛ:    ta:-nɛ:  
           NAME    beach    canoe            cross-PST

‘Wo:ko, Monica, Junior (and I), we were going to the bush camp and went to the bank of the Wa:wi river and we crossed in a canoe.’

- (19) nɛ            ba:bo:    **na:nɛ**    dɛla:  
           1:SG:MOD    KIN.MB    1:DU:BAS    dig:PST

‘They were doing it like that, back on the other side, me and my maternal uncle were digging.’

Similarly, in (19) a kinship term {ba:bo:} is used, and the first person dual pronoun follows it, referencing the speaker and his maternal uncle.

A coordinating construction is also possible using proper names and the dual pronoun {εja:lɛ:}. In this usage, seen in (20) and (21), one or two noun phrases may be followed by {εja:lɛ:} and the construction references a third person dual argument.

(20) keisa:lɛ    sa:wa    a:nɛ    ma:ti:jo    εja:lɛ:    a:la:  
 woman    child    two    NAME    COORD:DU    PRO:DEF

‘Those two young girls, Matijo and the other one, those ones.’

(21) kose:na:    εja:lɛ:    gesato:    εja:lɛ:    a:mi:    jɛ:    dɛn=o:bo:  
 NAME    COORD:DU    NAME    COORD:DU    PRO:ASS    DIR:VEN    PROG=INF

‘Kosina and Gisato were coming there.’

When only one noun phrase is present, as in (20), the construction is equivalent to pronoun elaboration. When two proper names are used, as in (21), the two name form a single coordinated argument in the clause.

#### 4.1.5 Topics

Arguments formed from pronouns may function as the topic argument of a clause, as in (22).

(22) ε-bi:=ja:    nili:=ja:    do:ga:    ja:    di  
 do-D.S=TOP    1:PL:EMPH=TOP    house:ABS    DIR:VEN    build:PST

‘So we came (to the village) and built the (school)house.’

In these cases, the pronominal topic function similarly to nominal topics discussed in §5.8.

#### 4.1.6 Argument Modifiers

In addition to the argument roles presented above, pronominal forms derived from the basic set of pronouns may function as modifiers within an argument. In this role, long vowels are shortened, and the final syllable of plural pronouns is omitted. The pronominal modifier references the possessor of the modified argument. For example, in (23), the pronoun nɛ is a possessive modifier of the noun ε:ja:.

- (23) [nɛ            ε:ja:        wi:-ja:]<sub>s</sub>    [u:gei]<sub>PRE</sub>]<sub>FIN</sub>  
 1:SG:MOD    father        name-ABS    NAME  
 ‘My father’s name is U:gei.’                    (A.1.2)

In this case, the modifier refers to the first person possessor of the argument. Singular possessors are expressed with the same form as the basic pronoun corresponding to the possessor, albeit with a short vowel rather than a long vowel. The emphatic plural pronouns may also function as an emphatic possessor, as in (24).

- (24) **nili:**                    *ειφο:st=ja:*        togo:la:    ε:                    kolo    ε-φο:  
 1:PL:EMPH    aid.post=TOP    road:ABS    3:SG:BAS    open    do-COMP  
 ‘He opened our aid post.’  
 (lit. ‘He opened the road for our aid post.’)

Other pronoun forms, such as the non-volitional or partitive pronoun forms do not occur in the role of a possessor in a noun phrase.

#### 4.1.7 Predicate Roles

Like nouns, pronouns may function as the predicate of a clause. Pronominal predicates, like nominal predicates, are defective in this role relative to verbs. Pronouns may not be inflected for predicate values such as tense, aspect, modality, mood, or evidentiality, and limited clause types are possible, as discussed in §9.2.2.

- (25) **ge**                    da:jo                    **nɛ:**  
 2:SG:MOD    namesake    1:SG:BAS  
 ‘Your namesake is me.’
- (26) **wɛ**    a:ga:                    **nɛ:-na:**                    kei  
 this    today:ABS    1:SG:BAS-POSS    ASSERT  
 ‘Today, this is mine.’

As in (25), a pronominal predicate functions as the predicate of an equative clause, asserting a pronoun to be coreferential with the subject of the clause. The possessive pronoun form derived from a basic pronoun may also serve this function as in (26).

#### 4.1.8 Morphological Categories

Pronouns feature much of the same morphological possibilities of nouns, with topic, case, and possession morphology. Additionally there is one suffix, for exclusive focus, which is limited to pronouns. Core case-marking is limited to dual pronouns, as in (27), while topic-marking is more widespread, appearing with all pronouns, as shown in (28). Oblique case-marking is discussed above in §4.1.3, and occurs in basic pronouns, non-volitional pronouns, and the bound root {a:-}.

- (27) kɛ: wɛ na:nɛ-jɛ: sɛbɛ:na: kɛi  
 pig this 1:DU:BAS-ERG kill:N.SG.A:FUT:1 ASSER  
 ‘We will kill this pig.’

- (28) [ɛ-bi:=ja: nili:=ja:]<sub>TOP</sub> do:ga: ja: di  
 do-D.S=TOP 1:PL:EMPH=TOP house:ABS DIR:VEN build:PST  
 ‘So we came (to the village) and built the (school)house.’

The lack of core case-marking in basic singular and plural pronouns as well as emphatic plural and non-volitional singular pronouns suggests that the alternation between these pronoun classes is functionally equivalent to case-marking in disambiguating the syntactic argument roles of pronouns. In singular pronouns, a neutral and patient form are available to disambiguate agentive and patientive argument roles, while in plural pronouns, a neutral and agentive form are available. While the semantically neutral pronouns are technically unmarked with regard to grammatical or semantic roles, the potential for ambiguity is greatly lessened with the availability of specific agent and patient forms. This seems to remove the necessity of case-marking from singular and plural pronouns.

A final morphological category is limited to pronouns, and denotes exclusive focus. For example, in example (29) the speaker describes a situation in which he had slept alone in a bush camp, and no one else was present.

- (29) [[nɛ:-φɛ:ni:]<sub>S</sub> [ka: a:li-φɛija:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG-alone FOC sleep-PERF  
 ‘I had been praying to god while I was sleeping there.’ (A.4.40)

While this morpheme is limited to pronominal roots, it may be combined with nouns through pronominal apposition, as in (30), where the pronoun {ε:} may refer to an inanimate noun, although it is usually limited to animate referents.

- (30) ko:lu-wε: **do:ga:**    ε:-φε:ni:    hi:    ε:-φε:ni:    do:-wa:    la:-bi:  
 man-LOC house:ABS 3:SG:BAS-EXC apart 3:SG:BAS-EXC stay-PST QUOT-D.S  
 ‘So they say he lived alone, and the man’s house was alone and separate from the others.’  
 (lit. ‘It was like that and only the man’s house stood apart, he stayed (there) alone, they say.’)

In this context with noun phrases, the semantics of the resulting form may also have a slightly different semantic interpretation, meaning something closer to ‘different’, as in ‘a different house, set apart from the others’.

#### 4.1.9 Interrogative Pronouns

There are five interrogative pronouns which have the same properties as the anaphoric pronouns described. In argument roles, {ε:bi} and {hε:} function similarly to nouns by displaying case as a grammatical category and serving as underived arguments. Both {ε:bi} and {hε:} may appear as a predicate, but like nouns, they lack any verbal morphology in predicate position. Other interrogative forms exist which serve as interrogative predicates, including functions best translated as ‘how’ or ‘why’. These are not described in this section, and may be found in §7.5.3.4.

Table 3: Interrogative Pronoun forms

ε:bi/a:bi/a:binε:	‘what, who’ (argument and predicate roles)
εibε:	‘what, who’ (only predicate roles)
oσε:mi:	‘regarding what’
a:gu:σε:	‘when’
hε:	‘where’

#### 4.1.9.1 Deficient Interrogative Pronouns

Both {*ose:mi:*} and {*εibe:*} function as deficient pronouns by being attested in only a subset of nominal roles. The proform *ose:mi:* may be considered a nominal form or an adverbial form, depending on whether the final syllable /*mi:*/ is interpreted as an associative case-marker or the form is analyzed as a single morpheme. The pronoun {*εibe:*} is limited to predicate roles, but like nouns, does not appear with any verbal morphology. {*εibe:*} seems to represent an unusual non-verbal predicate which is functionally similar to nominal predicates, but does not occur in argument positions.

#### 4.1.9.2 Interrogative Pronouns as Non-verbal Predicates

The interrogative pronouns {*ε:bi*}, {*εibe:*}, and {*hε:*} also appear in predicate positions in equative clauses. The pronoun {*εibe:*} appears to be a specialized predicate form of {*ε:bi*} which only occurs as an interrogative predicate, but does not display the morphological properties of a verb. In (31) and (32) *ε:bi* and *εibe:* appear to be semantically similar and may both function in a predicate position, but unlike {*ε:bi*}, {*εibe:*} is not attested in argument roles.

(31) *ge:*            *ε:bi*  
2:SG:BAS    **who**  
  
'Who are you?'

(32) *ge*            *wi:-ja:*        **εibe:**  
2:SG:MOD    name-ABS    **what**  
  
'What is your name?'

In questions seeking a static location on an argument, {*hε:*} 'where' may also be used as a predicate as in (33) and (34).

(33) *stalo:n-a:*        **hε:**  
NAME-ABS        **where**  
  
'Where is Stalone?'

- (34) no:-wa:    **hɛ:**  
 INDEF-ABS   **where**  
 ‘Where’s the other one?’

In questions in which the interrogative pronoun functions as a core argument of the clause, the interrogative pronoun {ɛ:bi} is used. Depending on the speaker, {ɛ:bi} may also be phonetically realized as *a:bi*, which is a borrowed form from the neighboring Kaluli language. References to *ɛ:bi* and/or *a:bi* should be taken as referring to one and the same morpheme.

#### 4.1.9.3 Core Case-marking

The interrogative pronoun {ɛ:bi} is optionally marked for case similarly to core argument noun phrases. The root form *ɛ:bi* may appear in any core argument role, and in particularly contrastive or emphatic contexts, an ergative form *a:bine:* may be used. Unlike case-marking in nouns, there does not seem to be any unique absolutive case form associated with interrogative pronouns.

Unmarked Case	Ergative
ɛ:bi (a:bi)	ɛ:bine: (a:bine:)

Unmarked case form: *ɛ:bi/a:bi* ‘who/what’

The root form of the interrogative pronoun *ɛ:bi* may be used in both subject and object roles in interrogative clauses. In (35) and (36) *ɛ:bi* is used in a transitive subject role.

- (35) wai    ko:            **a:bi**    sɛna:=jɛi  
 hey    DEM:DIST    **who**    attack:PST=Q:N.PRS:EMPH  
 ‘Hey! Who hit (you)?’

- (36) i:sa:    togo:    **ɛ:bi**    wa:lɛ-mɛ:na:=ja:  
 ground clay    **who**    teach-FUT=Q:N.PRS  
 ‘Who will teach us about the hard earth?’

In contrast, examples (37) and (38) show  $\epsilon:bi$  in an object role without any formal differentiation.

(37)  $g\epsilon:$              $\epsilon:bi$     bulu    di-m $\epsilon$ :na:    a:n $\epsilon$ :=ja:  
 2:SG:BAS    **what**    cut    PFV-PURP    go:PST=Q:N.PRS  
 ‘What did you go to cut?’

(38)  $g\epsilon:$              $\epsilon:bi$     k $\epsilon\epsilon$ =la:  
 2:SG:BAS    **what**    search=Q:PRS  
 ‘What are you looking for?’

Ergative Case:  $a:bin\epsilon:$  ‘who/what’

In transitive subject roles, an irregular ergative case-form  $a:bin\epsilon:$  is attested, as in (39), and the example given in (36) with the pronoun  $\epsilon:bi$  may be paraphrased using  $a:bin\epsilon:$  as in (40).

(39) [mu:lomu:lo di-m $\epsilon$ :    m $\epsilon$ n $\epsilon$ :na:=ja:]<sub>TOP</sub> **a:bin $\epsilon$ :**    di-m $\epsilon$ :    m $\epsilon$ n $\epsilon$ :na:=ja:    ka:  
 medicine    get-PURP    go:FUT=TOP    **who:ERG**    get-PURP    go:FUT:1=Q:PRS    FOC  
 ‘Regarding going to get medicine, who will go get it?’

(40) i:sa:    togo:    **a:bin $\epsilon$ :**    wa:l $\epsilon$ -m $\epsilon$ :na:=ja:  
 ground    clay    **who:ERG**    teach-FUT=Q:N.PRS  
 ‘Who will teach us about the hard earth?’

The exact conditioning factors of the alternation of these two case forms has not yet been thoroughly investigated, but it appears likely that the usage of these forms follows the general pattern of optional case-marking described in §10.3, where case-marking is conditioned by the topicality and identifiability of the discourse referent.

#### 4.1.9.4 Interrogative Pro-forms in Oblique Argument Roles: { $os\epsilon:mi:$ }, { $agu:s\epsilon:$ }, and { $h\epsilon:$ }

Three interrogative stem forms are used in oblique argument positions: { $os\epsilon:mi:$ } ‘regarding what’, { $agu:s\epsilon:$ } ‘when’, and { $h\epsilon:$ } ‘where’. Of the oblique interrogative arguments, only { $h\epsilon:$ } ‘where’ be definitively described as bearing a case-marking suffix. The root { $agu:s\epsilon:$ }, does not occur with any case-marking suffixes, while the analysis for the form { $os\epsilon:mi:$ } is less

straight forward. While it seems appropriate to segment the form {osɛ:mi:} into the root {osɛ:} and the associative suffix {-mi:}, the root {osɛ:} is not attested in any other context.

{agu:sɛ:} ‘when’

The interrogative pronoun {agu:sɛ:} refers to an adverbial argument specifying a moment or period of time, as in (41) and (42).

(41) **agu:sɛ:** dimi=ja:  
**when** happen=Q:N.PRS  
 ‘When did it happen?’

(42) **agu:sɛ:** mɛnɛ:na:=ja:  
**when** go:FUT=Q:N.PRS  
 ‘When will you leave?’

Associative

Of the oblique cases that are attested for noun phrases, only the associative case is attested in interrogative arguments. The associative case is used for non-specific or diffuse locations or non-specific semantic relationships as in (43). Other cases associated with oblique arguments, such as the dative suffix {-mo} or the instrumental suffix {-kɛi}, are not attested in arguments headed by an interrogative pronoun.

(43) [no: wɛ            do:go    ɛna:-mi:=ja:]<sub>TOP</sub>    a:li-si-ki:=ja:  
 DISJ   DEM:PROX   house   that-ASS=TOP   sleep-MED:PFV-CONT=TOP  
 ‘So here is how they were sleeping in regards to that house...’

{hɛ:} ‘where’

The interrogative root {hɛ:} is always suffixed by the case-marker {-mi:} when appearing in a non-predicate argument position. The bare root {hɛ:} only occurs in predicate positions. For example, in (44) and (45), *hɛ:mi* serves an allative argument function in the clause.

(44) ɛja:lɛ:        ɛna:        **hɛ:-mi:**        hɛna:    ba:  
 3:DU:BAS    DEM:ABS   where-ASS   go        DUB  
 ‘Where are those two going?’

- (45)    *ge:*            ***he:-mi:***            *a:nε:=ja:*  
           2:SG:BAS    **where-ASS**    *go:PST=Q:N.PRS*  
           'Where did you go?'

Static locative argument functions may also be expressed by *he:mi:*, as in (46).

- (46)    *ge:*            *he:-mi:*            *la:=lei*  
           2:SG:BAS    *where-ASS*    *be=Q:PRS:EMPH*  
           'Where are you?'

{*ose:mi:*} 'regarding what'

The interrogative form {*ose:mi:*} is similar to *he:mi* in that it resembles the argument roles assumed by the associative case in both form and function. However, while {*he:*} is attested as a separate root form in predicate roles, a comparable root form of {*ose:mi:*}, {*ose:*}, is not attested as a bare root form or a component of any other suffixed form. It is therefore possible to analyze {*ose:mi:*} as a single morpheme. The case for treating *ose:mi:* as an argument marked by the associative case is still compelling and useful due to the phonetic and functional parallels between *ose:mi:* and other associative-marked arguments. In addition to directional and locative functions, the associative case is present on an argument denoting a result of a speech-act or a topic of discussion as in (47).

- (47)    *ε:*            *ba:ge*            *wa:ta:*            ***ena:-mi:***            *wo:gu:*    *kei*            *ε-sa:-bi:*  
           3:SG:BAS    *kina.shell*    *waste:PST*    **DEM-ASS**    *do.thus*    *ASSER*    *say-3:DR-D.S*  
           'They say he wasted that kina shell like that.'

In interrogative clauses, {*ose:mi:*} is seen in a similar function, as in (48) where *ose:mi:* refers to the result of a speech-act.

- (48)    *di:k-a:*            ***ose:mi:***            *sε:-ja:=ja:*  
           NAME-ABS    *regarding.what*    *say-PST=Q:N.PRS*  
           'What was Dik talking about?'

It is possible that {*ose:*} may occur as a root outside of this argument position, but it too infrequent to occur in the corpus available.

Topics

Topic arguments may also serve as a means of introducing interrogative elements into a clause as in (49).

- (49) no:=wa:      **he:-mi:=ja:**      ka:      sugu:lu:=moko:no:  
INDEF=TOP    **where-ASS=TOP**    FOC    attend.school=DEO  
‘To which other place should they go school?’

In this example of a topicalized interrogative argument, the clause itself is inflected in the declarative mood rather than being inflected with an interrogative suffix.

## 4.2 Adjectives

The class of adjectives in Eibela is quite large, comprising approximately 40 lexical items. The exact number is difficult to state directly, because there are many derived modifiers which are to varying degrees being grammaticalized into the class of adjectives. Adjectives are considered a closed class in that there is a finite number of monomorphemic adjectives, and foreign borrowings into the adjective class are not attested. There is no single unambiguous word-charging derivation to create adjectives, although it appears various argument modifiers may result in adjectives by means of historical grammaticalization pathways, as discussed in §4.2.2.3. The clear set of un-derived adjectives is shown in table 4. Derived adjectives are discussed in §4.2.2.3. The majority of these adjectives describe physical properties and dimension while fewer adjectives describe concepts of color, age, propensity, quantity, and quality. Adjectives have many properties in common with nouns, including syntactic roles as arguments, argument modifiers, and morphologically deficient predicates, as well as case-marking and limited number-marking in lexical items with animate reference.

Table 4: Adjectives

Color	Dimension	Propensity	Physical Property	Age	Quantity	Quality
da:m̩la 'black, blue'	d̩t̩ɛ:ni 'small:N.SG' (lower animate, inanimate)	ɛga: 'wild'	g̩n̩ɛ 'ripe'	hi: 'new'	ma:li: 'much, many'	t̩ɛ: 'true, real, very'
ho:la 'white'	ga:l̩ni'small:N.SG' (higher animates)		ha:do 'unripe, green, alive'	molu:wa: 'old'	ba:di 'many'	w̩ɛfi 'pathetic, unfortunate'
i:m̩la: 'green'	ho:do:su (lo:su) <sup>4</sup> 'small'		hi:da: 'heavy'	ti:ɸɛ: 'younger, youngest'		moga:ga: 'bad'
w̩na:la 'yellow'	iso 'small'		k̩ga: 'bony, skinny'	w̩l̩ɛ:bi 'eldest, first- born'		no:ɸo: 'good'
g̩ɛ:ja: 'red'	ho:go:ja: 'big'		ɸɛɸɛ 'skinny'			
g̩ɛ:l̩si:sa: 'brown'	to:do: 'big:N.SG'		h̩ɛla:ja 'hard (inam), strong(an.)'			
	k̩ɛɛ:gi: 'huge'		o:g̩la: 'strong, tough (inan.)'			
	ko:loɸu 'medium'		o:g̩ɛ:ja 'soft'			
	k̩wa: 'short'		no:ja 'good tasting'			
	sada:ɛ 'tall, long'		b̩ɛɛgi:ja 'sour'			
			na:sa 'spoiled'			
			k̩ga:ja: 'thin'			

It is particularly noteworthy that there are four adjectives meaning ‘small’. Two of these are singular, {ho:do:su} and {iso}, and two of these are plural, {dɛtɛ:ni} and {ga:lɛni}. The distribution of the use of {ho:do:su} and {iso} is strictly lexically determined by the noun being modified by the adjective. The nouns which collocate with each adjective do not seem to share any obvious semantic features such as animacy, shape, or gender. For example, the adjective {ho:do:su} may be used with nouns with human reference, including personal pronouns and names while the adjective {iso} may also be used with proper names with an idiomatic meaning referring to the child of the named individual, e.g. *Sapai iso* would literally mean ‘little Sapai’, and be interpreted as Sapai’s child. {ho:do:su} is used with some animals, such as {kosu:wa:} ‘cassowary’, while other animals collocate with {ho:do:su}, such as {kɛ:} ‘pig’, and {a:gɛ} ‘dog’. Similarly, some artifacts will collocate with {ho:do:su}, such as {so:bo:no:} ‘ax’, while others, such as {so:bo:} ‘knife’, collocate with {iso}.

#### 4.2.1 Syntactic roles

The default role of an adjective is to modify a noun. In this role, they appear following the modified noun as in (50). Adjectives may also be used as the head of an argument, as in (51).

- (50) [[nɛ:]<sub>A</sub> [so:ko ha:do]<sub>O</sub> [mɛ:na: do: kɛi]<sub>PREP</sub>]<sub>FIN</sub>  
 1:SG tobacco green consume:PURP STAT ASSERT  
 “I feel like smoking green tobacco.” (A.1.21)

- (51) *sɛdo:li=ja:* nɛ: la: **molu:wa:** wa: ka:m  
 story=TOP 1:SG DEF old AND finish  
 ‘That story, my old (story) is finished.’

Both nouns and adjectives can be used as modifiers of a noun, but they differ in the ordering of constituents in the argument. A nominal modifier precedes the modified noun, as seen in §3.2.1, while an adjective follows the modified noun, as in (50). In both cases, only one adjectival modifier and/or one nominal modifier is possible. That is to say that a noun could

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<sup>4</sup> Note that the forms *hodo:su:* and the reduced form *lo:su:* are in free alternation.

have an adjectival modifier, a nominal modifier, or both an adjectival modifier and a nominal or pronominal modifier as in (52), but two or more nominal modifiers or two or more adjectival modifiers is not possible in a single noun phrase.

- (52) **nε**                **sa:wa:**    **ga:lɛni**    a:nε    ba:lɛ    ε-ta:-bi:  
 1:SG:MOD    child    small:N.SG    two    COORD    do-TEL-D.S  
 ‘I was with my two small boys.’

- (53) **kε:**    **iso**        **ɛna:**        **ka:**    **so:φo:**  
 pig    small    that:ABS    FOC    cook:PST  
 ‘I cooked those little pigs.’

Determiners occur as the final constituent of an argument and therefore follow after an adjective as in (53).

Adjectives may also serve as the predicate of an attributive clause or as a copula complement. In predicate roles, there is no verbal morphology present, and the semantic interpretation is that the subject has the adjectival quality, as in (54).

- (54) **a:bo:**    **wε**        **gε:ja:**  
 bird    this    red  
 ‘This bird is red.’

Adjectives may also function as an attributive complement to the stative auxiliary *do:*, as in (55).

- (55) **mo:lu:wa:**    **do:-mei**  
 old                STAT-N.1:FUT  
 ‘It will be old’

The meaning of this construction is identical to the construction in (54), where the adjective is the predicate of the clause, but the addition of the verbal auxiliary allows verbal categories such as tense, aspect and mood to be used.

The adjective *ho:go:ja*: ‘big’ has an additional predicate role as a qualifier of a clausal argument. In this construction, a clause with an emotive verb forms a complement clause functioning as the subject of the predicate *ho:go:ja*:

- (56) [nɛ: sɛga:lɛ]<sub>S</sub> [ho:go:ja:]<sub>PRED</sub>  
 1:SG be.happy big  
 ‘I am very happy.’  
 (More literally ‘Me being happy is big.’)

For example, in (56) *ho:go:ja*: functions semantically as an intensifier of the clause *sɛga:lɛ* ‘be happy’. Syntactically, *ho:go:ja*: is the predicate of the clause, and cannot be interpreted as an adverbial modifier of *sɛga:lɛ*. Adverbial modifiers precede the predicate they modify, so if *ho:go:ja*: were in the syntactic role of a predicate modifier, one would expect the ordering *nɛ: ho:go:ja: sɛga:lɛ*, which is not possible. The adjective *ma:li*: ‘many, much’ can serve a similar role as a predicate with an adjective or property as a subject, as in (57).

- (57) [da:=ja:]<sub>TOP</sub> [no:ja-ja:]<sub>S</sub> [ma:li:]<sub>PRED</sub>  
 sago=TOP tasty-ABS much  
 ‘The sago was very tasty.’  
 (lit. ‘As for the sago, the tastiness was much.’)

In this construction, the subject is optionally marked with the absolutive case-marker. There is not clear opposing construction with an adjectival predicate asserting the paucity of a property since no adjective meaning ‘small’ is attested in a predicate role.

#### 4.2.2 Morphology

Adjectival morphology is similar to that found in nouns in that case-marking suffixes and plural forms are both present as morphological categories. Additionally, there are many nominal modifiers which function similarly to adjectives, but are derived from other lexical or phrasal sources, discussed in §4.2.2.3.

#### 4.2.2.1 Case

Case-suffixes only occur on adjectives and nouns. Case-marking suffixes may occur on an adjective functioning as either an argument or as a modifier of a noun. Additionally, an adjective may occur with the locative case-marking suffix to form an adverbial argument. When an adjective modifies a noun, the case suffix appears on the adjective, and not on the noun stem as seen in (58).

- (58) [kosu:wa: **kɛsɛ:gi:-ja:]s ja: hɛ:li do:-sa:-bi:**  
cassowary huge-ABS DIR:VEN go.out STAT-3:DR-D.S  
'A huge cassowary came out towards me.'

If a determiner is present, then case is not marked by concatenative suffixation, but is instead indicated by the determiner, as in (53).

#### 4.2.2.2 Number Agreement

Plural forms are not as productive or numerous as those found in nouns (see §3.2.2.2), and the small number of adjectives with plural reference do not follow any formal correspondence to singular forms. For example, in (59) and (60) the singular and plural forms of an adjective meaning 'small' is contrasted.

- (59) ɛ-ta:-lo:lu=wa: muφa: **lo:su:** wɛ tila:-bi:=ja: ka:  
finish-TEL-ASS.EV=TOP head small this nod-D.S=TOP FOC  
'He did/said that and he(the dog) nodded his small head.'

- (60) nɛ: to:goɬɛ: ka: a:si-ta: do:-wa: nɛ: sa:wa: **ga:lɛni** a:nɛ ba:lɛ  
1:SG road:LOC FOC sit:PST-TEL STAT-PST 1:SG child small:N.SG two COORD  
'She did that so I was sitting on the road with my two sons.'

Like nominal number, number as a category in adjectives is limited to animate entities. The adjective {ga:lɛni} in (60) is limited to human reference, while a third adjective meaning 'small' is {dɛtɛ:ni}, which refers to plural lower animates, i.e. animals. Number-marking in adjectives is therefore a suppletive process of number agreement which is only possible in adjectives with animate reference. Plural adjectives are not attested as co-occurring with the nominal plural-

marking described in §3.2.2.2, but it is not clear whether this is impossible or merely infrequent.

#### 4.2.2.3 *Derived Adjectives*

Adjectives are unique among the closed classes in that they form a large and likely growing class of words. Many derived nominal modifiers appear to be on a lexicalization path to becoming adjectives, and in some cases, it may be difficult to draw a clear distinction between monomorphemic adjectives and compositional forms. The derived forms in this section have the same syntactic and morphological features of adjectives, but are either synchronically or diachronically formed periphrastically. Adjectives are not regularly derived by means of a regular synchronic morphological process, however. The list of adjectives given in table 4 includes only those adjectives which are clearly underived. When considering how lexicalized a derived adjective is, several factors must be considered, including the degree of conventionalized meaning attached to a fixed phrase, the fossilization or productiveness of a phrase, and phonetic reduction in the construction. There is not a clear boundary between adjectives which are historically derived from periphrastic construction and those which should be analyzed as synchronically derived. Cases will exist on both ends of the spectrum. On one end of the lexicalization spectrum, a modifier is clearly derived by a productive synchronic process, and the meaning of the derived construction is clearly predictable based on the meaning of the components and the application of the productive word-formation process. On the other end of the spectrum, an adjective is synchronically unsegmentable, either through phonological fusion or a lack of a productive phonological or syntactic process which results in the present form and meaning. If no productive process can predict the meaning of a final derivation from its constituent parts, then it has clearly been lexicalized.

Many adjectives have a recognizable verbal counterpart, shown in table 5 with a similar form and meaning, but with the verbal properties including the possibility to occur with predicate categories such as tense, aspect and mood. Three underived adjectives, {ho:do:su} 'small, be small', {da:mɫa} 'black, be black', and {hi:} 'new, be new', have verbal forms identical to the adjective form and may function as stative verbs.

Table 5: Adjective and Verb Correspondences

Adjective form	Verb form
ho:go:ja: 'big'	ho:gε:ni 'become big'
ga:lε:nε: 'small:N.SG'	ga:lε: 'be small:N.SG'
gε:jε 'red'	gε:lε 'be red'
wεna:la: 'yellow'	wεna: 'be yellow'
kε:ka:ja: 'skinny'	kεka:nε: 'be skinny'
jo:so:la: 'skinny'	jo:so:lo: 'be skinny'
mo:lu:wa: 'old'	mo:lu: 'be old'
to:do: 'big:N.SG'	to:dε:li 'be big:N.SG'
moga:ga: 'bad'	moga:gεlε 'be bad'

This is one distinction between the synonymous adjectives {iso} 'small' and {ho:do:su} 'small'.

While {ho:do:su} has a formally similar verbal counterpart, {iso} has no such equivalent.

For other adjective-verb pairs, there is no productive derivation process in either direction. Final syllables on several of the verbal and adjectival forms hint at previous morphological processes which are no longer productive. For example, the final syllable /nε:/ or /ni/ appears in the verbal forms {kεka:nε:} 'be skinny' and {ho:gε:ni} 'be big' and contrasts with the final syllable /ja:/ in the adjectival forms {kε:ka:ja:} 'skinny' and {ho:go:ja:} 'big', and the adjectival form {mo:lu:wa:} 'old' contrasts with the verbal form {mo:lu:} 'be old'. Strangely, though, a similar final syllable /nε:/ appears on the adjectival form {ga:lε:nε:} 'small:N.SG' and is absent from the verbal form {ga:lε:} 'be small:N.SG'. Similarly, the final syllable /lε(:)/ or /li/ appears on the verbal forms {ga:lε:} 'be small:N.SG', {gε:lε} 'be red', and {to:dε:li} 'be big:N.SG', and contrasts with various alternate final syllables in adjectival forms which don't follow a clear pattern.

The final element /la:/ is still productive in forming relative clauses, and adjectival forms such as {jo:so:la:} ‘skinny’ are likely historically derived from relative clauses, e.g. a relative clause *jo:so:lo: la:* would be reduced to *jo:so:la:* (see §9.3.2.3 on relative clause formation with the copula {la:}). Other forms are more clearly segmentable, and therefore more readily identified as a synchronic derivation. For example, the stative verbs {wɛna:} ‘be yellow, make yellow’ and {φoφo} ‘domesticate’ are often used in relative clauses with the existential copula {la:}, e.g. *wɛna: la:* ‘yellow’ and *φoφo la:* ‘tame’ respectively, and in this role have the same syntactic features as adjectives. Despite the high frequency of these forms, they are easily segmentable according to synchronic processes and therefore not considered adjectives. The form *jo:so:la:* in contrast has presumably resulted from a fusion of the morphemes *jo:so:lo:* and *la:* which are no longer easily segmented without diachronic reconstruction. As seen in the examples below, a nominal modifier can also be formed by a noun and {la:}, which functions as a copula or existential verb (see §9.2.1 on copula constructions).

(61) bo: la:  
 breast EXIST  
 ‘having breasts, post-pubescent girl’

(62) o:φo: la:  
 sun EXIST  
 ‘hot, sunny’

(63) ha:ɣɛ: la:  
 light EXIST  
 ‘sacred’

Many such constructions are semantically transparent as in (61) and (62). In these cases, the derived modifier means that the root noun is present or prominent in the object being modified by the construction. In some cases, these modifiers are developing more abstract conventionalized meanings. For example, the modifier *o:φo: la:* in (62) can literally mean that the sun is present, causing hot weather, but it can also be applied to hot food or hot water with

no direct reference to the sun. Similarly, the term *hagε la:* has developed into an abstract statement of value with no literal reference to light.

These three examples exemplify three points on a continuum of lexicalization. Example (61) is mostly literal, with the possibility of slightly abstract sense which refers to the age of a woman rather than being a statement primarily concerned with whether she has breasts, but the literal sense of the term breast remains relevant as a necessary indicator of the age being referenced. Example (62) may be abstracted away from the source lexeme to a greater degree when referring to situations which do not involve the sun, but a literal interpretation is still frequent and a clear semantic similarity is readily apparent between the senses of heat caused by sunshine and heat caused by fire. An example such as (63), however, is lexicalized to the greatest degree in that the abstracted meaning is the primary meaning and is not easily inferred from the meaning of the components. A literal interpretation of *ha:ge: la:* and 'bright' or 'well-lit' is inappropriate and unattested.

Other derived forms include four lexicalized negated forms. As in nouns, the negative morpheme {ma:} follows a negated adjective. These forms are mostly predictable from the semantics of the constituent parts and could be analyzed as embedded clauses. Semantically the usage and meaning of these expressions has a more specific and conventionalized usage, and the distribution of use favors a function of modifying a noun.

(64) ili: da ma:  
suffice be.at NEG

'huge'

(65) ho:do:su ma:  
small NEG

'huge'

(66) ki: la: ma:  
bone EXIST NEG

'weak, (lit. boneless)'

In examples (64) and (65), a negated adjective and a negated verb are both used to mean ‘very large, huge’. When used to modify a noun, these expressions follow the noun just as adjectives do, as in (67).

- (67) kosu:wa:      ho:do:su      ma:  
 cassowary      small              NEG  
 ‘An enormous cassowary’

The meanings of these three expressions are more specific than simple negation would produce. If the meaning were completely predictable from simple negation, then the expression *ho:do:su ma:* could in theory be applied to contexts describing any entity that is not small, including medium or large sizes, rather than the actual usage which is limited to very large entities. Similarly the expression formed from a negated form of the verb {ili:} ‘suffice’ could be interpreted as either too much or not enough, which is also not the case in the conventionalized form in (64), which refers to an excessively large size or amount. The final example of a conventionalized negative derivation is *ki: la: ma:* ‘weak (lit. boneless)’ which is a negated construction formed from a noun and the existential copula *la:*, as seen in the discussion of (61) to (63) above. In this case, the abstract notion of weakness developed from the literal compositional meaning of being without bones.

### 4.3 Demonstratives

Demonstratives are presented here as a meta-class covering three subclasses of terms with the function of specifying external deictic reference. This reference may be anaphoric, referring to an entity within a discourse, or extra-linguistic, referring to an entity in the real world. These three subclasses correspond to three syntactic functions: argument demonstratives, adverbial demonstratives, and predicative demonstratives.

#### 4.3.1 Argument Demonstratives

There are five demonstratives denoting anaphoric reference and a binary distinction between proximate and distal referents. These demonstratives can form an argument independently, or as a modifier of an argument.

Table 6: Argument Demonstratives

Demonstrative	Function	Predicate	Modifier of Argument	Head of Argument
ε:na:	Anaphor: Absolutive	NO	YES	YES
ε:mε:	Anaphor: Ergative	NO	YES	YES
no:	Indefinite reference	NO	YES	YES
wε	Proximal demonstrative	YES	YES	YES
wεbε:na:	Proximal anaphor	NO	YES	YES
ko:	Distal demonstrative	YES	YES	YES

#### 4.3.1.1 {ε:na:} and {no:}

The terms ε:na: and ε:mε: are definite demonstratives which are case forms of a single demonstrative category {ε:na:} which contrasts with the indefinite demonstrative no:. When used as the modifier of an argument, the initial vowel is shortened for both definite forms to εna: and εmε: respectively. As shown in (68) the demonstrative ε:na: is used in arguments in the absolutive case, while ε:mε: is used for arguments in the ergative or locative case, as shown in (69)e. The locative form ε:mε: may be used to form a possessive demonstrative ε:mε:na: with possessive suffix {-na:} ( {-na:} may also derive possessive nouns as in §3.2.1 and pronouns as in (26)).

- (68) [kosu:wa:     εna:]     di-ja:  
       [cassowary    DEM:ABS]    take-PST

‘(They) took the cassowary.’

These two determiners are used primarily as anaphors, referring to known or previously mentioned arguments, as seen in (69). In (69)b a man is introduced for the first time in a narrative, and afterwards, in (69)c εna: is used for this participant since it has been previously

introduced. Similarly, in (69)d *εmε:* is used when this participant is expressed in an argument position requiring the ergative case.

- (69) a. [a:nε: ka:musi]<sub>FIN</sub>  
 go:PST NAME  
 ‘(I) went to Kamusi.’
- b. [[ε:na: ta:-lo:lu=wa:]<sub>TOP</sub> ti:sa: ko:lu **no:-**wa: ε:na: si-ja: dεn=o:bo:]<sub>FIN</sub>  
 DEM finish-ASS.EV=TOP teacher man INDEF-ABS DEM roam-PST stay=INF  
 ‘I arrived there where a teacher was staying.’
- c. [o:gu: bεda:-nε:]<sub>MED</sub> [nε: ti:sa: ko:lu **εna:** φειβα: momo di=ma:]<sub>FIN</sub>  
 do.thus CONS-MED:IPFV 1:SG teacherman DEM:ABS paper write do=IMP  
 ‘Having done that, I (said) to the teacher man “write a letter!”.’
- d. [ε-ta:-lo:]<sub>MED</sub> [la: dεnε]<sub>FIN</sub>  
 do-TEL-ASS.EV EXIST PROG:PST  
 ‘I was doing that and then...’
- e. [ko:lu **εmε:** seλε-si]<sub>MED</sub> [nε: la: ti:sa: ko:lu kei]<sub>FIN</sub>  
 man DEM:ERG say-MED 1SG DEF teacher man ASSER  
 ‘That man said “I’m a teacher!”’

Also show in (69)b is the indefinite demonstrative {no:}, which is used to specify indefinite arguments, as in (69)b. The form {no:} may also be used to refer to some members of established group (70) or another argument of the same type as an established referent, as in (71). In these uses, the meaning is similar to ‘some other’, ‘some of...’, ‘another’, or ‘one of the...’.

- (70) a. ε: komei i:-ta: hεnε  
 3:SG pandanus cook-STATE DUR:MED  
 ‘(He) had been cooking pandanus.’

b. **no:**=wa:      ε:na:      ma:      iφo:  
 INDEF=ABS    DEM:ABS    NEG    cook:PST

‘Some of it, (He) didn’t cook.’

(71) a. [ε:sε    **no:**      ka:dε    to:mu      sa:      di]<sub>FIN</sub>    [ka:dε    dija:      mi-ja:]<sub>FIN</sub>  
 bag    INDEF    first    precede    pack    PFV    first    take    come-PST

‘(I) took one of the packed bags first; (I) took it first.’

b. u:sε:    di      heje-φeija:  
 middle:LOC    take    hang-PERF

‘(I) hung it in the middle.’

c. [[ε:mεε:    a:nε:=ja:]<sub>TOP</sub>    ε:sε    no:-wa:      la:      a:mi:      ε:na:    o:ge:      di]<sub>FIN</sub>  
 back    go:PST=TOP    bag    INDEF-ABS    ADD    PRO:ASS    DEM    pick.up    PERF

‘Going back, then (I) picked up the other bag there too.’

In (71) both bags have been previously introduced in the narrative, and *no:* is therefore no longer serving to introduce a participant in these contexts, and if referring to an indefinite portion of a known referent.

In addition to the ergative-absolutive contrast seen between *ε:na:* and *ε:mε:*, *ε:na:* may bear the oblique locative suffix {-mi:} to refer to given locations or topics, as in (72).

(72) **no:**    wε    ko:lu-wa:    wa:sa    **εna:-mi:**    o:ga:      dowa:ge-li:  
 INDEF    this    man-ABS    veranda    DEM-ASS    pandanus    squish-SIM

‘The man was taking the seeds out of cooked pandanus on the veranda.’

The forms *ε:na:*, *ε:mε:*, and *no:* may each operate as either a determiner following a head noun, or as the head of an anaphoric argument, as shown in (73).

(73) **ε:na:**    ε=ta:-lo:lu=wa:      ti:sa:      ko:lu    no:-wa:      **ε:na:**    si-ja:      den=o:bo:  
 DEM    do=finish-ASS.EV=TOP    teacher    man    INDEF-ABS    DEM    roam-PST    PROG=INF

‘I arrived there where a teacher was staying.’

(74) **ε:me:**        ti:φe:-mi:=ja:    *ειφο:st*    a:ka:        di  
 DEM:ERG    after-LOC=TOP    aid.post    PRO:FOC    build:PERF

‘After that we built an aid post.’

(75) **no:=wa:**        bole:ki:ni        to:ja-je:        di    he:-ja:        ka:    la:  
 INDEF=TOP    RIVER.NAME    top-LOC    take    hang-PST    FOC    DEF

‘As for the other one, (I) had hung that one at the top of Blekini creek.’

In this context, the argument formed by the demonstrative may be used for participant anaphora and textual anaphora. In (73), the demonstrative references a location, and this argument may also reference a previous event, as in (74). In cases where the demonstrative is directly affixed, such as *ε:na:mi* in (72), the functionally unmarked form *ε:na:* is used. This is despite the fact that arguments with locative reference are typically in the same form as those in ergative case roles.

#### 4.3.1.2 {wε} and {webε:na:}

Two other demonstrative pronouns, {wε} and {webε:na:}, function in many ways like *ε:na:* and *ε:me:*. {wε} is a proximate demonstrative, and the fused form {webε:na:} functions as a contrastive anaphor. The form *wε* may function as a modifier of a head noun, as shown in (76).

(76) no:        a:ge:    kega:ja:    **wε**        beja:ga:    mo:ti    ho:no:    o:ga:    ε-sa:-bi:  
 INDEF    dog    bony        **DEM:PROX**    cuscus:ABS    close.by    there    thus    do-3:DR-D.S

‘This bony dog sat there close to the cuscus like that.’

The use of {wε} seems to be primarily motivated by the definiteness or topicality of the participant. Spatial reference is a more common function of {wε}, and the anaphoric use seen in (76) occurs less frequently. In (77) it is shown that {wε} may function as the head of an argument with spatial reference.

(77) **wε**        ε:-na:  
**DEM:PROX**    3:SG-POSS

‘This one here is his.’

In contrast to  $\epsilon:na:$  and  $\epsilon:m\epsilon:$ ,  $\{w\epsilon\}$  may serve as a clause predicate. In (78),  $\{w\epsilon\}$  is seen in a predicate position, signifying a location or direction.

- (78)  $g\epsilon$              $da:-ja:$         **w $\epsilon$**              $k\epsilon i$   
          2:SG:MOD    sago-ABS        **DEM:PROX**    ASSERT  
          ‘Your sago is over here.’    (‘This is your sago.’)

Additionally,  $\{w\epsilon b\epsilon:na:\}$  appears to be a fusion of  $\{w\epsilon\}$  and  $\epsilon:na:$ . This form is used in contexts which are both anaphoric and contrastive, as in (79).

- (79)  $a:g\epsilon:$     **w $\epsilon b\epsilon:na:$**              $w\epsilon na:l\epsilon$      $da:$      $\epsilon na:$              $sa:gl\epsilon:-g\epsilon:$              $\epsilon-si$   
          dog        **PROX:DEM:ANA**    secretly    sago    that:ABS    give.out-ITER        do-MED  
          ‘This dog went and secretly gave out the sago (to his friends)...’

In these contexts,  $\{w\epsilon b\epsilon:na:\}$  does not appear to have a spatial reference, but is instead motivated by definiteness, specifically the contrast between the referent, a dog who has stolen sago, and his kin, other dogs who are less topical in the narrative.

#### 4.3.2 Adverbial Demonstratives

There are three types of adverbial demonstratives, which function as oblique adverbial arguments in a clause, either independently or as a modifier to another adverbial argument. The first is  $\{\epsilon:na:\}$ , which is a realization of the argument demonstrative discussed above as an argument specifying a spatial or temporal setting, the second is composed of three distal locational demonstratives which encode elevation relative to a deictic reference, and the third are directional demonstratives which refer to directions of movement.

Table 7: Adverbial Demonstratives

Demonstrative	Function
ε:na:	anaphor
ho:no:	distal, higher elevation
ho:lo:	distal, same elevation
ho:du	distal, lower elevation
ja:bi:	ventive directional
wa:	andative directional
kai, kaikai	contrastive deictic directional
ka:miga:	non-contrastive deictic directional

#### 4.3.2.1 {ε:na:}

As discussed previously, {ε:na:} is used as an anaphor for known core arguments. In addition to this function, {ε:na:} may function as an adverbial demonstrative of time or place. This may be specify a moment in time, as in (80).

(80) ε:na: go:dε-ja: o:su-wo:-φειja: kei  
 DEM God help-COMP-PERF ASSER

‘At that time, God helped me.’

In this usage, {ε:na:} refers to the time frame of the preceding utterance, similar to “at that point in time”. The demonstrative {ε:na:} may also specify a previously mentioned location, as in (81).

(81) a. waija o: keεε ja:-γενε:  
 Lake.Campbell lake side DIR:VEN-MED

‘Having arrived beside Lake Campbell...’

- b. nɛ:    ɛ:na:    a:si  
 1:SG    DEM    stay:PST  
 ‘We stayed there.’  
 (lit. ‘I stayed there’)

In (81)b, {ɛ:na:} refers to the location specified in the previous clause. These anaphoric adverbial uses differ from the examples in §4.3.1.1 only in the type of argument role being taken by {ɛ:na:}. The demonstratives in §4.3.1.1 serve as core arguments, and feature more variability in form representing different case and definiteness forms. In contrast, the spatial and temporal functions shown here are limited to a single form ɛ:na:, which corresponds to locative or temporal oblique arguments.

#### 4.3.2.2 {ho:no:}, {ho:lo:}, and {ho:du}

The locational demonstratives {ho:no:}, {ho:lo:}, and {ho:du} are distal deictics which are generally accompanied by some sort of gesture or extralinguistic context. The general semantics is equivalent to “over there” with the elevation of the location being additionally specified, and there is no equivalent set of proximal expressions which encode elevation in this way. For example, {ho:no:} in (82) refers to a location distant to the speaker, but known to both interlocutors. In addition, the location is at the same relative elevation as the speakers.

- (82) ho:no:            dijo:φo:=ma:  
 DEM:LVL        put=IMP  
 ‘Put it over there.’

- (83) nɛ:    ho:lo:            hɛna:    kɛi  
 1:SG    DEM:HIGH        go        ASSER  
 ‘I’m going up there.’

- (84) ɛ:    ho:du            sa:  
 3:SG    DEM:LOW        sit  
 ‘He’s sitting down there.’

Similarly, in (83), *ho:lo:* refers to a known location which is at a higher elevation, and in (84) *ho:du* refers to a known location at a lower elevation. These may combine with other adverbials, such as the adverb *mo:ti* in (85), or may occur alone as in (82) to (84).

(85) nɛ:    **mo:ti**    **ho:no:**    hɛna:    kɛi  
 1:SG    close.by    DEM:LVL    go    ASSER  
 ‘I’m going there close by.’

(86) nɛ:    **mo:ti**    hɛna:  
 1:SG    close.by    go  
 ‘I’m going somewhere close by.’

It is interesting to note the contrast in definiteness between (85) and the adverbial demonstratives (82) to (85). While the adverbials in both (85) and (86) provide spatial reference, adverbial demonstratives require that the reference be explicitly known either through discourse context or extralinguistic indications such as pointing. The adverb {*mo:ti*} on the other hand may reference an indefinite, unspecified location. Like {*wɛbɛ:na:*} discussed in §4.3.1.2, these demonstrative may also appear fused with the anaphoric demonstrative {*ɛ:na:*}, which appears in the bound form *bɛ:na:*.

(87) [sa:goi-wa:    **ho:no:bɛ:na:**    nɛ:    bɛda:-nɛ:]<sub>MED</sub>    [mi-ja:]<sub>FIN</sub>  
 NAME    DEM:LVL:ANA    1:SG    see:PST-MED    come-PST  
 ‘Sagoi saw me (U:gei) there and came.’

This fused form adds an anaphoric reference to the semantics of the demonstrative as shown in (87).

#### 4.3.2.3 Directional Demonstratives {*ja:bi:*}, {*wa:*}, {*kai*}, and {*ka:miga:*}

Directional demonstratives are a small class of four terms which are characterized by deictic reference to a direction in reference to an event of motion. These demonstrative specify whether the direction of motion is towards or away from some deictic reference point. These demonstratives all require either an anaphoric reference or an extralinguistic gesture establishing the direction of motion.

#### 4.3.2.3.1 {ja:bi:} and {wa:}

Two of these directional demonstratives are {ja:bi:} and {wa:}, which function in many ways like  $\epsilon:na:$  and  $\epsilon:m\epsilon:$ , but mostly of refer to the direction of an action of movement. They are additionally characterized by encoding the speaker as a deictic reference point. The directional {ja:bi:} is a ventive demonstrative making reference to motion towards the speaker, and {wa:} is the andative counterpart which refers to motion away from the speaker. Both may function as a modifier of a head noun, as shown in (88) and (89).

(88)  $\phi\epsilon\delta\epsilon$  **wa:** ka: mi=ja:  $\epsilon:m\epsilon\epsilon:$  togo:l\epsilon: h\epsilon:li-jo: di-si  
 ridge AND FOC come=TOP:DUR back road:LOC go.out-COMP PFV-MED  
 ‘I came to that ridge and came out to the road and then...’

(89) ni:  $\phi$ ili:so i:sa: **ja:bi:** la: mi-ja:=ja:  
 1:N.SG:MOD NAME ground VEN DEF come-PST=TOP  
 ‘Regarding how we Fili:so: came here to this place...’

In both (88) and (89) the argument modified by the directional is the destination of the movement event, and the choice of {ja:bi:} or {wa:} is determined by the speaker’s location. In (88) for example, the ridge is a location far removed from the speaker who is speaking of past events. In (89) however, the demonstrative refers to the same territory where the speaker was sitting when making the utterance. The directional {ja:bi:} may appear with the definite determiner {la:}, as in (89), but this is not attested for {wa:}. This is likely due to the pragmatics of the speech environment surrounding these demonstrative forms. The form {ja:bi:} will by definition always refer to an obvious known location since it is coreferential with the location of the speech-act participants. The location of the directional {wa:} on the other hand is more compatible with indefinite, or at least not markedly definite locations. This would explain a difference in frequency, but would not preclude the possibility of {wa:} ever having definite reference. It could simply be the case that definite-marking occurs with {wa:} too rarely in the corpus to appear.

In contrast to  $\epsilon:na:$  and  $\epsilon:m\epsilon:$ , {wa:} may serve as a clause predicate, as in (90) where the speaker is referring to a direction away from the speaker’s location.

- (90) gɛ            da:-ja:        **wa:**        kei  
          2:SG:MOD   sago-ABS    AND        ASSER

‘Your sago is over there.’

The directional {ja:bi:} is not attested as a predicate, but a shortened form *ja:* is used as a directional predicate describing ventive motion events.

#### 4.3.2.3.2 {kai} and {ka:miga:}

The demonstratives {kai} and {ka:miga:} differ from {ja:bi:} and {wa:} in that the speaker does not form a deictic reference. The form {kai} is a contrastive form used with new, unexpected, or contrastive directions, while {ka:miga:} is used anaphorically to refer to motion towards some reference point apparent from the discourse context. In (91) for example, {ka:miga:} is used to modify a noun phrase which refers to a branch that had been previously mentioned in the discourse.

- (91) [a:li-si]<sub>MED</sub>        [ha:geɲɛbo:ja]<sub>FIN</sub> jɛ:    ma:si    **ka:miga:**    dwadɛkɛ-si]<sub>MED</sub>        [a:nɛ:]<sub>FIN</sub>  
          sleep-MED:PFV    morning            tree branch    DIR        walk.on.top-MED:PFV go:PST

‘We slept until morning and we walked on top of that same tree branch.’

- (92) **ka:miga:**    sa:gu        ba:dɛ    na:gɛ    hɛɲɛ  
          DIR        waterfall    side    run        go

‘I ran that way to the falls...’

In (92), *ka:miga:* forms a separate constituent referencing a previously mentioned location, and the location is reiterated as the allative oblique object of the predicate. The directional {kai} mirrors this function, but is used in contrastive or emphatic contexts when the direction may be unexpected or unclear due to the presence of other competing referents. In example (93), {kai} is used independently as an adverbial phrase, while in (94) {kai} is used as a modifier of a noun phrase to form this adverbial.

- (93) **kai**            ma:lo:  
          DIR:FOC        go:ST.IMP

‘Go that way!’

(94) togo:lo    **kai**            ma:lo:  
road        DIR:FOC        go:ST.IMP

‘Go along that road!’

(95)    **kaikai**                    hɛnɛ-sɛnɛ  
DIR:FOC:REDUP        go-HAB

‘They go this way! (as opposed to the other way)’

In this focal usage, {kai} may be further emphasized through full reduplication, as in (95), where the speech-act is accompanied by an emphatic gesture indicating the direction.

#### 4.3.3 Predicative Demonstratives

In addition to argument and adverbial demonstratives which refer to locations, moments in time, or previously mentioned discourse actors, there are also two deictic verbal demonstratives which may refer to referenced actions (see Guérin [2015] for an overview of demonstrative verbs). The first of these, {wo:gu:}, refers anaphorically to a previously mentioned action. The exchange shown in (96) illustrates how {wo:gu:}, or the inflected past form *wo:ga:*, functions as a verb with reference to an action previously established in the discourse.

(96) a. gɛ:        ha:nɛ        wɛfɛ:ni:        a:nɛ:=ja:  
2:SG    water        fetch:PURP        go:PST=Q.N.PRS

‘Did you fetch the water?’

b. ɛ:        **wo:ga:**  
yes    do.thus:PST

‘Yes, I did that.’

In (96)b, *wo:ga:* refers to the same event specified in (96)a. This anaphoric verb may also appear fused with {wɛ}, resulting in the form {wejo:gu:}. This likely refers to topicality or more accessible reference rather than the spatial proximity expressed by {wɛ}. In (97)b, *wejo:gu:* refers the action of crawling around expressed in the immediately preceding sentence (97)a.

(97) a. ε:na: ho:do:su gɛ:li di=ja: si-sɛɛ-jɛ:-mi: ka: la:  
 DEM small crawl do=TOP roam-HAB-LOC-ASS FOC COP

‘Then when I was small , I was crawling and moving around...’

b. na:-wa: sa: bɛda: φo:sɛ: **wɛjo:gu:**  
 1:mother-ABS sit CONS back:LOC **do.like.this**

‘My mother was sitting and I was doing this behind her...’

Both {wo:gu:} and {wɛjo:gu:} often appear as a non-final constituent of a serial verb construction, serving an adverbial function, as illustrated in (98).

(98) a. [φo:gona: buta:]<sub>FIN</sub> [φo:gona: buta:]<sub>FIN</sub>  
 other.side:ABS cut:PST other.side:ABS cut:PST

‘Cut one side, then cut the other side’

b. hɛ:φa: la: [**wo:gu:** buta:]<sub>SVC</sub>  
 end DEF do.thus cut:PST

‘Cut the ends like that.’

In this usage {wo:gu:} still serves an anaphoric function, referring to the previous utterance. The verbal demonstratives {wo:gu:} and {wɛjo:gu:} are considered verbs first and foremost, since they present the morphological and syntactic properties of verbhood, but is worth mentioning here as a demonstrative due to its functional use as an anaphoric deictic. In addition, there are two non-verbal predicative demonstratives: {ka:m} and {wa:m}. These predicative demonstrative may only function in a predicate position, as in (99) and (100), and do not occur with morphology of any kind.

(99) [nɛ molu:wa:]<sub>S</sub> wa: ka:m  
 1:SG:MOD old DIR:AND that's.all

‘My old story there is finished.’

(More lit. ‘That is all there is to my story there.’)

(100) [[ne: la:]<sub>POSS</sub> wai-ja:]<sub>s</sub> ja: wa:m  
 1:SG DEF story-ABS DIR:VEN that's.it

'This is my story.'

The predicate {wa:m} asserts that an indicated referent is coreferential to a known discourse referent, and may be translated as, 'That's it!' or 'That's the one!'. The predicate {ka:m} describes the exhaustivity of some discourse referent, and might be translated as 'That's it.', 'It's finished.', or 'That's enough.'

All of the demonstratives discussed in this section are summarized in table 8 in terms of their syntactic roles, and semantic reference.

Table 8: Demonstratives Overview

	Anaphor	Locative/Spatial Reference	Temporal Reference	Argument Modifier	Core Argument	Adverbial (Predicate modifier)	Main-clause Predicate
{ε:na:}	YES	YES	YES	YES	YES	YES	NO
no:	YES	YES	YES	YES	YES	NO	NO
wε	YES	NO	NO	YES	YES	NO	YES
wεbε:na:	YES	NO	NO	YES	YES	NO	NO
ho:no:	NO	YES	NO	NO	NO	YES	NO
ho:lo:	NO	YES	NO	NO	NO	YES	NO
ho:du	NO	YES	NO	NO	NO	YES	NO
ja:bi:	NO	YES	NO	YES	NO	YES	NO
wa:	NO	YES	NO	YES	NO	YES	YES
kai	NO	YES	NO	YES	NO	YES	NO
ka:miga:	YES	YES	NO	YES	NO	YES	YES
wo:gu:	YES	NO	NO	NO	NO	YES	YES
wεjo:gu:	YES	NO	NO	NO	NO	YES	YES
wa:m	YES	YES	YES	NO	NO	NO	YES
ka:m	YES	YES	YES	NO	NO	NO	YES

#### 4.4 Coordinators and Determiners

The class of determiners, including coordinators, includes four terms which include definite, coordinating and additive functions, and are listed in table 9. The coordinators {ba:lɛ} and {di} are synonymous and have the same syntactic properties. These two coordinators appear to be in free alternation, with specific speakers having their own preferences. The determiners {la:} and {la:la:} have related but separate functions. Both specify a definite reference and often appear in contrastive environments, but {la:la:} has a specific additive function not found with {la:}. The distinction between these two forms is neutralized in some phonological environments, compounding the similarity of {la:} and {la:la:}.

Table 9: Determiners and Coordinators

ba:lɛ	Coordinator
di	Coordinator
la:	Definite
{la:la:}	Additive

##### 4.4.1 Coordinators {ba:lɛ} and {di}

The coordinators {ba:lɛ} and {di} have similar functions and in some instances are in free alternation. Some speakers attribute a construction formed with {di} to influence from the Kaluli language, which has a similar coordinator {dia:} (Andrew Grosh, personal communication). Interestingly, in both Kaluli and Eibela, the coordinators {dia:} and {di} appear to be used much less frequently than alternative marking strategies. In the case of Eibela, {ba:lɛ} occurs much more frequently. It is also plausible that in both Kaluli and Eibela the forms {dia:} or {di} may originate from the verb {di} 'take'.

In Eibela, both {ba:lɛ} and {di} follow all constituents of a coordinated argument construction when forming a single coordinated argument in a clause. These coordinated constituents may contain at least three constituent noun phrases, but in practice two conjoined noun phrases is most common. For example, in (101) and (102), {ba:lɛ} and {di} are used to

conjoin constituents into a single argument role within the clause, and {ba:lɛ} may also be used to form embedded adverbial clauses as described in §9.3.3.1.

(101) dɛda:nɛ    **ba:lɛ**        komo:lo    **ba:lɛ**        dija:    hɛna:-nɛgɛ:  
 crayfish   COORD   fish        COORD   take    go-MED:PFV

‘We went carrying prawns and fish and then...’

(102) φili:        a:nɛ:-gɛ:        o:lomo:    **di**        wa:wi    **di**        sa:gɛ-jɛ:-mi:  
 ascend   go:PST-ITER   NAME    COORD   NAME    COORD   river.mouth-LOC-ASS

‘We were going up, at the mouth of the O:lomo: and Wa:wi rivers...’

In (101), the subject of the clause is the entire coordinate construction *nɛ: ba:lɛ keisa:lɛ ba:lɛ*. Similarly, in (102) the entire construction *o:lomo: di wa:wi di* functions as a single nominal modifier to *sa:gɛ*. In (103) on the other hand, only one constituent appears with the coordinator, and forms a separate comitative argument within the clause which is syntactically distinct from the subject of the clause.

(103) [[[nɛ:]<sub>S</sub> [go:dɛ    ba:lɛ]<sub>X</sub>    [sa:    kɛi]<sub>PRED</sub>]<sub>S</sub> [la:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG    God        COORD    stay    ASSER    QUOT

‘I said "I am with God"’ (A.4.39)

(104) nɛ:        ba:lɛ        mɛnɛ:na:  
 1:SG    COORD        go:FUT:1

‘I too will go.’

(105) nɛ:        ba:lɛ        hɛna:    kɛi  
 1:SG    COORD        go        ASSER

‘I am going with (someone).’

OR ‘(Someone) is going with me.’

In (104), verbal agreement shows the first person reference to be the subject, and the other argument in the coordinate structure is not realized overtly. In (105), there is no verbal agreement to disambiguate between two possible interpretations, and the clause can mean

either ‘I am going with (someone).’ or ‘(someone) is going with me.’ In both instances, an argument is being elided.

(106) [nɛ:]<sub>s</sub> [∅ ba:lɛ]<sub>COM</sub> hɛna: kɛi  
 1:SG 3:SG COORD go ASSER  
 ‘I am going with (him/her).’

(107) [∅]<sub>s</sub> [nɛ: ba:lɛ]<sub>COM</sub> hɛna: kɛi  
 3:SG 1:SG COORD go ASSER  
 ‘(He/she) is going with me.’

In the interpretation ‘I am going with (someone).’ the comitative argument is elided as represented in (106), whereas in the interpretation ‘(someone) is going with me.’, the subject of the clause is taken to be elided as in (107).

#### 4.4.2 Definite and Additive Determiners {la:} and {la:la:}

The two determiners {la:} and {la:la:} both describe a definite argument, but {la:la:} additionally serves an additive function which specifies that the argument is serving the same semantic role in the same type of event as another referent in the discourse. For example, in (108) *la:la:* specifies that the modified argument *nɛ: la:la:* is involved in the same type of event structure as a previously mentioned argument. In this case, some other person is going, and the speaker will do so as well.

(108) nɛ: **la:la:** mɛnɛ:na:  
 1:SG ADD go:FUT:1  
 ‘I will go too.’

The morpheme {la:la:} has two allomorphs, *la:la:* and *la:*, which are phonologically determined. After the low vowels /a, a:/, *la:la:* is not possible, and only *la:* is attested. This means that in this context, the distinction between definite determiner {la:} and the additive definite determiner {la:la:} is neutralized. In the following example (109), the instances of /la:/ could easily be interpreted as either definite or both additive and definite, since both interpretations fit the discourse context.

- (109) a. ε:σε          di          sa:          di-si  
 string.bag   take   pack   PFV-MED:PFV  
 'I packed the bag.'
- b. kosu:wa:      **la:**      no:      **la:**      ε:σε          a:mi:          sa:      di  
 cassowary    ADD   INDEF   DEF   string.bag   PRO:ASS   pack   PFV  
 'Also put some of the cassowary in that bag.'
- c. *okei*    kε:-ja:      **la:**          u:σε:          o:lo:    ba:nε-ta:    di-si  
 okay   pig-ABS   ADD   middle:LOC   stab   break-TEL   PFV-MED:PFV  
 'Okay, we divided that pig too in the middle...'
- d. **a:la:**          a:mi:          sa:-lε  
 PRO:DEF   PRO:ASS   put.in-S.S  
 '...then we put that one in there.'

In this situation, the definite arguments are both identifiable and previously presented in the discourse, and they are both the patients of the same repeated action. In other environments, the definite determiner {*la:*} clearly lacks any additive function, and is clearly distinct from {*la:la:*}. In (110) for example, there is only one referent in the discourse context which is serving a given semantic role, and no additive interpretation is possible.

- (110) [ε-φειja:] [[na:na: **la:**]<sub>s</sub>          [ba:ba:lε    do:-wa:]<sub>PRED</sub>]  
 do-PERF   1:PAT   DEF          not.know   STAT-PST  
 'That had happened, and I didn't know (about it).'

Definite arguments are not obligatorily marked as definite by {*la:*}, and in contexts such as (110) and (111)a, the use of *la:* is motivated by the present of contrastive definite referents in the discourse, as in (111)b, where *la:* appears following a definite referent that contrasts with the argument of the previous clause.

- (111) a. [sa:goi    wa:]<sub>A</sub>    [ho:no:bε:na:]<sub>x</sub> [nε:]<sub>o</sub>    [bεda:-nε:]<sub>PRED</sub>]<sub>MED</sub>  
 NAME    DIR:AND   DEM:LVL:ANA    1:SG    see:PST-MED:IPFV  
 "'Sa:goi saw me (U:gei) there and...'"

- b. [[mi-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 come-PST  
 “‘He came.’”
- c. [[gɛ:    la:]<sub>A</sub>    [nɛ:]<sub>O</sub>    [bɛda:-gɛnɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 2:SG    DEF    1:SG    see:PST-MED:IPFV  
 “‘(then) *You* saw me and...”    (A.1.48-50)

While an additive meaning would fit the context of example (111)b, the form *la:la:* which would make this meaning explicit is not used despite being phonologically possible. In this context, *la:* serves a topic setting function within a discourse to shift attention to a particular discourse participant. In this way, the use of the determiner {*la:*} is more emphatic and marked than using the anaphor {*ɛna:*} in a similar role as discussed in section §4.3.1. The definite semantics of {*la:*} may be combined with the indefinite demonstrative {*no:*}, as in (112), to refer to some portion of a definite reference.

- (112) [ko:lu    no:    la:]<sub>s</sub>    [wɛ:lɛ    ba:dɛ]<sub>x</sub>    [do:-φɛija:]<sub>PRED</sub>  
 man    INDEF    DEF    top    side    stay-PERF  
 ‘Some of the people were staying on top.’

This apparent contradiction results in the interpretation of referring to an indefinite portion of a definite referent. This is most often used to refer to an unspecified number of a definite plural referent, as in (112).

#### 4.4.3 Morphosyntax

Both {*la:*} and {*la:la:*} appear as the last element of a noun phrase, following any case-marking or the focus particle *ka:* (see §4.6.2 on polar predicate particles) as in (113) and (114).

- (113) [do:-mo:    la:la:]<sub>s</sub>    mi=ja:  
 father-DAT    ADD    give:PST=TOP  
 ‘They gave (a woman) to (my) father too.’

(114) ε:      wa:      ε:      ka:      **la:**      ja:      kɛi  
 3:SG    AND    3:SG    FOC    DEF    DIR:VEN    ASSER

‘That one there, that one is here.’

When juxtaposed with a following noun phrase, {la:} may be used to signify possession. For example, in (115), the argument *ne: la:* specifies the possessor of the following noun *waija*.

(115) [[*ne:*    **la:**]<sub>POSS</sub>    wai-ja:]<sub>S</sub>    ja:      wa:m  
 1:SG    DEF      story-ABS    DIR:VEN    that’s.it

‘That’s my story here.’

This usage resembles the principle of topic setting shown by the usage of {la:} within a discourse, but takes place within a single clause. The definite determiner establishes a reference point as context for the following noun, and this relationship is most often one of possession. The form /la:/ may also be used in relative clauses and embedded clause constructions as discussed in §9.3.2.3, and as a copula as described in §9.2.1. Despite the formal similarity of these morphemes, and a possible historical link between them, the predicative uses are treated as a copula or existential verb, and the morpheme found in argument phrases is treated as a separate homophonous morpheme serving as a definite determiner.

## 4.5 Quantifiers

There are four quantifiers which form a functional class with two subclasses based on morphosyntactic properties. This word class is similar to adjectives and determiners in their functional and morphosyntactic behavior. Two quantifiers will be referred to as exhaustive quantifiers, {to:bo:} ‘all’ and {ɛga:lɛma:} ‘none’, and two others are referred to as numeral quantifiers, {ɛ:mɛli:} ‘one’ and {a:nɛ} ‘two’. These quantifiers may generally function as arguments, argument modifiers, and predicates.

### 4.5.1 Exhaustive Quantifiers {to:bo:} and {ɛga:lɛma:}

The two exhaustive quantifiers describe absolute quantities including the entire membership of some group or the complete absence of a thing. In examples (116) and (117),

{to:bo:} and {εga:lεma:} are shown to follow the argument they modify when functioning syntactically as an argument modifier.

(116) a:gε: tε: wε **to:bo:** hεna: bεda:  
 dog real DEM:PROX all go CONS  
 'All the dogs (apparently) left, so...'

(117) [[i: ha:bila:]<sub>S</sub> [εga:lεma: do:-ba:bε]<sub>PRE</sub>]<sub>FIN</sub>  
 3:N.SG:MOD NAME nothing STAT-CF  
 'Those Ha:bila: people wouldn't be here.' (A.1.62)

In this respect, quantifiers resemble adjectives and determiners which appear following the argument they modify, as opposed to nominal modifiers and possessors, which precede the argument they modify. Adjectives and demonstratives precede a quantifier when they are present in an argument, as shown in (116).

(118) [[[ba:di-**ja:** **to:bo:**]<sub>o</sub> [a:gε: εmε:]<sub>A</sub> di-si=ja:]<sub>TOP</sub> o:la: do:-si]<sub>MED</sub>  
 many-ABS all dog that:ERG PFV-MED:PFV=TOP stab:PST STAT-MED  
 'The dog did it to all of them, he had stabbed them, then...'

Exhaustive quantifiers (but not numeral quantifiers, see 4.5.2) are not suffixed for case when they modify an argument, and case suffixes appear on a noun or adjective in the argument before the quantifier, as shown in (118), where the case suffix {-ja:} appears on the adjective {ba:di}. When functioning as an argument, however, an exhaustive quantifier may display case suffixes similarly to nouns and adjectives, as seen in (119), although as with other contexts, case is not obligatory, as evidenced by its absence in (120).

(119) **to:bo:**-wε: do:goba: εna: a:mi: di  
 all-ERG airstrip that:ABS PRO:ASS build:PST  
 'And then everyone built the airstrip.'

(120) [**to:bo:** a:gεlε-si]<sub>MED</sub> [a:nε: la-bi:=ja]<sub>TOP</sub>  
 all laugh-MED DUR:PST COP-D.S=TOP  
 'They were all laughing (and continued to do so)...'

The quantifier {εga:lɛma:} is very uncommon in the role of an argument or argument modifier, and is more often found as the predicate of the clause, as in (121).

- (121) [[to:gola:]<sub>S</sub> [εga:lɛ:ma:]<sub>PRED</sub>]<sub>FIN</sub>  
road:ABS nothing  
‘...there was no path.’ (A.3.43)

In strong contrast, {to:bo:} is not attested in the role of a predicate. It is unclear whether {to:bo:} is ungrammatical in a predicate position, or whether this usage is simply too rare to have been captured in the gathered corpus.

#### 4.5.2 Numeral Quantifiers {ε:mɛli:} and {a:nɛ}

There are two numeral quantifiers, {ε:mɛli:} ‘one’ and {a:nɛ} ‘two’, which generally mirror the properties of exhaustive quantifiers except for a couple of points. Like exhaustive quantifiers, numeral quantifiers follow most elements of a modified argument with the exception of the focus-marker {ka:} and determiners, such as the coordinator {ba:lɛ} as seen in (122) and (123), and may function as an argument without a noun, as in (124).

- (122) nɛ            sa:wa:    ga:lɛni            a:nɛ    ba:lɛ    ε-ta:-bi:  
1:SG:MOD    child    small: N.SG    two    COORD    do-TEL-D.S  
‘I was with my two small boys.’

- (123) iso        a:nɛ    ka:        ja:si                di  
small    two    FOC    kill:N.SG.A        take:PST  
‘I killed and took two small (piglets).’

- (124) no:=wa:        nɛ:        ε:mɛli:    ka:    di-si  
INDEF=TOP    1:SG    one        FOC    take-MED:PFV  
‘Otherwise, it's my only one, so I would take it and then...’  
(lit. ‘another one, I take (the only) one...’)

It is not known whether or not determiners or the focus-marker {ka:} may appear in combination with exhaustive since this is not attested in the corpus. Numeral quantifiers

precede case-marking when they appear in an argument as a modifier, as seen in (125), which distinguishes them from the exhaustive quantifiers which follow the case-marker, as in (118).

- (125) iso    a:nε-ja:    ja:si            di=ja:    ε:mεle:    a:nε:=ja:    do:gε:  
 small   two-ABS   kill:N.SG.A    take=TOP   back    go:PST=TOP   house:LOC  
 ‘Having killed and taken those two little ones, I went back to the house.’

- (126) a:gε:=ja:    kali:ja:    iso=wa:    ε:mεli:    sεdε-sa:-bi:  
 dog=TOP   wallaby   small=TOP   one    kill:N.SG.A-3:DR-D.S  
 ‘The dogs killed a small wallaby,’  
 (lit. ‘As for the dogs, a small wallaby, they killed one.’)

In some constructions, it may superficially appear that the quantifier follows a topic-marking suffix when a topic argument is coreferential with a core argument expressed by a quantifier. For example, the patient of the action described in (126) is analyzed as a topic argument *kali:ja: i:so*, and a separate core object argument *ε:mεli:* appearing in the clause.

Perhaps the greatest difference between exhaustive quantifiers and numeral quantifiers is the use of the suffix {-φειja:} in the formation of quantifier constructions when a numeral quantifier is in the role of a predicate or when multiple numeral quantifiers form a single combined argument modifier. In (127), the combined quantifier *a:nε ε:mεli:* serves as the predicate of the clause, and in this position must be suffixed by {-φειja:}.

- (127) ετελεγε    sa:weli    εna:    kali:ja:-ja:    a:nε    ε:mεli:-φειja:=bo:  
 NAME   waterfall   that:ABS   wallaby-ABS   two   one-QUANT=INF  
 ‘There were three wallabies there at Etelege Falls.’

- (128) [[ha:gε:=ja:]<sub>TOP</sub>    [a:nε]<sub>x</sub>    [ε:mεli:-φειja:]<sub>o</sub>    [di-mεi]<sub>PRED</sub>]<sub>FIN</sub>  
 day=TOP            two            one-QUANT            take-HYPO  
 ‘(Continue) getting (sago leaves) for three days.’ (A.2.54)

In (128), *-φειja:* also appears attached to the last of a sequence of numeral quantifiers, and allows the quantifiers *a:nε* and *ε:mεli:* to form a single combined modifier meaning ‘three’. This is possible in other combinations such as *a:nε a:nεφειja:* ‘four’, and may appear with up to

three constituents as in the phrase *a:ne a:ne ε:melifeija*: ‘five’. These are the only vernacular quantifiers used to modify an argument, though loan words from English and Tok Pisin are used for to express numbers larger than five, and for strictly counting outside of the argument modification role, a body-part based counting system exists, which is described briefly in "Numeral Systems of the World's Languages" (2016) and Usher (2016). The quantifier suffix is homophonous with a perfect aspect-marking suffix which appears on verbal predicates (see §7.4.1), but has a very distinct function in this case. A similar function of the morpheme {-φεija:} can be found in relative clause constructions discussed in §9.3.2.5.

#### 4.6 Predicate Particles: Mood Particles and Polar Particles

In Eibela, there are two distinct classes of particles that function primarily as predicate modifiers. Mood particles are also discussed in depth in §7.5.1 and form a class of five particles which follow a predicate and describe the speakers attitude regarding the utterance. Polar particles are a class two particles which precede a predicate, and may also modify an argument as a following modifier.

Table 10: Syntactic Roles of Particles

Particle	Function	Argument Modifier	Argument	Predicate Modifier	Predicate
<b>Mood Particles</b>					
{kɛi}	Assertion	NO	NO	YES	NO
{ba:}	Dubitative	NO	NO	YES	NO
{lo:}	Affirmative	NO	NO	YES	NO
{jo:}	Exclamative	NO	NO	YES	NO
<b>Polar Particles</b>					
{ka:}	Focus, Affirmation	YES	NO	YES	YES
{ma:}	Negation	YES	NO	YES	YES

#### 4.6.1 Emotive Mood Particles

Emotive mood particles are the last element of a clausal predicate, as seen in (129), freely appear in all independent clause types.

(129)	nɛ:	ɛ:mɛɛ:	mi-jɛ:na:	<b>kɛi</b>
	1:SG	back	come-FUT:1	<b>ASSER</b>
	'I will come back.'			

Only one mood particle may occur in each clause, with the exception of the combination of {ba:} and {kɛi}, which most often forms a dubitive construction as illustrated in (130).

(130)	gɛ:	ho:golo:	<b>ba:</b>	<b>kɛi</b>
	2:SG	be.tired	<b>DUB</b>	<b>ASSER</b>
	'You are tired.'			

All other possible permutations are unattested. Mood particles do not have any morphological categories unto themselves, and are limited to this role as a predicate modifier.

#### 4.6.2 Polar Particles

The two polar particles {ma:} and {ka:} are a bit more diverse than mood particles in their syntactic behavior. These two particles may function as the modifier of a predicate or an argument, and {ma:} may function as the predicate of a clause. The particle {ma:} negates the element of the clause it modifies, and the particle {ka:} functions as an affirmative focus-marker. Polar particles are thus called in reference to polar negation, with {ka:} serving an affirming function and {ma:} functioning as a negator.

##### 4.6.2.1 Affirmation, Focus and Negation

While the function of negation and focus may at first seem unrelated, it is possible to view them as semantically related opposites. The focus particle {ka:} may be seen as the opposite of a negator in that it affirms the role of the element it modifies despite counter expectations or possibilities. For example, in (131)b, *ho:la ka:* is used in a contrastive environment in opposition to a preceding negative construction (131)a.

(131) a. tila: wε si:jεbε:ki: wε o:mani:-ja: ma: a:nε:  
 descend here shin this blood-ABS NEG go:PST

‘Here, on this shin, There was no blood going down.’

b. mo: ho:la **ka:** la:-bi:=ja: **ka:**  
 just white FOC exist-D.S=TOP FOC

‘There was only white (fat).’

(132) gεda: ba:lε hεnε **ka:** gu:du: di-sa:-bi:  
 flail COORD DUR FOC die PFV-3:DR-D.S

‘It (The cassowary) flailed and then at length it died.’

Similarly, in (132) the action is unexpected given the events leading up the clause shown. In this context, even though there are not direct alternative possibilities given in the discourse, as in the negated proposition in (131)a, the unexpected nature of the event requires it to be further affirmed to be true through the use of the focus particle.

#### 4.6.2.2 *Syntactic roles*

Polar particles do not have any morphological categories, but can serve in three different syntactic roles. As the modifier of an argument, polar particles follow the head of the argument as seen in (131)b and (133).

(133) [diki:no: do:sa: **ma:** εga:lεma:]<sub>S</sub> [do:-ba:bε]<sub>PRED</sub>  
 NAME ASS.PL NEG nothing STAT-CF

‘None of Dikino’s people would be alive.’

(134) [**ma:** ju:la:]<sub>PRED</sub>  
 NEG butcher:PST

‘(We) didn’t butcher it.’

When polar predicates modify a predicate, they must appear immediately before the predicate, as in (134) and (132). This position is similar to that of adverbs, but distinct in that adverbs need not be contiguous with the predicate and may sometimes appear before other arguments of

the clause as described in §3.4. Polar particles may also serve as a clause predicate. For example, the negator *ma:* appears in a predicate role in (135).

- (135) [nɛ: sɛgai-jɛ: sɛna:]<sub>S</sub> [ma:]<sub>PRED</sub> kɛi  
 1:SG NAME-ERG kill:PST NEG ASSER

‘Sigai did NOT hit me.’

(More literally ‘It is not the case that Sigai hit me.’)

- (136) [do:=wa: wa:lɛ bɛda:-nɛ:]<sub>MED</sub> [do:bu] [ka la:]<sub>PRED</sub>  
 father=TOP tell CONS-MED understand:PST FOC COP

‘My father told that story, so (I) understood.’

The affirmative focus particle {ka:} is also attested as a predicate, as shown in (131)a, and is also commonly used in conjunction with the copula {la:}, as in (136). These two constructions are similar in meaning, with the clauses in (131)a and (136) affirming the event to have in fact taken place.

#### 4.7 Interjections

The class of interjections is a class of emotive lexical items, which do not appear in combination with any affixes, and form an independent speech-act in themselves. These interjections also feature unusual phonetic gestures including prominent glottal stops in {(?)ǎ:} and {ʔɛʔɛ}, particularly strong nasalization in {(?)ǎ:}, vowel-less syllable structure in {::}, {m:}, and {|||} and a central vowel [ə] in {(?)ǎ:}. These phones and phonotactics are not phonemically represented in other lexical items.

Table 11: Interjections

<b>Interjection</b>	<b>Meaning</b>
ko:	go over there, move out of the way
kε	move out of the way, watch out
ʃ::	shoo! Go away! (said to animals and pre-verbal children)
á	expression of surprise or alarm
ε:	yes, expression of assent or agreement
(?)ǎ:	yes, expression of assent or agreement
ʔεʔε	no, expression of disagreement
m:	positive feedback
 	bemusement, astonishment

The majority of interjections may function as an independent utterance, either as a command or as a response to some utterance or event. Three interjections, {ko:}, {kε}, and {ʃ::}, serve a command function. The command {kε} is a common way to assert that someone must act to avert some negative outcome. This might include taking food off of the fire if it is burning, preventing an unstable item from falling, or moving to clear someone's path. In this way, it is similar to 'watch out!'. The expression {ko:} has a more demonstrative function, and refers to a place or direction, with the implicit meaning that the addressee should go in that direction or attend to that item in some way. This is almost certainly related to the demonstrative {ko:} (see §4.3.1 on Argument Demonstratives), but the function is distinct

enough to warrant a separate mention here. Finally, {::} is only used with animals or non-verbal children as a means of scolding or a command to go away.

Another large number of interjections may function as in independent utterance, but function as a response to some other speech-act or event. One of these is {á} which has an unusually high pitch and conveys surprise. Questions may be answered with a short interjection as well, although it is more common to respond with a full clause elaborating on the response. A simple affirmative response can be expressed with {ε:} or {(?)ã:}, while a negative response can be expressed by {?ε?ε}. Two other responses are reserved for the function of providing feedback to a speaker while they speak. A neutral assenting response is a nasal {m:}, while a more emphatic reactive expressing surprise, admiration, bemusement, or astonishment can be expressed by dental clicking {|||} which sounds similar to the disapproving *tsk tsk* in English, albeit with a differing function.

#### 4.8 Discourse-Markers

A small class of discourse linkers includes two sub-classes. One group is formed by parentheticals, {bo:} and {mo:}, which can serve as hesitation-markers in a discourse or within a clause as pre-phrasal limiters. The other subclass is formed by two clause linkers, {no:} and {kosobε:sε}, which occur at the beginning of a clause to signal a shift in setting or topic.

Table 12: Discourse-Markers

<b>Parentheticals</b>	
bo:	just
mo:	only
<b>Clause Linkers</b>	
kosobε:sε	afterwards...
no:	so, but....

#### 4.8.1 Delimiting-Markers

The delimiting-markers {bo:} and {mo:} serve as clausal modifiers, filler words, or argument modifiers. These two delimiting-markers are parenthetical in the sense that they can occur between any clausal constituents or before a clause. They may have a similar meaning which softens a statement, as in (137) and (138), where the function of {bo:} and {mo:} is to lessen the importance or extent of the action described.

(137) nɛ:     **mo:**     odɛ:-si  
           1:SG   only    beat-MED:PFV  
           ‘I was just beating (the sago) and...’     (41.28)

(138) **bo:**     nɛ:     ka:     ma:     bo:bo:     o:gu:     di-si  
           just    1:SG   FOC    NEG    see:PST   do.thus   PFV-MED:PFV  
           ‘I just acted like I didn't see him and then...’

It seems very likely that {mo:} is historically derived from the adverb {mo:so:} which means ‘to be without anything’ or ‘naked’, as in (10), reprinted as (139).

(139) ɛ-si=ja:                   nɛ:           ɛ:mɛɛ:     mo:so:     jɛ:-li:  
           do-MED:PFV=TOP   1:SG:BAS   back       bare       DIR:VEN-SIM  
           ‘I did that and then while I was coming back without anything ...’

It is plausible that this form could have become phonetically reduced and semantically broadened to form the discourse-marker {mo:}. The semantic similarity is especially evident when {mo:} is used to limit the scope of the participants of an event, as in (131), reprinted as (140) below.

(140) [**mo:** ho:la]<sub>s</sub> ka:     la:-bi:=ja:     ka:  
           only   white   FOC    exist-D.S=TOP   FOC  
           ‘There was only white (fat).’

In this context, the semantics of the adverb {mo:so:} ‘without anything, only’, coincide with the limiting semantics the interjection {mo:} which limits the scope of the event in a general way.

## 4.8.2 Clause Linkers

Two clause linkers function as discourse particles which appear between independent clauses in a discourse. The linker {no:} is typically used when a new section of a discourse is being introduced which is unrelated to previous events. In the excerpt in (141) to (144), which is a continuing section of discourse, the speaker switches between two different perspectives which describe separate events with separate actors which do not interact. In (141) the location and the description focuses on a dog hiding in a stack of firewood beneath a house, and in (142) {no:} marks a shift in location and participant to focus on a man who is preparing food inside the house.

(141) dɛ: hɛ-ta: su:-wɛ: wɛna:lɛ da la: dɛnɛ  
 fire chop-TEL inside-LOC secretly lie COP PROG  
 ‘He (the dog) was hiding inside the firewood while...’

(142) no: wɛ ko:lu-wa: wa:sa ɛna:-mi: o:ga: dowa:gɛ-li  
 DISJ here man-ABS veranda DEM-ASS pandanus squeeze-SIM  
 ‘...the man was squeezing (the seeds out of cooked) pandanus.’

(143) a. [da: hɛ:ba: a:gɛ: la: ma: ka: la:]<sub>FIN</sub>  
 sago half dog DEF NEG FOC exist  
 ‘The sago half, since there were no dogs...’

b. [da: hɛ:ba: i:sa:-jɛ: ka: so:logo: tilɛ-li:-si]<sub>MED</sub>  
 sago half ground-LOC FOC drop descend-SIM-MED:PFV  
 ‘...he just dropped the sago half on the ground.’

(144) a. [[no: wɛ a:gɛ: wɛ bɛda:-lo:lu=wa:]<sub>TOP</sub> da:-ja: tila: da-bi:=ja:]<sub>TOP</sub>  
 DISJ this dog this see-ASS.EV=TOP sago-ABS descend lie-D.S=TOP  
 So this one, this dog seeing that sago lying on the ground having fallen...

b. [a:gɛ: wɛφi-ja: lo:su ja: ja:-gɛnɛ:]<sub>MED</sub>  
 dog pathetic-ABS small here DIR:VEN-MED:IPFV  
 ‘the poor little dog came there and then...’

The man drops some of the left-over food through the floorboards to land beneath the house, and in (144)a the perspective shifts again with an occurrence of {no:} and again focuses on the dog beneath the house who comes to secretly eat this food. The discourse linker {no:} may originate in the indefinite determiner {no:} described in §4.3.1.1, but the function is quite different in this discourse particle role.

The other discourse particle {kosobe:sɛ} is often reduced to *kosobe:*, *koso*, or {bɛ:sɛ} in natural speech, and the full form *kosobe:sɛ* is less common, being used in careful speech or in prominent contexts. Similarly to {no:}, {kosobe:sɛ} occurs at the beginning of a clause, though it may be preceded by adverbial arguments as in (145) or a topic argument as in (146), and specifies that the clause follows preceding events in either a temporal sense, or a spatial sense.

- (145) [[a:mi:]<sub>x</sub> [koso]<sub>x</sub> [wo:ba:]<sub>o</sub> [a:mi:]<sub>x</sub> [mɛ:-mɛi]<sub>PRE</sub>]<sub>FIN</sub>  
 DEM:ASS afterward sleeping.surface:ABS DEM:ASS tie-HYPO  
 ‘Then after that tie/make the sleeping area.’ (A.2.84)

- (146) [[[a:mi: la: o:gɛ: di=ja:]<sub>TOP</sub> mi-ja:=ja:]<sub>TOP</sub> **kosobe:** wo:wi ta:do:]<sub>FIN</sub>  
 there DEF pick.up PFV=TOP come-PST=TOP afterwards NAME crossing  
 ‘From that place I took it and came, and then there was the wowi crossing.’

For example, in (145) *koso* has a purely temporal reference, while in (146), *kosobe:* occurs between a series of motion events and coincides with both spatial and temporal sequence of events. The discourse-marker {kosobe:sɛ} is not considered an adverb, since it may occur in isolation as a discourse particle between clauses or episodes, and may occur between any sentence constituents, similarly to the delimiting-markers discussed in §4.8.2.

### 4.8.3 Conclusion

In conclusion, the closed word classes are more numerous than the open classes, but generally more morphologically simple. Closed classes tend to modify syntactic roles taken by open classes, such as adjectives, demonstratives, determiners, quantifiers, and particles, while others make anaphoric reference or deictic reference such as demonstratives and pronouns. A complete listing of these syntactic functions and the general role of each closed word class is

presented below, along with their prototypical role, which is judged by the frequency in which the word class appears in that role relative to other word classes.

Table 13: The Syntactic Roles or Closed Word Classes

<b>Class</b>	<b>Core Function</b>	<b>Argument Modifier</b>	<b>Argument</b>	<b>Predicate Modifier</b>	<b>Predicate</b>
<b>Pronouns</b>	Argument	YES	YES	NO	YES
<b>Adjective</b>	Argument/ Argument Modifier	YES	YES	NO	YES
<b>Demonstrative</b>	Argument/ Argument Modifier	YES	YES	YES	YES/NO
<b>Determiner</b>	Argument Modifier	YES	NO	NO	NO
<b>Quantifier</b>	Argument Modifier	YES	NO	NO	YES
<b>Particles</b>	Predicate/Predicate Modifier	YES	NO	YES	YES
<b>Interjection</b>	Predicate	NO	NO	NO	YES
<b>Discourse Markers</b>	Predicate Modifier	YES	NO	YES	NO

## Chapter 5 Grammatical Relations

### 5.1 Introduction

Grammatical relations as presented here should simply be understood as the way different arguments of a predicate are mapped onto various semantic roles. Every argument is identified as bearing some semantic relationship to the predicate through various methods of changing the structural expression of the argument, e.g. through case-marking or constituent order. First there will be a distinction made between core and oblique arguments. Core arguments are those which must be identifiable due to the semantic representation of the predicate. Oblique arguments, on the other hand, may be optionally expressed or omitted.

Argument structure can be quite difficult to ascertain in Eibela due to the wide spread elision of arguments, and the resulting ambiguity concerning the valency of a given predicate. In any discourse context where an argument can be understood due to common knowledge or previous discourse reference, the argument may be elided. This is true for every type of argument, and the factors governing the expression of elision of a core argument are driven by pragmatic and discourse variables rather than syntactic constraints. Additionally, case-marking suffixes are often omitted where the semantic roles of the arguments are clear based on previous discourse or constituent order. This makes a syntactic or morphological basis for grammatical relations and transitivity poorly defined and not universally applicable. Furthermore, there are few pivot restrictions which are sensitive to specific syntactic roles. For the current discussion, the focus will be on the structural characteristics of overt, fully realized noun phrases within a single clause, and how these formal characteristics signify the semantic role of the argument.

### 5.2 Intransitive Clauses

An intransitive clause requires only one core argument, which may be abbreviated as S. S will refer to the single core argument of an intransitive clause regardless of the semantic role of the argument. This argument can be an animate agent, as seen in (1), a non-animate quasi-agent as in (2), or a patient, as in (3).

- (1) [[a:ge:]<sub>s</sub> [je:-la: kei]<sub>PRED</sub>]<sub>FIN</sub>  
 dog DIR:VEN-PRS ASSERT  
 'A dog is coming.'
- (2) [[so:bolo-wa:]<sub>s</sub> [tebe do:-wa:]<sub>PRED</sub>]<sub>FIN</sub>  
 plane-ABS land PFV-PST  
 'A plane landed.'
- (3) [[ε:]<sub>s</sub> [ma: gu:du:]<sub>PRED</sub>]<sub>FIN</sub>  
 3:SG-ABS NEG die:PST  
 'It didn't die.'

In each of these examples, the argument appears before the predicate. Additionally, S arguments may bear the absolutive case suffix {-ja:}, as seen in (2). Despite the varied semantic roles, S arguments are represented by the same formal markers, i.e. pre-verbal position and absolutive case-marking. This does not introduce any ambiguity since only one core argument may occur with an intransitive predicate, and the semantic role is lexically determined by the predicate of the clause. For example, the verb {hena:} 'go' requires only one argument, which must be an agent. Similarly, the verb {hili} 'to be cold' requires one argument which must be an experiencer.

### 5.3 Transitive Clauses

Transitive predicates require two arguments, which are prototypically refer semantically to an agent and a patient. In referring to the syntactic roles of arguments of transitive verbs, it will be useful to use shorthand labels. "A" will be used for the syntactic subject argument which typically has a more active or volitional semantic role, including agents, experiencers, and causers, and "O" will be used for the argument which is being manipulated, or is a non-volitional argument, including patients and stimuli.

In clauses headed by a transitive predicate, both arguments typically precede the predicate, with the agent or experiencer argument first, followed by the patient or stimulus, and then the predicate in the final position. This can be seen in (4) and (5), where the initial

constituent of the clause represents the agent controlling and initiating the event. The second argument in these clauses represents the patient of the event.

(4) [[nɛ:]<sub>A</sub> [da:]<sub>O</sub> [kɔna:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG sago cut:PST  
 ‘I was cutting a sago tree’

(5) [[nɛ: do: bubusu:wɔ:-wɛ:]<sub>A</sub> [o:ga:]<sub>O</sub> [gɛla:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG father NAME-ERG pandanus plant:PST  
 ‘My father Bubusuwo planted pandanus.’

In referring to the arguments of transitive verbs, it will be useful to use shorthand labels. A will be used for the argument which typically has a more active or volitional semantic role, including agents, experiencers, and causers, and O will be used for the argument which is being manipulated, or is a non-volitional argument, including patients and stimuli.

#### 5.4 Core Case-marking

When an argument is suffixed for case, the suffix attached to the final element of the noun phrase, as exemplified in (6).

(6) [[a:gɛ: φɛφɛ-ja:]<sub>A</sub> [ɛ:na:]<sub>x</sub> [dobosu:-wɛ:]<sub>x</sub> [ti a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 dog skinny-ABS DEM underneath-LOC descend go:PST  
 ‘The skinny dog went down underneath there.’

Both absolutive and ergative core case forms are given in table 1 below, and oblique-case-marking is discussed in §5.7. In addition to concatenative suffixation, case may also be expressed through suppletion or stem changes. The anaphoric demonstrative {ɛ:na:} has two distinct forms for the core cases absolutive and ergative: *ɛ:na:* ‘Absolutive’ and *ɛ:mɛ:* ‘Ergative’.

Table 1: Core-Case Forms

	<b>Absolutive</b>	<b>Ergative</b>
<b>Core-Case Suffixes</b>	{-ja:}	{-jɛ:}
<b>Core-Case-Marking</b> <b>Demonstratives</b>	{ɛ:na:}	{ɛ:mɛ:}

Additionally, a sub-class of nouns show case by shifting the final vowel of the root form to the vowel corresponding to the appropriate case form, as illustrated in (7). Note that the case forms for the ergative and locative cases are homophonous.

- (7)
- a. do:go 'house'
  - b. do:ga: 'house:ABS'
  - c. do:gɛ: 'house:ERG/LOC'

A final consideration to consider in Eibela case-marking is that nominal determiners do not co-occur with concatenative case-marking. Where a determiner appears modifying a noun, case-marking may not be expressed through case suffixes or stem changes on the noun, as illustrated in (8).

- (8) [[dɛda:nɛ ɛna:(\*-ja)]<sub>O</sub> [so:φo:]<sub>PRED</sub>]<sub>FIN</sub>  
 prawns that:ABS(\*-ABS) cook:PST  
 'We cooked those prawns on the coals.'

S arguments are often not inflected for case when the role of the argument is clear. In (1) and (9) below, the S argument is expressed as a noun phrase which does not display a case suffix, but still occurs pre-verbally.

- (9) [[habajɛ]<sub>S</sub> [ka: na:gla:]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME FOC be.sick:PST  
 'Habaye was sick.'

The presence of case inflection does not seem to be determined by the semantic role of the argument in question, since in (1) an agent argument is realized without case-marking, whereas

in (9) the S argument is a non-volitional experiencer. In both cases, the argument is the only noun phrase in the clause, and may be unambiguously identified as the S argument of the predicate without case inflection.

Transitive clauses in Eibela rarely show two overt arguments. Instead the more topical argument, typically the A argument, will be elided. When both arguments are overt noun phrases, O arguments may bear the absolutive suffix, as in (10), and A arguments may be suffixed by the ergative case, as in (11); however, it is very rare for both A and O arguments to include case-marking suffixes in the same clause.

- (10) [[nɛ:]<sub>A</sub> ti:φɛ: [o:ga: ε-ja:]<sub>O</sub> [o:gɛ: di a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG after pandanus seed-ABS pick.up take go:PST

‘I went after him, taking the pandanus seeds in a bilum.’

- (11) [[[nɛ:]<sub>O</sub> [sɛgai-jɛ:]<sub>A</sub> [sɛna:]<sub>PRED</sub>]<sub>S</sub> [ma: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG NAME-ERG hit:PST NEG ASSER

‘Segai did NOT hit me.’

(lit. ‘It is not the case that Segai hit me.’)

Case-marking of A arguments is frequently found in clauses with OAV word order. In such clauses constituent order is no longer a reliable indicator of the semantic roles of the arguments, and case-marking suffixes are required to eliminate possible ambiguity. For example, in (11), *sɛgai* is the agent of the clause, but appears as the second argument, whereas the patient *nɛ:* is in occurs as the first argument. Since this is a mismatch between the semantic roles of the arguments and syntactic ordering, an additional cue is required in the form of case-marking. Similarly, in (12) the typical word order of AOV is violated, which necessitates case-marking of the A argument.

- (12) [[hɛ:ba:]<sub>O</sub> [dulumi-jɛ:]<sub>A</sub> [di sa:-lɛ]<sub>PRED</sub>]<sub>FIN</sub>  
 half:ABS NAME-ERG take pack-S.S

‘Dulumi was packing half (of a wallaby).’

Note that as long as the ergative suffix is present, the absolutive suffix remains optional. A sentence such as (13) below, where both A and O arguments are suffixed with case-markers is not attested in the corpus, though Eibela consultants find it to be acceptable when asked.

- (13) ? [[ko:lu-**wɛ:**]<sub>A</sub> [kɛ:-ja:]<sub>O</sub> [o:la:]<sub>PRED</sub>]<sub>FIN</sub>  
 man-ERG pig-ABS shoot:PST  
 ‘The man shot the pig.’

This seems to indicate that the case-marking of multiple core arguments in a single clause is uncommon, or at worst awkward or stilted. This is not surprising, since the occurrence of two core arguments in general is uncommon, regardless of whether they feature case-marking. Finally, clauses that have a referent corresponding to an O argument of a clause may also be attached by the homophonous topic enclitic, as in (14) (see also §9.3 for a more detailed discussion of clauses in argument roles).

- (14) [[nɛ:]<sub>A</sub> [mɛ:na:=**ja:**]<sub>O</sub> [φo:du:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG eat:FUT=TOP not.want  
 ‘I don’t want to eat.’

Core case-marking is not obligatory, and the conditioning factors governing the use of case-markers are discussed in greater detail in §10.3.

## 5.5 Number Agreement

A limited number of verbs also agree in number with the referent of their core S argument. This number-marking is formally irregular and limited to a small number of verbs.

### 5.5.1 Number Agreement in Intransitive Clauses

The plurality of the S argument may be cross referenced on the verb, even if no noun is overtly realized. Some verbs, such as *jɛ:* in (15) are inflected for number by concatenative suffixation. Other verbs, however, express number agreement through suppletion such as the form *φa:* in (16) or *da:li* in (17), which may be compared to the singular forms *na:gɛ* ‘run:SG’ and *a:di* ‘sleep:SG:PAST’, respectively.

(15) [[i:ja:]<sub>s</sub> [a:mi:]<sub>x</sub> [jɛ:-si dɛn=ɔ:bo:]<sub>PREDFIN</sub>]  
 3:PL PRO:ASS DIR:VEN-N.SG PROG=INF

‘They were arriving there.’

(16) [[ɸa:-ja:]<sub>PREDFIN</sub>]  
 sleep:N.SG.S-PST

‘(They) slept.’

(17) [[nɛ:na:]<sub>s</sub> [da:li a:nɛ:]<sub>PREDFIN</sub>]  
 1:DU run:N.SG.S go:PST

‘We both ran away.’

Table 2 features all of these verbs which are attested in the research corpus.

Table 2: Intransitive Suppletive Verb Pairs

	<b>Singular S</b>	<b>Non-Singular S</b>
‘run’	na:gɛ	da:li
‘sleep’	a:di	ɸa:
‘go’	hɛna:	tulu
‘walk around’	sija	da:si

### 5.5.2 Number Agreement in Transitive Clauses

In transitive clauses with two core arguments, a verb can show number agreement with either of the two arguments. This number agreement falls into three general categories regarding the argument that is indexed for number agreement.

#### 5.5.2.1 *Non-Singular A Agreement*

First, a verb may specify that the A argument is non-singular, such as the form *sɛdɛ* in (18) which agrees with the elided A argument.

- (18) [[kali:ja: no:-wa:]<sub>o</sub> [ε:na:]<sub>x</sub> [sɛɛ-sa:-bi:]<sub>pred</sub>]<sub>fin</sub>  
 wallaby INDEF-ABS DEM kill:N.SG.A-3:DR-D.S  
 ‘(The dogs) killed another wallaby then.’

### 5.5.2.2 Non-Singular O Agreement

Second, a verb form may specify that the O argument is non-singular, such as the form *ja:si* in (19) which agrees in number with the O argument *iso a:nɛ:*.

- (19) [[iso a:nɛ:]<sub>o</sub> [ka: ja:si di]<sub>pred</sub>]<sub>fin</sub>  
 small two FOC kill:N.SG.O take:PST  
 ‘(I) killed and took two small (piglets).’

Table 3 features all of these verbs which are attested in the research corpus.

Table 3: Transitive Suppletive Verb Pair Examples

	Singular A and O	Non-singular A	Non-singular A
‘Hit/kill’	sɛna:	sɛɛ	ja:si

### 5.5.2.3 Flexible Agreement

Finally, some verbs have a form which is ambiguous as to which argument is non-singular. These verb forms may be used when a non-singular A *or* a non-singular O is present. The most prominent verb forms in this category express plurality by means of reduplication, as seen in (20) and (21).

Reduplication

- (20) [[φu:sa:]<sub>o</sub> [hɛ:nɛφa:]<sub>o</sub> [gɛgɛ di-mɛi]<sub>pred</sub>]<sub>fin</sub>  
 bamboo:ABS bamboo.type:ABS cut:MULT PFV-HYPO  
 ‘One should cut up many pieces of strong bamboo.’
- (21) [[sɛ:li]<sub>x</sub> [buta:buta:]<sub>pred</sub>]<sub>fin</sub>  
 properly chop:MULT  
 ‘He/she/they chopped it/them.’

This indicates that reduplication signifies a plurality of action (pluractionality) rather than cross-referencing the number of an argument. This explains the polysemy of reduplication in all instances where multiple participants are involved, regardless of the semantic role of the participants. For example, in (21) multiple actors or multiple patients both result in multiple instances of chopping. A circumstance where a single event involved several participants in a given semantic roles would clarify this. For example, if one man were to cut several pieces of bamboo with a single chop, would this allow reduplication? Unfortunately, such a sentence has not come to light in the corpus collected.

## 5.6 Person Agreement

Person agreement is also present in two corners of the verbal morphology. The first may be found in one of the suffixes for evidentiality. The marker for an event in the past which has been personally witnessed is limited to verbs with a third person S or A argument, such as the examples in (22).

- (22) [[ε:]<sub>A</sub> [kosu:wa: ka:]<sub>O</sub> [sa:-li:-sa:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 3:SG cassowary FOC pack-SIM-3:DR-D.S  
 ‘He/she packed the cassowary.’

The second number contrast is within the tense system, where the future tense suffix has a distinct form for first and non-first person S and A arguments. In example (23) the suffix *-je:na* is used with a first person S argument, which contrasts with the form *-jei* in (24), which agrees with a third-person S argument.

- (23) [[olo-sa:-li:=ja:]<sub>TOP</sub> dija:-si]<sub>MED</sub> [[do:gε:]<sub>X</sub> mi-je:na:]<sub>FIN</sub>  
 shoot-3.DR-SIM=TOP take-PST-MED:PFV house:LOC come-1:FUT  
 ‘If I shoot one (hornbill), I will take it and come to the house.’
- (24) [[ε:]<sub>S</sub> [dudu-wε:]<sub>X</sub> a:nε:]<sub>FIN</sub> [[ga:lo]<sub>X</sub> mi-jei]<sub>FIN</sub>  
 3:SG bush-LOC go:PST afternoon come-N.1:FUT  
 ‘He went to the bush. He will come back in the afternoon.’

Both of these contrasts lead to a formal contrast between third and non-third person arguments in S and A positions.

At least one verb, ‘go’, has suppletive future forms for first, second and third persons.

- (25) a. mɛnɛ:na:  
 go:1:FUT  
 ‘I/We will go.’
- b. mɛ:na:  
 go:2:FUT  
 ‘You(sg./pl.) will go.’
- c. mɛ:nɛi  
 go:3:FUT  
 ‘He/She/They will go.’

## 5.7 Oblique Arguments

While core arguments are required for a verb, (i.e. S in intransitive clauses, and A and O in transitive clauses), other arguments may be optionally included in a clause. These oblique arguments denote roles such as location, source, destination, time, beneficiary, etc. In (26) the optional argument *do:ɡɛ:* expresses a location where the event is occurring and is inflected in the locative case. The same verb is shown in (27) with no optional oblique arguments, and only the agent of the predicate appearing as an S argument.

- (26) [[ɛ:]<sub>S</sub> [do:ɡɛ:]<sub>X</sub> [sa:-lɛ]<sub>PRED</sub>]<sub>FIN</sub>  
 3:SG house:LOC sit-S.S  
 ‘(While) she was sitting in the house.’

- (27) [[nɛ:]<sub>S</sub> [ɛna]<sub>X</sub> [ka: sa:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG still FOC sit-D.S  
 ‘I was still sitting.’

Oblique arguments may be formally marked by one of four cases: instrumental, dative, and two locative cases, which are shown in table 4. See also §4.1.3 on pronouns used in oblique argument roles.

Table 4: Oblique-Case Forms

Instrumental	Dative	Locative	Associative
{-kɛi}	{-mo:}	{-jɛ:}	{-mi:}

### 5.7.1 Instrumental Case

The first of these, the instrumental suffix {-kɛi}, which is rarely realized as *-ka:*, signifies an inanimate artifact or tool which is used as an instrument. In (28), the argument *bɛ:nɛ: kɛi* refers to the tool used by the agent to accomplish the action.

- (28) [[bɛ:nɛ:-kɛi]<sub>x</sub> [ɛ:na:] [φi:-ja:]<sub>o</sub> [o:la:]<sub>PRED</sub>]<sub>CC</sub> [ka: la:]<sub>PRED</sub>]<sub>FIN</sub>  
 arrow-INST DEM thigh-ABS shoot:PST FOC COP  
 ‘I had shot it there in the thigh with an arrow.’

- (29) [[nɛ ε:ja: wɛbɛ:na:=ja:]<sub>o</sub> [da:no-ka:]<sub>x</sub> [bo:la: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG:MOD father PROX:DEM:ANA=TOP bow-INST hit:PST ASSERT  
 ‘He hit my father with his bow’

Additionally, this case may denote non-animate entities that cause an effect without being controlled by an agent, as in (30) and (31).

- (30) [[jɛ: ma:sɛ-kɛi]<sub>x</sub> [φo:su ja:bi:]<sub>o</sub> [bo:la:]<sub>PRED</sub>]<sub>FIN</sub>  
 tree branch-INST back DIR:VEN hit:PST  
 ‘A tree branch hit me here in the back.’

- (31) [[si:-ja:]<sub>o</sub> [jɛ: to-kɛi]<sub>x</sub> [ga:da:la:]<sub>PRED</sub>]<sub>FIN</sub>  
 eye-ABS tree stub-INST impact:PST  
 ‘That branch stub hit my eye.’

### 5.7.2 Locative and Associative Case

There are two cases which overlap semantically with regard to locative functions. The more specific of the two is formed with the suffix {-jɛ:}, and is homophonous with the ergative case suffix. This case is limited to either static locations where an event occurs, such as *kɛsɛ:gi:jɛ:* in (32), and allative arguments such as *i:sa:jɛ:* in (33).

- (32) [[kɛsɛ:gi:-jɛ:]<sub>X</sub> [sugu:lu: la:]<sub>CC</sub> [lɛ:-ki:]<sub>PRED</sub>]<sub>MED</sub>  
 NAME-LOC school exist COP-CONT  
 'I was still at school in Wawoi Falls/Kesigi.'

- (33) [[nɛ:]<sub>S</sub> [i:sa:-jɛ:]<sub>X</sub> [hologo-ta:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG ground-LOC jump-TEL  
 'I had jumped back to the ground.'

Locative case may also be used within a noun phrase to mark possession in a kin relation, as in (34). This is described further in §8.2.1 describing modifiers within an argument.

- (34) [[pa:sta ɛwa:lu-wɛ:]<sub>POSSESSOR</sub> [ɛlɛ]<sub>POSSESSED</sub>]  
 pastor NAME-LOC daughter  
 'Pastor Ewa:lu's daughter'

Another case may be used for static locations as well, but extends to more general meanings such as temporal setting or association. Do to these varied roles, it will simply be referred to as the associative case, and is formally expressed by the suffix {-mi:}. In (35) {-mi:} is used for a function similar to the argument-marking by the locative case in (32) and (33), although the location specified is more diffuse, denoting a larger and more general area rather than a specific point.

- (35) [[nɛ:]<sub>S</sub> [u:ludi:ja i:sa:-mi: la:]<sub>X</sub> [wɛ]<sub>CC</sub> [la:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG NAME land-ASS DEF here COP  
 'I am here in the area around Uludija.'

- (36) [[ε:na:-mi:]<sub>x</sub> [εsidi konu]<sub>o</sub> [sule la:-bi:]<sub>pred</sub>]<sub>fin</sub>  
 then-ASS plant.type shoots graze COP-D.S

‘Then it (a pig) was pulling up esidi shoots to eat.’

In (36) however, the argument refers to the temporal rather than locative setting. As shown in (37) the two cases even co-occur very on oblique arguments with varied semantic roles such as location, causer, or theme.

- (37) [[na:-**wε**:-**mi**:]<sub>x</sub> [golo-φo:]<sub>fin</sub> [tεlε-si-jε:-mi:]<sub>x</sub>  
 mother-LOC-ASS push-COMP descend-MED:PFV-LOC-ASS

‘While I was being pushed down by my mother...’

Finally, clauses referring to a location may similarly appear with the locative case suffix, as in (38).

- (38) [[nε: jε:be la: mεnε:na:-jε:]<sub>x</sub> [na:gε a:nε:]<sub>pred</sub>]<sub>fin</sub>  
 1:SG tree DEF go:FUT-LOC run go:PST

‘I ran to where the tree was going’

Similarly, clauses may appear with the associative case, and generally specify temporal reference as in (39).

- (39) [[**sεnε-gε**:-**mi**:]<sub>x</sub> [a:mi:]<sub>x</sub> [nε: ε:ja:-ja:]<sub>s</sub> [wεlε-sa:-bi:]<sub>pred</sub>]<sub>fin</sub>  
 sit-ITER-ASS PRO:LOC 1:SG father-ABS call-3:DR-D.S

‘**As I sat there**, my father called.’

### 5.7.3 Dative

The dative case is marked by the suffix {-mo:}, and is used for prototypical dative arguments such as recipients (40) and addressees (41), as well as other oblique arguments such as beneficiaries (42).

- (40) [[tεbe:sε mo soso ko:]<sub>o</sub> [nε:-**mo**:]<sub>x</sub> [dimi:no:]<sub>pred</sub>]<sub>fin</sub>  
 orchid bottom root DEM:DIST 1:SG-DAT give:IMP

‘Give me the bottom of that orchid vine!’

- (41) [[wo:ko-**mo:**]<sub>x</sub> sɛ:-ja:]<sub>FIN</sub> [[[ɛ:sa: a:nɛ]<sub>o</sub> [di-mɛ:ni:-jo:gu: kɛi]<sub>PRED</sub>]<sub>o</sub> sɛ:-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME-DAT say-PST bag:ABS two take-PURP-INT ASSER say-PST

‘(I) told Wo:ko, I said, "I will take two bags.”’

- (42) [[gɛ kɛisa:lɛ-mo:]<sub>x</sub> [a:bo]<sub>o</sub> [o:-mɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 2:SG:MOD woman-DAT bird shoot-N.1:FUT

‘(You) will shoot birds for your wife.’

In addition to oblique arguments, a topic is a further non-core argument position which differs from oblique arguments enough to justify a separate discussion in the following section.

## 5.8 Syntactic Topic Arguments

A further syntactic role marks topical arguments. These arguments may be coreferential with a core argument of a predicate, or they may denote oblique notions such as place, purpose, or cause. While possibly being coreferential with a core argument, topics are considered to be a separate syntactic role. This syntactic category is characterized by the initial clause position, and the topic enclitic {=ja:}, as in (43).

- (43) [[do:ɸa:=ja:]<sub>TOP</sub> [kosu:wa:-ja:]<sub>o</sub> [a:mi:]<sub>x</sub> [sa:nɛ dija:-gɛnɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 snare=TOP cassowary-ABS PRO.ASS kill take-MED:IPFV

‘As for the snare, (I) killed the cassowary there.’

This topic enclitic is homophonous with the absolutive suffix {–ja:}, and generally does not show case distinctions. Example (44), however, shows that case may be expressed by the suppletive case forms on of the demonstrative {ɛ:na:}. The demonstrative *ɛ:mɛ:* is the ergative form of this demonstrative, and occurs in the topic position below. In this case, the argument may be considered to be both a syntactic topic, and a transitive subject, with the properties of both.

- (44) [[ɛ:mɛ:=ja:]<sub>TOP/A</sub> [kosu:wa: ɸo:gono ka:]<sub>o</sub> [bulu dijɛ:-li:]<sub>PRED</sub>]<sub>MED</sub>  
 that:ERG=TOP cassowary crest FOC cut take-SIM

‘That (dog) was cutting off the cassowaries' crests and...’

Nouns which express case through a vowel change are no longer inflected for case in topic positions, as illustrated in the contrast between (45)a, where *u:sɛ:* appears as a fronted oblique

argument inflected for the locative case, and (45)b where the root *u:su* is uninflected for case, and shows the topic enclitic =*ja*:

- (45) a. [[**u:sɛ:**]<sub>x</sub>    [ɛ:sa:]<sub>o</sub>    [di    hɛ:-ja:]<sub>PRE</sub>]<sub>FIN</sub>  
middle:LOC    bag:ABS    take    unhook-PST  
‘I hung the bag in the middle.’
- b. [[**u:su=wa:**]<sub>TOP/x</sub>    [ɛ:sa:]<sub>o</sub>    [wa:]<sub>x</sub>    [di    hɛ:-ja:]<sub>PRE</sub>]<sub>FIN</sub>  
middle=TOP    bag:ABS    DIR:AND    take    unhook-PST  
‘I hung that bag in the middle.’

While (43) and (45)a feature topical locations, and (44) demonstrates a topical core argument, the semantic relationship between a topic and the event can be quite varied. In (46) for example, the topic *o:ja*: ‘grave’ is the reason for the action, as they are splitting trees for the purpose of building a grave.

- (46) [[**o:ja:=ja:**]<sub>TOP</sub> [jɛ:ba:    ba:tɛ    ɛna:]<sub>x</sub>    [kɔbɛdanɛ    ba:tɛ-jɛ:]<sub>x</sub> [hɛna:-nɛgɛ:]<sub>PRE</sub>]<sub>MED</sub>  
grave=TOP    tree:ABS split    DEM:ABS    tree:type    split-LOC    go-MED:IPFV  
‘For the grave, They went to the split logs, the kobedane trees.’

Similarly, this topic argument may be a clause which signifies the cause or reason for the main clause, as well as other semantic relationships as described in §9.2.4.

## 5.9 Subjecthood

There are, two syntactic properties which operate solely on S and A arguments, suggesting that these two arguments may qualify as subjects. First, number agreement in the future tense is triggered by the number of the A or S argument, and never the O argument or an oblique argument, as shown in (47) and (48).

- (47) [[**ko:lu-wa:**    to:bo:]<sub>s</sub> [gi:ja:]<sub>x</sub> [kudu    mi-jɛi    kɛi]<sub>PRE</sub>]<sub>FIN</sub>  
man-ABS    all    2:PL    follow    come-3.FUT    EMPH  
‘All of the men will follow you.’

- (48) [[gɛ            kɛisa:lɛ-mo:]<sub>x</sub> [a:bo]<sub>o</sub>    [o:-mɛi]<sub>PRE</sub>]<sub>FIN</sub>  
 2:SG:MOD    woman-DAT    bird            shoot-N.1:FUT

‘You will shoot birds for your wife.’

Second, in serial verb constructions with one transitive and one intransitive verb, the shared argument between the two verbs always corresponds to the S argument of the intransitive verb, and the A argument of the transitive verb, as in (49).

- (49) [[kosu:wa:-ja:]<sub>o</sub> [di    a:nɛ:]<sub>PRE</sub>]<sub>FIN</sub>  
 cassowary-ABS    take    go:PST

‘(I) went and put the cassowary on the veranda’

\*‘(I) took the cassowary and it (the cassowary) went.’

In defining subjecthood criteria, a very limited set of properties are available to form a conclusion. Pivot restrictions between clauses (e.g. switch-reference, gapping collapsibility, relativization, etc.) have not been found to differentiate between A, S, and O arguments. Instead such relationships are governed primarily through discourse considerations such as topicality and animacy. Similarly, number agreement within a clause is not a useful determinant of subjecthood, since the agreement patterns, when limited to a specific argument, are not consistent between lexical items.

## Chapter 6 Predicate Structure

### 6.1 Introduction

In this section, the structure of simple and complex predicates will be presented in detail. Predicates are divided into verbal predicates, described in §6.1, and non-verbal predicates, described in §6.2. Complex predicates include serial verb constructions, converbal constructions, and auxiliary constructions, and are described in §6.3. In these sections, the properties of the different types of clause predicate are demonstrated, particularly with regard to morphological properties of the predicate, and how tense, aspect, modality, mood, evidentiality, and predicate particles may occur and co-occur on a clause predicate.

### 6.2 Verbal Predicates

Verbal predicates are the most complex and versatile predicates from both a morphological and functional perspective, with a rich array of tense, aspect, modality, mood, and evidentiality categories. A verbal predicate consists of a predicate stem which may include one or more verb stems (see §6.4 for discussion of multiple verb stems functioning as a single predicate) with adverbial modifiers and polar particles marking negation and focus preceding this predicate stem (see §4.6.2 for more on polar particles), and all other predicate modification following the predicate stem, including tense, aspect, modality, mood and evidentiality suffixes, as well as emotive mood particles. This overall predicate template of a main clause is represented by the scheme below (see chapter 9 for discussion of other clause types). This scheme is an abstraction of the predicate structure, and the individual segments are often fused into single portmanteau morphemes, or co-occur in limited environments. This discussion will also exclude number-marking which occurs as part of the verbal predicate stem and is discussed in §5.5. The inflected verbal predicate forms a single phonological word represented by the shaded portion of the Verbal Predicate Structure represented above. A complete listing of which post-predicate modifiers have been attested to co-occur is shown in table 1, and the order of these modifiers by category is given in scheme 1. The co-occurrence of tense and aspect is limited, and is often realized by fusional forms, and tense, completion, and aspect are

therefore listed as a single paradigmatic slot, though these categories may co-occur in some limited ways.

Scheme 1: Verbal Predicate Structure in a Main Clause

POLAR PARTICLE	VERBAL STEM	TENSE/ASPECT	MODALITY	EVIDENTIALITY	INTERROGATIVE	MOOD PARTICLES
		IMPERATIVE ENCLITICS				

Additionally, polar particles including focus and negation may precede the inflected verbal predicate and emotive mood particles may appear after the inflected verbal predicate.

A verbal stem, which may include multiple verb roots in the case of complex predicates, forms the verbal predicate stem, which may be inflected for either imperative mood or non-imperative mood. The imperative moods, including imperative, delayed imperative, and deontic mood (see §7.5.4 for detailed discussion of these moods) denote commands and statements of obligation and do not inflect for tense, aspect or modality categories (see chapter 7 for a detailed discussion of each of these categories), but may be inflected with evidentiality and interrogative clitics as in (1).

- (1)    na:    wε    nili:            di=**moko**:no:=wo:bo:=la:  
       meat this    1:PL:EMPH    take=DEO=INF=Q:PRS  
       ‘Should we take that meat?’

Non-imperative moods may inflect for tense, aspect, and modality, as well as occur with evidential or interrogative clitics, but it is generally not possible for a single predicate to be inflected for all of these categories simultaneously. For example, tense-marking, including past {-ja:}, present {∅}, and future {-mε:na:} tenses, may be followed by interrogative clitics as in (2) or evidential clitics, as in (3).

- (2)    gε:    ε:bi    di-**mε:na**:=**ja**:  
       2:SG what do-FUT=Q.N.PRS  
       ‘What are you doing?’

- (3)    nɛ:    su:da:    ti-nɛ:=o:bo:  
        1:SG   fall        descend-PST=INF  
        'I fell.' (non-witnessed)

Past tense may only co-occur with aspect and modality suffixes in verbs with a suppletive past tense form as in (4) and (5) where a suppletive past tense form occurs with an aspect-marking suffix in (4) and a modality-marking suffix in (5).

- (4)    ha:nɛ    ka:    tila:        a:si-φɛija:  
        water   FOC    descend    sit:PST-PERF  
        'I had gone down to the water and had been sitting.'

- (5)    [[ka:la:ma:bɛ:]<sub>A</sub> [ɛ:na:]<sub>O</sub> [sɛna:-ba:bɛ]<sub>PRED</sub>]<sub>FIN</sub>  
        NAME            DEM    kill:PST-CF  
        'Ka:la:ma:bɛ: would have killed that one.'        (A.1.60)

Table 1 below offers a listing of the co-occurrence of tense, aspect, and modality suffixes, and shows that tense, aspect and modality morphemes are largely mutually exclusive with the exception of a small number of fused forms. Evidentiality and predicate particles, however, may combine freely with tense/aspect morphology, though the direct evidential {-sa:} and interrogative enclitics are entangled with the tense system. The direct evidential only occurs in a main clause with past time reference, and does not allow tense/aspect morphology except for perfect or completive categories, while interrogative enclitics have separate forms depending on whether the predicate is present or non-present. Imperative mood categories do not co-occur with tense, aspect, or modality morphology. These paradigmatic limitations on co-occurrence are represented by the scheme given in scheme 1, though exceptional fused forms and interactions between paradigmatic categories are shown in the more complete listing given in table 1. Individual morphemes are discussed at length in chapter 7 on verbal morphology, and a more exhaustive illustration of all attested combinations of post-verbal modifiers, including imperatives, evidentials, interrogatives, and emotive particles is given in appendix 2.

Table 1: Co-occurrence of Tense, Aspect, and Modality Suffixes

	<b>-ja:</b> PST	<b>-me:na:</b> FUT	<b>-mo:fo:</b> INCOMP	<b>-jo:fo:</b> COMP	<b>-sene</b> HAB	<b>-ta: TEL</b>	<b>-feija: PERF</b>	<b>-ba:be CF</b>	<b>-jo:no:</b> CAUT	<b>-mei</b> HYPO
<b>-ja: PST</b>	NA	NO	NO	NO	NO	NO	YES <sup>1</sup>	YES <sup>1</sup>	NO	NO
<b>-me:na: FUT</b>	NO	NA	NO	YES <i>-fe:na:</i>	NO	YES	NO	YES	NO	NO
<b>-mo:fo: INCOMP</b>	NO	NO	NA	NO	NO	NO	NO	NO	NO	NO
<b>-jo:fo: COMP</b>	NO	YES <i>-fe:na:</i>	NO	NA	NO	YES <i>-jo:ta:</i>	YES <i>-jo:feija:</i>	YES <i>-jo:fa:be</i>	NO	YES <i>-fei</i>
<b>-sene HAB</b>	NO	NO	NO	NO	NA	NO	NO	NO	NO	NO
<b>-ta: TEL</b>	NO	YES	YES	YES <i>-jo:ta:</i>	NO	NA	YES	NO	NO	NO
<b>-feija: PERF</b>	YES	NO	NO	YES <i>-jo:feija:</i>	NO	YES	NA	NO	NO	NO
<b>-ba:be CF</b>	YES	YES	NO	YES <i>-jo:fa:be</i>	NO	NO	NO	NA	NO	YES
<b>-jo:no: CAUT</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NO
<b>-mei HYPO</b>	NO	NO	NO	YES <i>-fei</i>	NO	NO	NO	YES	NO	NA

<sup>1</sup>Suppletive Past forms only

Verbs that have concatenative past tense forms do not take the past tense suffix when suffixed by aspect or modality-markers, as in the example with aspect-marking in (6) and modality-marking in (7).

- (6) su:da: ti-**mo:φo:**  
 fall descend-INCOMP  
 'I was about to fall.'
- (7) [[diki:no: do:sa:]<sub>s</sub> [ma: εga:lima: do:-ba:bε:]<sub>PRE</sub>]<sub>FIN</sub>  
 NAME ASS.PL NEG nothing STAT-CF  
 'Dikino and the others would not be alive.' (A.1.61)

In these contexts a clause is somewhat ambiguous and may be interpreted with either past or present time reference. Additionally, the future-tense-marking may occur freely with the counterfactual modality suffix {-ba:bε}, as in (8), and the homophonous purposive suffix {-mε:na:} may occur with the telicity changing suffix {-ta:}, as in (9).

- (8) bi:jo: εna: a:mi: ta:gobi-mε:na:-**ba:bε** jo:  
 drum that:ABS DEM:ASS dance-1:FUT-CF EXCL  
 '(I would say,) "I would want to go dance there with this drum!"'
- (9) a. [[diki:no: εja:lε: ho:mi:jo: εja:lε:]<sub>s</sub> [ε:mεlε:]<sub>x</sub> [nε:nε: keλε-mε:na:-ta:]<sub>x</sub>  
 NAME COORD:DU NAME COORD:DU back 1:DU search-PURP-TEL
- b. [εna]<sub>x</sub> [a:nε:=jo:bo:]<sub>PRE</sub>]<sub>FIN</sub>  
 still go:PST=INF  
 'Dikino and Homijo were evidently still gone looking for us.' (A.3.69)

The completive and perfect aspect categories represented by the suffixes {-jo:φo:} and {-φεija:} are merged into a single aspectual category-marking telic aspect in the future tense which, is represented by the portmanteau suffix -φε:na:, as in (10).

- (10) keλεφu: la: γε-**φε:na:**  
 feather.ornament DEF plant-1:COMP  
 'I will finish planting the feather ornament there.'

The category of completion, as represented by two morphemes {-jo:φo:} ‘ASS.EVETE’ and {-mo:φo:} ‘INASS.EVETE’, behaves differently from other aspect categories in that no past-tense-marking is possible, even in verb stems with suppletive past tense forms. Whereas future tense can be expressed in a fusional portmanteau form, as in (10), past tense is not expressed, as in (11).

- (11) togo:lo hɛnɛ-bi:-sɛna: ko:nu:-wo:φo:  
 door go-D.S-DEL.IMP-NOM:ABS cut-COMP

‘It was cut down for the walking path.’

At least one modality suffix, {-ba:bɛ} may co-occur with the complete aspect in a fused form, as in (12). Other possible combinations, involving the incomplete suffix {-mo:φo:} or other modalities such as the cautionary {-jo:no:}, are not attested.

- (12) ɛ-φɛija: nɛ: dʒɛ:bɛ ka: sa:nɛ-jo:φa:bɛ=ja: ka:  
 do-PERF 1:SG tree FOC kill-COMP:CF=TOP FOC

‘When that happened, that tree branch would have killed me.’

The completive suffix {-jo:φo:} also occurs with the other two aspect-making suffixes, {-ta:} and {-φɛija:} in a reduced fusional form, as shown in (13) and (14).

- (13) sɛgɛli=ja: φili:-jo:ta: hɛna:-gɛnɛ:  
 raft=TOP ascend-COMP:TEL go-MED

‘Having gotten off the raft, I went and...’

- (14) ha:suwɛ:-ja: kosu:wa:-ja: o:lo:-wo:φɛija:=jo:bo: nu:lu:  
 NAME-ABS cassowary-ABS shoot-COMP:PERF=INF night

‘Hasuwe had/has shot and killed a cassowary in the night.’

Similar co-occurrence is not attested with the incompletive-marking suffix {-mo:φo:}, but this may be due to the uncommon occurrence of incomplete-marking in general and a lack of data. The modality-marking suffixes {-jo:no:} and {-ba:bɛ} are not attested to co-occur with any evidential or interrogative enclitics, but may occur with emotive mood particles as in (8). Pre-

predicate polar particles and post-predicate emotive mood particles may occur following any predicate.

- (15) [[ne εja: u:gei=ja:]<sub>TOP</sub> [gεφα:]<sub>O</sub> [ma: dε:ga:lε-φειja:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG:MOD father NAME=TOP neck:ABS NEG straighten-PERF  
 ‘My father, U:gei, hadn't straightened his neck.’ (A.1.23)

- (16) [[ja:]<sub>X</sub> [ka: φα:lε-mε:na: kεi]<sub>PRED</sub>]<sub>FIN</sub>  
 DIR:VEN FOC sleep:PL-FUT:1 ASSER  
 “‘We will sleep here.’” (A.3.62)

For example, in (15) and (16), both polar and mood particles are shown to occur with an inflected verbal predicate, which forms a single phonological word separate from the predicate particles.

### 6.3 Non-Verbal Predicates

Non-verbal predicates include nouns, pronouns, adjectives, demonstratives, and quantifiers used as the predicate of the clause. These predicates are considerably more limited than verbal predicates in that there is no aspect, mood, or modality-marking possible with the exception of some limited imperative uses, and only limited future tense-marking possible. Predicate structure in non-verbal predicates is therefore limited to evidential enclitics and the predicate modifying particles. Interrogative enclitics do not occur on non-verbal predicates, and when tense or imperative suffixes are present on a non-verbal predicate, the predicate may be interpreted as a speech report. The semantic and syntactic properties of clauses with non-verbal predicates are discussed in greater detail in §9.2.2.

Scheme 2: Non-verbal Predicate Structure in a Main Clause

PRE-PREDICATE POLAR PARTICLE	NON-VERBAL PREDICATE STEM	TENSE (to describe an act of speaking)	EVIDENTIALITY	POST-PREDICATE MOOD PARTICLE
		IMPERATIVE SUFFIXES (to describe an act of speaking)		

Non-verbal predicates may be used with imperative mood or future tense, but the resulting meaning must generally describe a speech-act or a command to say the phrase serving as the predicate, as in (17) and (18).

(17) kɛga:da:=ma:  
old.man=IMP  
'Say "old man"!'

(18) kɛga:da:-mɛ:na:  
old.man-FUT:1  
'I will say "old man"'  
OR 'I will become an old man.'

Additionally, in some limited semantic domains, i.e. nouns with human reference, a nominal predicate may also be used with future tense to convey the notion of becoming, as in (18).

Evidentiality-marking may be present in clauses with a non-verbal predicate, as in (19). In these cases, evidentiality-marking serves the same function as in verbal predicates and specifies the information source of the assertion being made.

(19) ti:φɛ: u:gei=jo:bo:  
after NAME=INF  
'The last (born) was U:gei.'

In (19), the inferred evidential is used because the clause describes the birth of the speaker's father, which the speaker was obviously not present for and did not witness. Interrogative enclitics do not occur with non-verbal predicates. Questions may be formed from non-verbal predicates with the addition of a verbal copula, as in (20).

(20) gɛ: wɛ la:=lɛi  
2:SG here COP=Q:PRS  
'Are you here?'

- (21) gε            da:-ja:    wε  
          2:SG:MOD sago-ABS here  
          ‘Your sago is here.’

The copula construction in (20) could be expressed without the copula using as a non-verbal predicate in a declarative clause, as in (21), but in order to form a question with the interrogative enclitic {=lei}, the copula {la:} is needed. Finally, like verbal predicates, non-verbal predicates freely occur with post predicate emotive particles, as in (22) (See §4.6.1 for more on emotive mood particles).

- (22) wε    a:ga:            nε:-na:            kεi  
          this   today:ABS   1:SG-POSS   ASSER  
          ‘Today, this is mine.’

- (23) kε:        ma:  
          pig        NEG  
          ‘It isn’t/wasn’t a pig.’

The polar particles {ka:} ‘FOCUS’ and {ma:} ‘NEGATION’, do not occur preceding non-verbal particles however, and instead follow the non-verbal predicate, as in (23).

#### 6.4 Complex Predicates

Complex predicates are defined as a single predicate formed by multiple grammatical words. A complex predicate prototypically has a single argument structure, a single intonational contour, and a single value of polarity, tense, aspect, mood, modality, and evidentiality for the entire complex predicate construction. These predicate-level verbal inflections are expressed once in a complex predicate on the final constituent of the predicate. In Eibela, three different constructions are classified as such: Serial Verb Constructions, Converbial Constructions, and Auxiliary Constructions.

- (24) [a:gε: φεφε-ja:]<sub>A</sub> [ε:na:]<sub>x</sub> [do:bo:su:-wε:]<sub>x</sub> [ti \_\_\_\_\_ a:nε:]<sub>svc</sub>  
          dog   skinny-ABS   DEM   underneath-LOC   descend   go:PST  
          ‘The skinny dog went down underneath there.’

(25) na:-ja:        [hojε-gε: hεnε-si]<sub>CON</sub>  
 animal-ABS    hunt-ITER    DUR-MED:PFV

‘I was hunting animals and then...’

(26) so:bolo-wa:    [tebe do:-wa:]<sub>AUX</sub>  
 plane-ABS        land        PERF-PST

‘A plane landed.’

Serial verb constructions (SVCs), such as the predicate in (24), are composed of multiple verb stems which are each capable of independently forming the predicate of an independent clause. Additionally, there is no dependent morphology present on any of the component verbs. Converbial Constructions, such as example (25), are also composed of multiple verb stems which are each capable of independently forming the predicate of an independent clause, but feature dependent morphology present non-final component verbs. Finally, auxiliary constructions, such as the example in (26), are composed of one productive verb stem which is capable of independently forming the predicate of an independent clause, and an auxiliary verb which cannot function independently as a predicate. Some auxiliaries are derived from lexical verbs which may function as independent predicates, but with very different semantics. Auxiliaries provide grammatical functions including aspect and clause linking functions.

#### 6.4.1 Serial Verb Constructions

Serial verbs in Eibela contrast with other complex predicates in two ways. Firstly, each component in a serial verb construction is a fully functional verb which may operate independently as the head of a predicate, and secondly, none of the constituent verbs is morphologically-marked as subordinate to a final verb. For example, the serial verb in (27) is composed of the verbs {wε:lε} and {sε:}, both of which may function independently as a predicate, as shown in (28) and (29) respectively.

(27) ko:dulu        sulo:bo-mo: [wele sε:-ja:]<sub>SVC</sub>  
 downward    NAME-DAT    shout    say-PST

‘I shouted it down to Solo:bu.’

(28) a:mi: nε ε:ja:-ja: **wεε**-sa:-bi:  
 PRO:ASS 1:SG father-ABS shout-3:DR-D.S

‘Then my father called out.’

(29) hama:nja:-mo: **sε**:-ja:  
 NAME-DAT say-PST

‘(I) told (it) to Hamanja.’

Neither of the constituent verbs in the SVC in (27) is morphologically-marked as subordinate to a final verb. Instead, each verb is uninflected, except for the final verb, which bears predicate-markers such as tense, aspect, mood, modality, and evidentiality. This can be seen in (27), where the non-final verb {wεε} is uninflected and unaffixed, and the final verb {sε:} is suffixed with the past tense morpheme {-ja:}. An additional example is given in (30) where the two non-final verbs, {o:gε:} and {di} are uninflected, and the final verb *a:nε:* is an inflected suppletive past tense form.

(30) nε: ti:φε: o:ga: ε-ja: [o:gε: di a:nε:]<sub>SVC</sub>  
 1:SG afterwards pandanus seedling-ABS carry.in.bilum take go:PST

‘I went after him, taking the pandanus seeds in a bilum.’

The components of a serial verb construction are generally contiguous with no intervening constituents, as seen in (27) and (30). However, if a non-initial component verb which has a direct object which is not shared by a preceding intransitive verb, the object precedes the transitive verb rather than preceding the entire serial verb construction, as seen in (31).

(31) sugu:lu: εna: [hεna: do:qa: dije:=bi:]<sub>SVC</sub> kεi  
 school that:ABS go house:ABS build=DEL.IMP ASSER

‘Go build that building for the school!’

Two constituent verbs is the most common SVC, as in (24), (27), and (31), but three constituents also possible, though less common, as in (30) and (32).

- (32) nɛ:     wo:gu: su:da: ti-nɛ:<sub>SVC</sub>  
 1:SG   do.thus   fall       descend-PST  
 ‘I fell like that’

In SVC’s, all possible arguments are shared, meaning that if verbs have the same transitivity, all arguments are shared, as in (24), (32), and (33), and if verbs have different transitivity, at least one argument is shared, as in (30), (31), and (34). Oblique objects appear to be shared as well, and there is no attested example of a complex predicate where the constituent verbs clearly do not share an oblique argument.

- (33) kɛ:   iso    ɛna:     sɛɛ   nɛ:<sub>SVC</sub>  
 pig   small   that:ABS   cook   consume:PST:N.SG  
 ‘Then we cooked and ate that small pig.’

- (34) a. do:gɛ:     hɛɛ itɛ:   lɛ    hɛnɛ]<sub>SVC</sub>  
 house:LOC   go    cook   do   DUR  
 ‘I went to the house and cooked a while...’

- b. ɛ:mɛlɛ: ja:       mi-ja:  
 back   DIR:VEN   come-PST  
 ‘And then I came back here’

Other properties of the predicate are also shared, like polarity, mood and evidentiality categories, which have scope over the entire serial verb construction, as in the question in (35) and the command in (36).

- (35) [dija:       mi-jɛ:na:=ja:]<sub>TOP</sub>     hɛ:gu:   to:go:-mɛ:na:=ja:<sub>SVC</sub>     ɛ:sa:  
 take       come-1:FUT=TOP     do.how   lift-1:FUT=Q:N.PRS     bilum:ABS  
 ‘If we are going to bring it, how will we lift the bag?’

- (36) ɛ:mɛlɛ: ho:go:   ho:no:       mɛdɛ:   na:gɛ   ma:lo:<sub>SVC</sub>  
 back   bottom   there:level   really   run   go:ST.IMP  
 ‘Run back down there!’

(37) nε            ε:ja:    u:gei    o:do:-wa:    ka:    [kudu mi-ja:=bo:]<sub>SVC</sub>  
 1:SG:MOD    father    NAME    sister-ABS    FOC    follow    come-PST=INF

‘My father U:gei came following his sister.’

Evidentiality is also shared, as in (37), where the inferred evidential enclitic {=jo:bo:} has scope over the entire event described by the clause, namely that the parts of the event described by both the verbs, {kudu} ‘follow’ and {mi} ‘come’, are inferred to have taken place.

#### 6.4.1.1 Idiomatic Lexicalizations

Some meanings of symmetrical serial verb constructions are quite idiomatic and unpredictable from their component verbs. For example, in (38) the SVC composed of {ili:} ‘suffice’ and {bo:bo:} ‘see’ have a conventionalized meaning of ‘to recognize’ or ‘to realize’ as a cognitive process.

(38) ε:mεε:    ho:ge:ja:    a:mi:=ja:    ε:na:    [ili:    bo:bo:]<sub>SVC</sub>  
 back    big            PRO:ASS=TOP    DEM:ABS    suffice    see:PST

‘Now that I’m big (grown up), I know it because of that’

(39) ε-φειja:    nε:-mo:=wa:    ma:    [wa:    do:bu:]<sub>SVC</sub>    la:-bi:=ja:    ka:  
 do-PERF    1:SG-DAT=TOP    NEG    tell    hear:PST    COP-D.S=TOP    FOC

‘Having done that, she wasn’t asking me (any more questions).’

Similarly, the verbs {wa:} ‘tell’ and {dεdε} ‘hear’ have a conventionalized meaning of ‘to ask’ when combined in a serial verb construction, as in (39).

#### 6.4.1.2 Semantic Scope and Event Structure

Serial verbs must express a single integrated event. This means that sequential event structures form a fixed uninterruptible sequence. Switch function serial verb constructions, where an argument may have different semantic roles for different component verbs of a serial verb construction, are not recognized in Eibela (see Aikhenvald [2006b]). In Eibela, the equivalent of switch function serial verbs requires subordination strategies with switch-reference marking. Predicate modifiers and mood have scope over the entire serial verb phrase.

(40) a. ε:-mo:      ma:    sɛ:-ja:  
           3:SG-DAT   NEG   say-PST

‘I didn't speak to him.’

b. bo:    nɛ:    ka:    [[ma:    bo:bo:]    wo:gu:]    di-si  
       just   1:SG   FOC   NEG   see        do.thus   PFV-MED

‘I just acted like I didn't see him and then...’

Following this definition of SVC's, the example in (40)b is not a serial verb construction, owing to the limited scope of the negator {ma:}. There is also a strong tendency for verbs in a SVC to follow a specific order according to semantic type, which is represented by Scheme 3 below, and the examples (27), (30), (32), and (38), where a verb describing manner or state is the first constituent in a SVC and a verb or motion appears as the final constituent of a SVC. Verbs describing dynamic actions most often follow verbs describing states or manners, and occur before a motion verb.

Scheme 3: Semantic Ordering of Serial Verb Constructions

manner or state	dynamic action	motion
-----------------	----------------	--------

Verbs within these semantic groupings may sometimes appear in other orders, but other semantic orderings of verbs tend to be less semantically integrated, and more likely to have a sequential interpretation, as is the case in example (33), where the verb of motion precedes the dynamic verb, and the events described by the constituent verbs must be interpreted to take place sequentially rather than simultaneously.

#### 6.4.2 Converbal Constructions

Converbal constructions are similar to SVC's in that they are composed of multiple verb stems, each of which is capable of independently forming a clause, but whereas SVC's represent integrated events and do not display any dependent verbal morphology, a converbal construction is a single predicate composed of multiple, non-integrated events, and makes use of two dependent suffixes, {-gɛ:} and {-li:}, which appear on the non-final verbal constituent.

These suffixes do not co-occur with any other verbal inflection, and do not occur on clause final verbs, and were therefore not included in the discussion in §6.1. Like SVC's, the constituents of a converbial constructions are contiguous. There are no examples of a converbial construction with more than two verbal constituents, but a converbial construction may be combined with serial verb construction to form a single hybrid predicate.

#### 6.4.2.1 {-gɛ:} 'iterative'

The suffix {-gɛ:} attaches to a verb describing an alternating action, which is non-simultaneous to the action described by the final verb in the converbial construction. The non-final verbs bearing this suffix are typically dynamic, active verbs, as in (41) and (42).

- (41) na:-ja:            [ho:jɛ-gɛ:    hɛnɛ-si]<sub>CON</sub>  
          animal-ABS    hunt-ITER    DUR-MED

'I was hunting animals and then...'

- (42) ka:            [ko:jɛ:-gɛ:    hɛnɛ-si]<sub>CON</sub>  
          FOC    row-ITER       go-MED

'I paddled and went and then...'

In example (41), the predicate *ho:jɛgɛ: hɛnɛsi* describes an event structure where the speaker is traveling and intermittently pausing to hunt. The verb {hi:jɛ} 'to hunt' is therefore suffixed by {-gɛ:}, which signifies that this event periodically takes place on several occasions and interrupts the event described by the other component verb of the converbial predicate, which in this case is the verb {hɛnɛ} 'to go'. Similarly, in (42), the non-final verb {ko:jɛ:} 'to row' is suffixed by {-gɛ:}, specifying that the event described by this verb intermittently interrupts the event described by the final verb of the converbial predicate {hɛnɛ} 'to go'.

A converbial construction may be combined with serial verb construction, as in (43). In (43), the entire predicate is *bɛbɛgɛ: kɛ mi* which is formed by the converbial construction *bɛbɛgɛ kɛ* forming the first constituent in a SVC with two constituents: *bɛbɛgɛ kɛ* and *mi*.

- (43) [[bɛbɛ-gɛ: kɛ]CON mi]SVC-ja:=ja:    bɛda:-lo:lu=wa:    ka:    mɛ:sine  
 see-ITER    check    come-PST=TOP    see:PST-ASS.EV=TOP    FOC    NAME  
 ‘We were coming to check (the trap) and look around and then we saw (it) at Meesine  
 creek.’

The semantic interpretation of this event structure is that the suffixed non-final verb in the converbial construction {bɛbɛ} ‘to see’ periodically interrupts the action described by the final constituent of the converbial construction {kɛ} ‘to check’, and that this entire process described by the converbial construction is integrated into the event described by the final verb of the predicate {mi} ‘to come’.

#### 6.4.2.2 {-li:}

The suffix {-li:} attaches to a verb describing a continuous action, which is simultaneous to the action described by the final verb in the converbial construction, but is not integrated into the same event structure. The suffixed, non-final verb is often a verb of motion or an imperfective verb. For example, in (44), the predicate *ɛta:* stem describes an action in progress. The suffixed form *ɛta:li:* describes the ongoing action as taking place during the same time as the final verb of the converbial construction, {da} ‘to stay’, although these two events are not portrayed as being contingent on one another or causally related.

- (44) [ɛ=ta:-li:        da-nɛ:]CON  
 do=TEL-SIM    stay-MED:IPFV  
 ‘And then they stayed there doing that...’

A converbial construction formed by the suffix {-li:} may also be combined with serial verb construction, as in (45). Just as in (43) above, in (45), the entire predicate is *gudɛ:li: φili: hɛna:*, which is formed by the converbial construction *gu:dɛ:li: φili:* forming the first constituent in a SVC with two constituents: *gu:dɛ:li: φili:* and *hɛnɛ*.

- (45) ɛ:na:        [[gu:dɛ:-li: φili:]CON    hɛna:]SVC    ta:lɛ=ta:    hɛnɛ-si  
 that:ABS    tie-SIM    ascend    go        finish=TEL    DUR-MED  
 ‘Keep tying it up that side and when you’ve finished that...’

The semantic interpretation of this event structure is that the suffixed non-final verb in the converbial construction {gu:dɛ:} ‘to tie’ is simultaneous to the action described by the final constituent of the converbial construction {ɸili:} ‘to ascend’, and that this entire process described by the converbial construction is integrated into the event described by the final verb of the predicate {hɛna:} ‘to go, to continue’. This predicate can therefore be characterized primarily as an act of continuation, with the converb giving additional detail into the processes involved. The context of this utterance is the continuation of the construction of a head dress by wrapping cord gradually upwards around a piece of wood.

### 6.4.3 Auxiliary Constructions

The final type of complex predicates is an auxiliary construction, in which a non-final predicate is followed by an inflected auxiliary with a grammatical function, e.g. aspect, modality, or clause linking. The non-final predicate may be formed from either an uninflected predicate, which may be a non-verbal predicate such as a noun, or a non-final dependent verb form, including suffixed converbial forms and serial verb constructions. Auxiliaries are a closed class of deficient verbs. Most auxiliaries cannot inflect for tense aspect, or evidentiality, and most are derived from recognizable source verbs of posture or motion, as seen in table 2.

Table 2: Auxiliary Inflectional Categories

Auxiliary	Source Lexical Meaning	Tense	Completion Aspect	Other Aspect	Modality	Imperative	Evidential	Interrogative
do: 'STAT'	'stand'	YES	NO	YES	YES	YES	YES	YES
da 'PROG'	'stay, lie'	NO	NO	NO	NO	NO	NO	NO
di 'PFV'	'take'	YES	NO	NO	NO	YES	NO	NO
dɛnɛ 'PROG'	'stay, be at a location'	MAYBE	NO	NO	NO	NO	NO	NO
hɛnɛ 'DUR'	'go'	NO	NO	NO	NO	NO	NO	NO

### 6.4.3.1 {do:}

The auxiliary {do:} functions to convey Stative and Perfective aspect, as well as potential modalities. This the least deficient auxiliary with tense, aspect, modality, and evidentially categories expressed, and is very likely derived from the verb {do:} or {dodo} ‘to stand’. In examples (46) and (47), {do:} conveys a stative meaning when combined with stative or non-telic verbs.

- (46) [[wɛjo:gu: kulu:                    sa:-ta:    do:-wa:    kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
do.like.this with.head.bent sit-TEL STAT-PST ASSER  
‘He was sitting like this, with his head down.’ (A.1.24)

- (47) ε-φειja:    na:na:    la:            [ba:ba:lɛ    do:-wa:]<sub>AUX</sub>  
do-PERF 1:PAT DEF not.know STAT-PST  
‘That had happened and I didn't know.’

In (46), a verb is suffixed by the telicity changing suffix {-ta:}, which forms a non-telic verb stem which does not inflect for tense or other verbal categories unless as part of an auxiliary construction formed by the auxiliary {do:}. Similarly, dependent verb forms suffixed by the converbal suffixes {-gɛ:} or {-li:} may not independently form a predicate and may only appear as the non-final constituent in a complex predicate. These converbal forms may be combined with another verb, as in the converbal constructions in §6.3.2, or an auxiliary, as in (47) and (54) (see also §9.1.1.2 on copula constructions using {do:}).

In dynamic or telic verbs the auxiliary do results in a perfect aspect interpretation. For example, in (48)a the telic verb {dijo:} ‘put’ forms a complex predicate with do and describes an event as having been completed prior to the subsequent clause.

- (48) a. sɛgɛli    ɛna:            hɛna:    hɛ:lɛnɛ    [dijo:    do:-si]<sub>AUX</sub>  
raft    that:ABS    go    side    put    STAT-MED:PFV  
‘I had put the raft on the side and...’

b. sɛ:=ja: ka: [a:li-ta: do:-wa:]<sub>AUX</sub> kɛi  
 bank=TOP FOC sleep-TEL STAT-PST ASSER

‘I was sleeping on the sand.’

(49) o:mani:-ja: ɛ:na: [kɛlɛ:gɛ do:-wa:]<sub>AUX</sub> kɛi  
 blood-ABS DEM disappear STAT-PST ASSER

‘The bleeding had stopped.’

Similarly, in (49) the verb {kɛlɛ:gɛ} ‘disappear’ forms a complex predicate with {do:} and represents an event which has concluded.

The auxiliary {do:} may also be used to represent desiderative or potential modalities when the non-final verb is inflected with the purposive suffix {-mɛ:na:}.

(50) [[nɛ:]<sub>A</sub> [so:ko ha:do]<sub>O</sub> [mɛ:na: do: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG tobacco green consume:FUT STAT ASSER

‘‘I feel like smoking green tobacco.’’ (A.1.21)

(51) ha:nɛ ka: [[ka:dɛ di-mɛ:na:]<sub>AUX</sub> do:-wa:]<sub>AUX</sub>  
 water FOC drown PFV-FUT STAT-PST

‘I almost drowned in that water.’ (lit. ‘I could have died in that water.’)

The distinction between desiderative and potential modality is mostly a matter of the tense of the clause, with a clause inflected for future or present tense having a desiderative interpretation, as in (50), and a clause cast in the past tense being more appropriately understood as having a potential meaning, as in (51). Note also how the auxiliary construction *ka:dɛ dime:na:* forms a constituent of a greater auxiliary construction in (51). This shows that the auxiliary {do:} may modify another complex predicate.

Clause linking morphology is not attested in clauses with non-verbal predicates except when a non-verbal predicate is a component of an auxiliary construction utilizing {do:} as a copula (see also §9.2.1). For example, in (52), the nominal predicates *kɛkɛbeja:nɛ* and *koko:no* are represented in medial clauses as auxiliary constructions with the auxiliary {do:}.

- (52) a. kekebeja:nε do:-si-ki: koko:no  
 caterpillar STAT-MED-CONT pupae  
 ‘Being a caterpillar, then there is a pupae.’
- b. koko:no do:-si-ki: εja:ge  
 pupae STAT-MED-CONT butterfly  
 ‘Being a pupae, then there is a butterfly.’

In medial clauses such as (52), the auxiliary provides a required verbal predicate for morphology that may only attach to a verbal root, and thereby allows non-verbal predicates to appear with verbal inflections by means of an auxiliary construction. This is similar to examples of dependent converbal forms, such as (47) and (54), which may not function as an independent predicate, but may appear as a component of an auxiliary construction that forms an independent complex predicate. It can therefore be surmised that {do:} often functions solely as a means of providing a deficient predicate with the greater functionality as a verbal predicate in terms of syntactic functions and morphological categories.

#### 6.4.3.2 {da}

The auxiliary {da} functions to convey progressive aspect and combines with non-final dependent verb forms or bare verb forms. The auxiliary {da} is derived from a lexical verb {da} ‘to lie, to stay’, but is morphologically deficient, with no tense, aspect, modality, or evidential morphology. With non-final verb forms, {da} may mark verbs as imperfective and incomplete, as in (53) and (54).

- (53) a:mi: ko:so:la:=ja: togo:la: a:mi: [gege da]<sub>AUX</sub>  
 DEM:ASS length=TOP road:ABS DEM:ASS chop.MULT PROG  
 ‘At that time they were cutting the length of road.’
- (54) teka: mεne:na:=ta: [hεne:-li: da]<sub>AUX</sub>  
 take.down go:FUT:1=N.TEL go-SIM PROG  
 ‘I was going to take (the bilum) down.’

Inherently imperfective or multiactional reduplications may appear with {da} without dependent morphology, as seen with *gege da* in (53), or they may be suffixed by dependent converb morphology, as with *hene:li:* in (54).

### 6.4.3.3 {di}

The auxiliary {di} expresses perfective aspect and is often used in clause linking functions portraying consecutive events. The auxiliary {di} is morphologically deficient with no tense, aspect, modality, or evidential morphology, and may be historically derived from the verb {di} ‘to take’. In independent clauses, such as (55) and (56), an uninflected verb stem is portrayed as having a perfective event structure with the auxiliary {di}.

- (55) φυ:sa:            hε:νεφα:            [gege            di-mei]<sub>AUX</sub>  
 bamboo:ABS    bamboo.type:ABS    chop:MULT    PFV-HYPO

‘Cut up many pieces of strong bamboo.’

- (56) [[ha:nε    sε:=ja:]<sub>TOP</sub>    [ka:    so:lo:    di]<sub>PRED</sub>]<sub>FIN</sub>  
 river    beach=TOP    FOC    darken    PFV

‘It got dark, at the riverside.’ (A.3.35)

Without the perfective auxiliary, a multiactional reduplication such as *gege* has an imperfective aspect. This auxiliary is also required to attach clause linking morphology to dependent verb forms, non-verbal predicates, and perfective events. The converb suffix {-li:} is used with {di} for stative verbs used in a perfective event structure describing the initiation of that state, as in (57) where the stative posture verb {ke:ga:} ‘to block, to stand’ is used perfectly to describe the initiation of the state of blocking a path.

- (57) [[nε:    ka:    ke:ga:-li:    di=ja:]<sub>TOP</sub>    a:nε:]<sub>FIN</sub>  
 1:SG    FOC    block-SIM    PFV=TOP    go:PST

‘I went to block its escape.’

In clause linking, the use of {di} specifies consecutive event structure, with one event concluding and a following event then taking place.

(58) a. [mɛlɛsɛ:nɛ: di=ja: lɛ: hɛnɛ]<sub>MED</sub> [φa:lɛ-ta: di-si]<sub>AUX:MED</sub>  
 medicine take=TOP do DUR heal-TEL PFV-MED

‘I was taking the medicine and I got better, then...’

b. [mɛlɛsɛ:nɛ: di=ja: lɛ: hɛnɛ]<sub>MED</sub> [φa:lɛ-ta:]<sub>FIN</sub>  
 medicine take=TOP do DUR heal-TEL

‘I was taking the medicine and I got better.’

(59) [do:φa: sɛsɛ-mɛ:na:-ta: a:nɛ:=ja:]<sub>TOP</sub> [u:tijonɛ: ɛlɛ:bɛ: di-si]<sub>AUX:MED</sub>  
 snare bend-PURP-TEL go:PST=TOP NAME river.head PFV-MED:PFV

‘We had gone to set the snares at the head of U:tione: creek and then...’

In clauses with a non-verbal predicate, as in example (59), the use of the auxiliary {di} allows for clause linking morphology. This is similar to the use of {do:} in §6.4.3.1, but is limited to clause-linking functions, and does not allow the other verbal morphology enabled by the auxiliary {do:}.

#### 6.4.3.4 {dɛnɛ}

The auxiliary {dɛnɛ} is similar to {da} in that it denotes a type of imperfective aspect, progressive. The auxiliary {dɛnɛ} displays no aspect or modality morphology, and there is no clear lexical source verb for this auxiliary. It is possible that there may be limited tense-marking in the form of a final vowel alternation, but the contexts of these forms make it difficult to disambiguate from clause linking morphology. In an independent clause with final aspect, modality, or evidential suffixes or final sentence particles attached, the auxiliary has the form {dɛnɛ}, as seen in (60) and (61).

(60) wa:dɛ:-ja: ɛ:na: [sɛdɛ lɛ: dɛn=ɔ:bo:]<sub>AUX</sub>  
 banana-ABS DEM cook do PROG=INF

‘They were cooking bananas there.’

(61) [[ɛ:na:]<sub>x</sub> φa:lɛ hɛnɛ dɛnɛ kɛi]<sub>PRED</sub><sub>FIN</sub>  
 DEM sleep:PL DUR PROG ASSERT

‘‘Then (you) stayed and slept a while.’’ (A.1.52)

In environments where this auxiliary is the final element of the clause and is unaffixed, as in (62), there is a final vowel alternation which may be related to tense-marking, but this particular context is uncommon enough that there is insufficient data to be certain.

- (62) ε-si=ja:                      nε:      [a:li-ta:      dεna:]<sub>AUX</sub>  
do-MED:PFV=TOP    1:SG    sleep-TEL    PROG:PST

‘That happened and then I was sleeping.’

In most clauses with this final vowel alternation, the clause has a level intonation associated with dependent clauses, and may be functioning as an adverbial dependent clause or medial clause rather than an independent clause. More research will be needed to disambiguate these functions.

#### 6.4.3.5 {hεnε}

The final auxiliary discussed in this section stands apart in that it cannot function as the final inflected verb in an independent clause. This may be sufficient grounds to consider this auxiliary construction quite different from other complex predicates formed by auxiliaries, but the parallels in the form and function are similar enough to warrant its inclusion here. This auxiliary is clearly historically derived from *hεnε* ‘to go’, and may function as the final verb in a dependent clause, where it combines with a bare verb stem to convey durative aspect. This may be the final element of a dependent medial clause in a clause chain, as in (63), or the final element of a morphologically unmarked subordinate clause as in (64).

- (63) [[mijε:            hεna:-nε:]<sub>PRED</sub>]<sub>MED</sub>  
give:MED    DUR-MED:IPFV

‘He was giving (food to them), then...’ (A.1.17)

- (64) [osε:φi-kεi    ti:=ta:    **[bεdε hεnε]**<sub>AUX:MED</sub>    [o:lɑ:]<sub>FIN</sub>  
arrow-INST    pull=TEL    see    DUR                      shoot:PST

‘I drew an arrow and was taking aim, then I shot.’

In both cases, the complex predicate formed by an uninflected verb stem and the auxiliary {hɛnɛ} describes an event that continues for a prolonged period until the following clause occurred.

## 6.5 Conclusion

Predicates and predicate categories are most complex in verbal predicates, which feature a wide array of predicate modifiers and morphological categories which will be further described in Chapter 7. Verbal predicates are most complex when multiple verb stems form very complex serial verb constructions, converbal constructions and auxiliary constructions, though many auxiliary constructions lack many of the verbal predicate categories present in other verbal predicates. Non-verbal predicates are similarly limited, both in the morphological categories represented and in the possible clause types which may be formed, as described in §6.3 and §9.2.2.

## Chapter 7 Verbal Morphology

### 7.1 Introduction

In this chapter, the morphology of verbal main-clause predicates is presented. Clause-linking morphology is discussed in §9.3, and non-verbal main clause predicates, are discussed at length in §6.3. The morphology discussed in this section is presented broadly in four semantically organized sections: tense, aspect, mood and modality, and evidentiality. Tense, aspect and mood are not clearly separate morphological categories, and in many cases may be mutually exclusive or may result in fused in portmanteau forms. The systems of tense, mood, and aspect morphology are somewhat overlapping in that they are generally mutually exclusive, though some fused forms are possible. This is discussed in greater detail in sections discussing specific morphemes with fused forms, and the full paradigmatic relationships between morphological categories is primarily discussed in the previous chapter on predicate structure. Before discussing the morphological categories, however, the following section attempts to offer an overview of fusional stem changes which are pervasive throughout verbal morphology in Eibela.

### 7.2 Stem Forms

Verbs in Eibela are quite irregular, and stem forms may be quite variable. In most cases, verbal morphology may be organized into one of three different stem classes which to some extent determine the form of the verb stem, as in table 1. These three stem forms are quite similar in some regular verbs, such as {na:glɛ} ‘to be sick’, but approximately a dozen verbs have three stems which differ completely, as seen in {wɛ:tɛ:} ‘to fill’, and many others have considerable formal differences between the three stem forms, such as {ho:lo:} ‘to know’ and {a:li} ‘to sleep’. While these three general categories of verb stems are not sufficient to explain all the variation in many verb stems (e.g. *ho:lo:* ‘to know’ and *a:litɛla:* ‘to sleep’ which show considerable variation within stem classes), there is a clear formal correspondence which holds true for the majority of verbs. Citation forms refer to the uninflected verb forms which are used when the verb is a non-final element in a complex predicate. This citation form is often identical

to or similar to one of the three stem forms, but which of the three stem forms corresponds to the uninflected form varies by lexical item. The variation within these three stem categories will be further discussed in the following section §7.2.1.

In some verbal paradigms, the present and past verb forms are inflected through stem changes, and may form present tense or past tense forms without a concatenative suffix (or may be undifferentiated between stem classes as with the verb form *ho:lo*: ‘to know’ which may function as a past form, an uninflected form, or as a present form). Present, past and future verb stems may be inflected by concatenative tense suffixes. The past stem form may be used as a monomorphemic suppletive past tense verb, as with *wo:su*: ‘to fill’, although many verbs may vary from the present stem form in predictable, albeit irregular, inflections. For instance, in many verbs, the past tense verb form is similar to the present form with the final vowel of the stem differing, and being realized as /a:/ as with *na:gla*: ‘be.sick:PST’, which differs from the present stem *na:gɛ*. A past stem may also be distinguished by a consonant change as with *a:di* ‘sleep:PST’, which differs from the present stem *a:li* only in the medial consonant change. In these cases, the vowel or consonant change serves to preserve a formal contrast between the present stem forms (e.g. *a:li* and *na:gɛ*) and past stem forms (e.g. *a:di* and *na:gla*:), which would otherwise be homophonous.

Table 1: Example Verb Stem Forms by Morphological Category

Stem Class	Lexical Item				
	‘be sick’	‘know’	‘sleep’	‘finish’	‘fill’
<b>Present IPFV</b>	na:gɛ:-la:	ho:lo:tɛɛ:-la:	a:liteɛ:-la:	ta:leteɛ:-la:	wɛ:tɛ:-la:
<b>Past</b>	na:gla:	ho:lo:	a:di	ta:leta:	wo:su:
<b>Future</b>	na:gɛ:-mɛ:na:	ho:lo:tɛ-mɛ:na:	a:li:-mɛ:na:	ta:lete:-mɛ:na:	wɛ:φɛ:na:

Finally, future stem forms typically do not include any unaffixed stems, but in some irregular verbs, the future is a single fused form, as with *wɛ:φɛ:na*: ‘fill:FUT:1’. In most cases, the fusion of the stem and future suffix is phonologically predictable based on the onset on the final

syllable of the stem 3 form (see §2.7.2 on fusion occurring with the future-tense morpheme {-mɛ:na:}).

### 7.2.1 Stem Variation and Conjugation Classes

Most of the variation within individual stem classes can be described by categorizing individual verbs into four separate conjugation classes. These four conjugation classes describe general formal contrasts between the three stem forms. For example, the present stem of *tɛlɛ:* verbs typically ends in the two syllables /tɛlɛ:/, and these two syllables are replaced by /ta:/ in the past stem form, and /tɛ:/ in the future stem form. Table 2 shows each of the four conjugation class with examples of the resulting three stem forms.

Table 2: Verbal Conjugation Classes

Stem Class	Conjugation Class			
	<i>-tɛlɛ:/-dɛlɛ:</i> Verbs	<i>-Cɛ</i> Verbs	Alveolar Consonant Change Verbs	<i>-lɛ</i> Verbs
	'finish'	'pick'	'hit'	say
<b>Present IPFV</b>	ta:lɛtɛlɛ:-la:	tijɛ:-la:	sɛdɛ:-la:	sɛlɛ:-la:
<b>Past</b>	ta:lɛta:	NA (ti di)	sɛna:	sɛ:-ja
<b>Future</b>	ta:lɛtɛ:-mɛ:na:	ti-mɛ:na:	sɛbɛ:na:	sɛ-mɛ:na:

The forms within each stem class are broadly similar, but various verbal morphology may cause additional stem form variation within each of the three stem forms for some verbs. For example, verbs in the conjugation class for *-Cɛ:* verbs have a short present stem form used with some verbal morphology, and a longer present stem form with an additional syllable /-jɛ:/( or /-wɛ:/ after back vowels) added to the end of the present stem when bearing other suffixes. In practice, this means that for some conjugation classes, each stem class will have further subdivisions. This variation within stem classes is still poorly understood and requires further research.

## 7.2.2 Irregularities in Past Tense Forms

Past tense forms are irregular, but follow some general tendencies. Four general past-tense-marking strategies exist, which are forms from the past stem form of the verb, and possibly a suffix. Two concatenative suffixing strategies exist for marking past tense, and a third option exists in an auxiliary construction. The concatenative suffixes are {-ja:} and {-nɛ:}. These suffixes are synonymous and lexically determined. In addition, some verbs do not have a morphological past tense form, but may be made to have clear past time reference through the use of the perfective auxiliary {di}, for example *ti di* 'have picked' in table 2. Suppletion or partial suppletion is also possible, where there is no predictable correspondence between the past stem form and other stem forms, and the past stem may be used as a past-tense inflected verb with no suffix. For example the past stem form of *hɛna:* 'go:PRS' is *a:nɛ:* which has no resemblance to any other stem forms of the verb, and may function as a tense-inflected verb with no concatenative suffix. The final formal expression of this morphological category is predictable stem changes. This may be realized by replacing the final vowel of a stem with /a:/. This may be viewed as a phonologically reduced variation of the past suffix {-ja:}, where the past tense-marking is fused with the final syllable of the stem rather than a separate concatenated syllable. Stem changes may also take the form of regular consonant changes. One such alternation is where a /l/ in the stem 2 forms of such verbs is realized as /d/ in the past form. For more detail on past tense-marking, see §7.3.1.

## 7.2.3 -tɛɛ:/-dɛɛ: Verbs

The first class of verbs features present forms ending in /-tɛɛ:/ or /-dɛɛ:/. In these stems, the present form varies from other stem one forms in the final vowel, displaying a final /a:/ instead of /ɛ:/. These verbs form past and future stem forms with the shorter form /-tɛ/ or /-dɛ/, omitting the final syllable /-ɛ:/ of present forms.

Table 3: -tɛ/ɛ:/-dɛ/ɛ: Conjugation Class

Stem Class	put.PL.O	descend	finish	make.bridge
Present IPFV	di:tɛɛ:-la	tɛɛ:-la:	ta:lɛtɛɛ:-la:	wa:dɛɛ:-la:
Past	di:ta:	ti-nɛ:	ta:lɛta:	wa:da:
Future	di:tɛ-mɛ:na:	ti-mɛ:na:	ta:lɛtɛ:-mɛ:na:	wa:dɛ-mɛ:na:

For example, the verb referring to putting a number of objects has the present stem form *di:tɛɛ:*. The past stem and future stem forms of this verb omit the final syllable resulting in *di:ta:* and *di:tɛ* respectively. In these verbs, the uninflected citation form is generally the same as the past stem form.

#### 7.2.4 -Cɛ: Verbs

The -Cɛ: conjugation class is similar to the previous conjugation class in that it has a short stem form used for past stem forms and future stem forms, and a longer stem used for most present stem forms. Present stem forms have the final syllable /-jɛ:/, or /-wɛ:/ following back vowels. Past stem forms and future stem forms omit this final syllable. Uninflected citation forms are quite irregular, but most often resemble the shorter future stem form.

Table 4: -Cɛ: Conjugation Class

Stem Class	sleep	crush	take	slice	ascend	pick
Present IPFV	a:liɛ-la:	bɛ:sɛjɛ:-la:	dijɛ:la:	tɛ:bɛdi:jɛ:-la:	ɸili:jɛ:-la:	tijɛ:-la:
Past	a:di	bɛ:sɛ-ja:	di	tɛ:bɛda:	ɸili:-nɛ:	NA (ti di)
Future	a:li:-mɛ:na:	bɛ:sɛ-mɛ:na:	di-mɛ:na:	Unknown	ɸili:-mɛ:na	ti-mɛ:na:

#### 7.2.5 Alveolar Consonant Change Verbs

Many verbs will undergo regular consonant changes in their stem forms. This may be sub-categorized into three types of consonant alternations. The first is in verbs alternating oral

stops with nasal stops, as in the verbs meaning ‘swallow’ and ‘hit’ in Table 5. The second is an alternation between a lateral alveolar /l/ and the alveolar stops /d/ and /t/, as in ‘cut’ and ‘bathe’. The final alternation is in suppletive imperative and future forms, where a bilabial stop appears with a reduced form of the Imperative and Future tense suffixes. These verbs and the consonant alternations are not predictable based on current data. The choice of which consonant appears in which morphological category stem is not consistent between lexical items. Additionally, other formal variations are not accounted for, such as the additional syllable -Cɛ: in the Present Imperfective form *bu:lu:wɛ:-la:* ‘cut-PRS’. Furthermore, the fusional forms of imperative are lexically determined, but are not predictable based on this class, e.g. ‘swallow-IMP’ is realized concatenatively as *godu:=ma:*, but ‘hit:IMP’ is the partially suppletive form *sɛba:*. In these verbs, the uninflected citation form is generally the same as the present stem form.

Table 5: Alveolar Consonant Changes

Stem Class	swallow	hit	cut	bathe
Present IPFV	godɛ:-la:	sɛdɛ:-la:	bu:lu:wɛ:-la:	mu:lu:wɛ:-la:
Past	go:-ja:	sɛna:	bu:du:	mu:du:
Future	gobɛ:na:	sɛbɛ:na:	bu:tɛ-mɛ:na:	mu:lu:-mɛ:na:

### 7.2.6 -/ɛ/ Verbs

The final irregular verb class to discuss is verbs with a stem 1 form ending in /-ɛ/. This does not seem to be a very internally consistent class of verbs, and does not have many verbs identified and belonging to this class, and such may not be a real morphological class of lexemes, but rather a collection of irregular verbs with some surface similarities in their stem formations. All verbs in this class have stem class 1 forms ending in the syllable /-ɛ/, but the occurrence of this syllable in stem 2 and stem 3 forms is sporadic and inconsistent between lexemes within this conjugation class.

Table 6: *-lɛ:* Conjugation Class

Stem Class	whittle	hit	say
Present IPFV	<i>ga:lɛ:-la:</i>	<i>sɛdɛ:-la:</i>	<i>sɛlɛ:-la:</i>
Past	<i>ga:-ja:</i>	<i>sɛna:</i>	<i>sɛ:-ja</i>
Future	<i>ga:lɛ-mɛ:na:</i>	<i>sɛbɛ:na:</i>	<i>sɛ-mɛ:na:</i>

For example, the verb meaning ‘tell/teach’ has the same stem form *wa:lɛ* present in stem 1, stem 2, and stem 3 morphology, excepting Past morphology which omits the final syllable */-lɛ/*, which features a different stem *wa:ja:*. The verb meaning ‘say’ has a very different pattern, where only stem 1 form *sɛlɛ* feature the syllable */-lɛ/*, and all stem 2 and stem 3 forms are mono-syllabic form *sɛ:*, or *sa:* for the Telic morphology. Other verbs seem to have similar alternations, but there is not enough data to see how consistent these stem forms are used for some less common morphological forms. In these verbs, the uninflected citation form is generally the same as the present stem form.

### 7.3 Tense

Three different tenses are morphologically expressed in Eibela, corresponding to past, future and present time reference. The morphological expression of these tenses is lexically determined and may be represented by regular suffixation or varying degrees of irregular stem changes and allomorphy. In the case of past tense morphology, this variation is at least partially predictable by a semantic classification of motion verbs. In nearly every case, the stem form corresponding to the present tense is the also the non-finite verb form which appears in contexts where the verb is not inflected for tense (e.g. uninflected verbs in serial verb constructions, auxiliary constructions and uninflected subordinate clauses). Tense morphology may not co-occur with imperative mood forms, and has limited interactions with aspectual morphology.

### 7.3.1 Past Tense

The past tense in Eibela is expressed by three different morphosyntactic strategies, which are lexically determined by the verb. First and foremost, a verb may show past time reference by means of the suffix {-ja:}. Second, some verbs, most commonly verbs of motion, present the suffix {-nɛ:} to signal past time reference. Lastly, many frequent verbs inflect for past tense through irregular suppletion.

The method of tense-marking among these three strategies is consistent for each lexical item, and in the case of {-nɛ:}, it may be somewhat predictable based on semantic class of a verb since these are predominantly verbs of motion. For example, the verb {mi} ‘come’ is inflected for the past tense with the suffix {-ja:}, resulting in *mija*: ‘came’. The alternatives, \**mi-nɛ:* or some suppletive form, are unattested. The verb {ɸili:} ‘ascend’ is an example of a verb which inflects for past tense using the suffix {-nɛ:}, resulting in *ɸili:nɛ:* ‘ascended’. Finally, some verbs may signal past tense through irregular consonant changes such as {mu:lu:} ‘bathe’ -> *mu:du:* ‘bathed’ and {a:li} ‘sleep’ -> *a:di* ‘slept’, while others may have completely suppletive forms such as {hɛna:} ‘go’ -> *a:nɛ:* ‘went’ and {na:} ‘eat’ -> *mɛna:* ‘ate’.

#### 7.3.1.1 Past {-ja}

The past tense suffix {-ja:} is a semantically and structurally unmarked method of signaling past time reference in that the verbs which take the affix are not predictable by any semantic or structural criteria. Additionally, this means of signaling the past tense is the most transparent and productive of the three methods discussed. The suffix is present in two allomorphs, the unconditioned form *-ja:* and the variant *-wa:* following back vowels, as discussed in §2.7.2.

#### 7.3.1.2 Motion Past {-nɛ:}

The suffix {-nɛ:} is an alternative past-marking strategy required by some lexical items. As previously mentioned, nearly every verb which is inflected for past tense with {-nɛ:} is a verb of motion as in (1) and (2).

- (1) wa:wi se: kowa:-je: ta:-nɛ:  
 NAME beach canoe-LOC cross-PST  
 'I went to the bank of the Wa:wi and crossed in a canoe.'
- (2) to:mu la: hɛ:li-jo: di-si=ja: to:ja-je: φili:-nɛ:  
 precede COP go.out-COMP PFV-MED:PFV=TOP hilltop-LOC ascend-PST  
 'We went out ahead and climbed up to the hilltop.'

One possible explanation of this is that {-nɛ:} may have been historically derived from *a:nɛ:*, which is the suppletive past tense form of the verb {hɛna:} 'go'. If this is the case, then a serial verb construction such as *φili: a:nɛ:* would have gradually been reduced to *φili:nɛ:*. This would explain the semantic quality of motion which is linked to {-nɛ:}, as well as the divergent form, since it originates from the suppletive form of a verb of motion.

### 7.3.1.3 Suppletion

The most irregular and least predictable means of encoding the past tense is total or partial suppletion of the verb root. Partial suppletion occurs in some verbs, where morphological tense is expressed by a change in one or more segments of the verb root, but the form is not completely altered. This may be seen in examples (3) and (4), where a single consonant segment differentiates the past tense form in (3)a and (4)a from the corresponding non-finite forms in (3)b and (4)b which are not inflected for tense.

- (3) a. tila: ha:na **mu:du:**  
 descend water:ABS bathe:PST  
 'I went down and bathed.'
- b. ha:nɛ **mu:lu:-wɛ:** lɛ hɛnɛ di-si  
 water bathe-LOC do DUR PFV-MED  
 'We bathed and then...'
- (4) nɛ: sobo:-kɛi **bu:du:** kɛi la:  
 1:SG knife-INST cut:PST ASSERT QUOT  
 'I said, "I cut myself with a knife!"'

- (5) da:-ja:      **bu:lu:-wε:**    hεnε    ga:lε-jo:      di-si  
 sago-ABS    cut-LOC    DUR    peel-COMP    PFV-MED

'I cut the sago tree open, and then cut off the bark.'

Some verbs differ from the non-finite form to a greater extent, but still share phonological segments. One example of this is *mεna:* in (6), compared to the non-inflected form *na:* seen in (7).

- (6) sεda:    hεna:    **mεna:**  
 cook    DUR    eat:PST

'I cooked it on the fire and ate (it).'

- (7) **na:**    di=ja:      hεna:-gεnε:  
 eat    PFV=TOP    go-MED:IPFV

'Having eaten, I went and then...'

A final type of suppletion is total suppletion, where no sequence of two or more segments is shared between the non-finite form and the inflected form. This can be seen in (8) and (9) below, where a form inflected for past tense is demonstrated in (8)a and (9)a and a corresponding uninflected verb form is shown in (8)b and (9)b.

- (8) a. ka:lε      di=ja:      hεna:      **a:si**  
 wait.for    PFV=TOP    DUR      sit:PST

'I sat waiting for him.'

- b. sulo:bo=wa:    nε:      ε=ta:      **sa:**    kei  
 NAME=TOP    1:SG    do=TEL    sit    ASSER

'Sulo:bo, I'm sitting (as a result of something/something happened to me).'

- (9) a. nε:      do:φa:      bεbε:na:-ta:      **a:nε:**  
 1:SG    snare      see-PURP-TEL    go:PST

'I went to check a snare.'

- b.  $\varepsilon:m\acute{e}\varepsilon:$  waija: **hɛna:** kei  
 back NAME go ASSER

'I am going back to Lake Campbell'

While partial suppletion is quite common, total suppletion is quite rare, with only a handful of suppletive paradigms being attested.

### 7.3.2 Future {-mɛ:na:}

Inflection for the future tense shows more morphological regularity than the past tense; however, the morphological future form shows a high degree of polyfunctionality, extending to intentional meanings when used in subordinate clauses.

In (10)a the suffixed future form is shown, and in (10)b, the unaffixed form in a complex predicate is shown for comparison.

- (10) a. [[ja:sɛ-mɛ:na:=ja:]<sub>TOP</sub> [ɛ:mɛɛ:]<sub>X</sub>[nɛ:]<sub>S</sub> [ɛna] [dɛ:φɛ-mɛ:na:]<sub>PRED</sub>]<sub>FIN</sub>  
 kill:SG.A-FUT:1=TOP again 1:SG still try-FUT:1

"I will still try again to kill them."

- b. [[wɛ]<sub>O</sub>[nɛ:]<sub>A</sub> [dɛ:φɛ la: kei]<sub>PRED</sub>]<sub>FIN</sub>  
 this 1:SG measure COP ASSER

'I am measuring this.'

The future suffix also expresses limited person agreement. The form *-mɛ:na:* is used for first person as in (10)a. The form *-mɛi* is used for second and third persons, as in (12)b, and for unspecified hypothetical clauses as in (12)a. In purposive constructions and interrogative constructions as in (11), the suffix {-mɛ:na:} is used for all persons, and the person agreement is neutralized. This person agreement is also discussed in §5.6 regarding grammatical relations.

- (11) gɛ: ε:bi di-mɛ:na:=ja:  
 2:SG what do-FUT=Q:N.PRS

'What are you doing?'

In (12) the third person form of the future suffix *-mɛi(b)* is shown, which contrasts with the form *-mɛ:na:*.

- (12) a. φu:sa:            hɛ:nɛfa:            gɛgɛ            di-**mɛi**  
 bamboo:ABS    bamboo.type:ABS    chop.up:MULT    PFV-HYPO  
 ‘He/she will cut up many pieces of strong bamboo.’

- b. dɛbi-ja:            a:mi:            di-**mɛib**  
 rafter-ABS    PRO:ASS    get-FUT.3  
 ‘He/she will get the rafters.’

Note also that the allomorph *-mɛib* in (12)b is seemingly in free variation with the form *-mɛi*. This agreement patterning reveals three separate morphemes which have overlapping forms. {-mɛ:na:} is the future tense morpheme, with a first person form *-mɛ:na:* and the non-first person form *-mɛi*, though these forms are neutralized to *-mɛ:na:* in interrogative clauses. {-mɛi} is a hypothetical modality-marker with no person distinctions. Finally, {-mɛ:na:} is a purposive-marker with no person agreement that appears on subordinate purpose clauses as described in §7.3.2.1.

A small number of verb forms display full suppletive forms for both future and past tense forms. The verb meaning ‘to go’ has three distinct forms as seen in (13) below.

- (13) a. i:ja:            jɛ:ba:            ɛimɛ            dogɛ            lɛ-li:            a:nɛ:  
 3:PL-ABS    tree-ABS    already    dig.out    do-SIM    go:PST  
 ‘They were already going and digging up trees.’

- b. a:bo-wa:            do:lo            **hɛna:**            kɛi  
 bird-ABS    fly            go            ASSER  
 ‘The bird is flying.’

- c. ni:ja:            ha:nɛ            mu:lu:-mɛ:            **mɛnɛ:na:**            kɛi  
 1:PL    water:LOC    bathe-PURP    go:1:FUT    ASSER  
 ‘We are going to bathe.’

Similarly the verb ‘to stay/to sit’ has three distinct tense forms as shown in (14).

- (14) a. ni:ja:    kɛsɛ:gi:    **a:si**  
1:PL    NAME    stay:PST  
‘We stayed at Wawoi Falls.’
- b. nɛ:    go:dɛ    ba:lɛ    **sa:**    kɛi    la:  
1:SG    God    COORD    stay    ASSER QUOT  
‘(I said) "I am with God"’
- c. nɛ:    do:gɛ:    **mɛsɛ:na:**  
1:SG    house:LOC    sit:1:FUT  
‘I will stay in the house.’

Like other future tense forms, these suppletive forms also specify first person and non-first person subjects, and seen in the contrast between the first person in (14)c and the third person in (16).

- (15) a:mi:    mɛ:-ja:    ti:-mɛ:    **mɛnɛi**  
PRO:ASS    rope-ABS    cut-PURP    go:N.1:FUT  
‘Then one should go to cut rope.’
- (16) ɛ:na:    **mɛsɛi**  
there    sit:N.1:FUT  
‘He will sit there’

The future forms of these two lexemes have clear similarities to the regular future tense morphology *-mɛ:na:* and *-mɛi*, but the differences are not predictable based on phonological criteria. Furthermore, the initial syllables of both *mɛnɛ:na:* and *mɛsɛ:na:* are identical, which may hint at some common historical origin which is no longer apparent in the grammar.

### 7.3.2.1 Purpose Clauses with {-ta:}

In embedded clauses, the morpheme {-mɛ:na:} is used as a purpose-clause marker for purpose clauses featuring either the same-subject or a different-subject. This morpheme is

homophonous with the first-person future form of a verb, but does not have any person distinctions. These embedded clauses specify an intention or result. For example, in (17) the verb {sugu:lu} ‘to attend school’ is identical to the first person form, and specifies that the event is the outcome of the final and primary verb of the clause, *di:ja:*. Additionally, the purpose clause has a third person subject while the main clause has a non-co-referential first person subject.

- (17) *ε:lemε:ntri:*    sugu:lu-**mε:na:**    do:ga:    di:-ja  
 elementary    attend.school-PURP    house:ABS    build-PST  
 ‘We built a building for them to attend elementary school.’

Example (17) also illustrates that person agreement is neutralized in this contexts, with *-mε:na:* being used for all persons. In this context, it is also quite common for the telicity changing suffix {-ta:} to accompany the future suffix as in (18) (See §7.4.1 for more on {-ta:} and imperfective aspect, and §3.3.2.2 on interactions between {-ta:} and verbal aspect classes). Example (18) also illustrates that a purpose clause may have the same-subject as the main clause.

- (18) *εime*    o:ga:    ε    **ge-mε:na:-ta:**    ho:lo:    a:nε:=jo:bo:  
 already    pandanus    seedling    plant-PURP-TEL    DEM:HIGH    go:PST=INF  
 ‘He already went up to plant pandanus seeds.’

In these purposive constructions, the final syllable of the purposive suffix /na:/ may be omitted, as in (19). In verbs with irregular non-concatenative future tense forms, the final syllable /na:/ may similarly be omitted, as in (20), where the verb {na:} ‘consume’ has the irregular future tense form *mε:na:*, which may be shortened to *mε:* in the purposive construction.

- (19) *nε:*    ha:nε    mu:lu:-**mε:**    hεna:  
 1:SG    water    bathe-PURP    go  
 ‘I am going to bathe.’
- (20) *da:*    **mε:**    mino:  
 food    consume:PURP    come:ST.IMP  
 ‘Come to eat!’

These two suffixes, {-mɛ:na:} and {-ta:}, may also appear as a main clause predicate to denote present ability or intention as in (21).

- (21)    gɛ:        mu:        ja:        a:li-mɛ:na:-ta:  
          2:SG    kitchen    DIR:VEN    sleep-FUT-TEL  
          'You intend to sleep in the fire pit.'

The combination of {-mɛ:na:} and {-ta:} is interpreted as potential or ability for the event to occur. The semantic reference is no longer on a future event as it would be in a clause inflected with only the future suffix {-mɛ:na:}. Instead the time reference is either the same as the final verb in a serial verb construction as in (18), or the present time of the speech-act, as in the inflected final verb in (21).

### 7.3.2.2 *Completive Future*

The future tense may also form a portmanteau morpheme as in (22), which fuses the future tense with the completive and telic aspect categories. The resulting form is -φɛ:na: 'COMP:1:FUT' or -φɛi 'COMP:N.1:FUT', which could be interpreted as a fusion of the future tense suffix and either the completive morpheme -jo:φo: or the perfect-marking morpheme -φɛija:.

- (22)    kɛɛφu:                    la:        gɛ-φɛ:na:  
          feather.ornament    DEF    plant-1:COMP  
          'I will finish planting the feather ornament there.'

For comparison, the same verb {gɛ} 'to plant/to stick into' may be seen inflected for only completive aspect in (23), and for only future tense in (24).

- (23)    ho:gɛ:                dija:    gɛ-φo:  
          bottom:LOC    take    plant-COMP  
          'Taking it to the bottom, I planted it.'
- (24)    a:mi:                a:bo    bu        gɛ-mɛ:na:  
          PRO:ASS        bird    quill    plant-1:FUT  
          'Then I will put in bird quills.'

The fusion of these morphemes, is likely attributable to the articulatory similarity between the consonants / $\phi$ / and / $m$ /.

### 7.3.3 Present Progressive

While present tense may be morphologically unmarked, an incomplete or ongoing event may be specified by the suffix {- $la:$ }, as in (25).

- (25)  $\epsilon na$       $s\epsilon d\epsilon:-la:$   
still     cook-PRS  
‘(It’s) still cooking.’

The verb stem undergoes a regular phonological change in conjunction with this suffix, in which a stem ending in a non-high vowel is realized with a final / $\epsilon:$ /, and a verb stem ending in a high vowel has the additional syllable / $w\epsilon:$ / epenthesized. For example, consider the uninflected verb stem  $s\epsilon d\epsilon$  ‘cook’, which is realized as  $s\epsilon d\epsilon:$  in the present imperfective form in (25), and the uninflected stem  $u:lu$  ‘boil’ is realized as  $u:luw\epsilon:$  in the present imperfective form shown in (26).

- (26)  $\epsilon ime$       $u:luw\epsilon:-la:$   
already     boil-PRS  
‘(The water) is already boiling.’

An alternative analysis might interpret the morpheme {- $la:$ } as the copula { $la:$ }, if it were not for this stem alternation which suggests the imperfective present suffix to be a bound morpheme, unlike the copula { $la:$ }, which does not trigger such phonological changes in clear copula constructions such as those described in §9.2.1.

## 7.4 Aspect

In this section, the aspectual system is presented in four categories: perfectivity, completion, habituality, and duration. The aspectual categories of perfectivity and completion both include two opposite and contrasting morphemes; however, habitually and duration each have only a single morphological expression.

#### 7.4.1 Perfect {-φειja:} and Imperfective {-ta:}

Perfectivity may be defined as the boundedness of an event. A perfective aspectual distinction expresses an event “externally” as a completed event with a defined beginning and end. In contrast, imperfective aspect characterizes an event “internally” as being in progress and/or without a clearly defined beginning or end. In Eibela, the past tense {-ja:} discussed in §7.3.1 is by default interpreted as perfective aspect. In addition to this, two suffixes explicitly express notions of perfectivity, and do not allow concatenative tense morphology.

The suffix {-φειja:} denotes both a perfective and perfect aspect, in which a perfective event has taken place prior to a reference time, but holds immediate relevance. In contrast, the suffix {-ta:} expresses imperfective aspect in events that are in progress (the suffix {-ta:} specifically modifies the telicity of a verb, which is discussed in greater detail in §3.3.2.2). To discuss examples of perfect aspect, it will be necessary to distinguish between three different periods in time: time of event, time of reference, and time of speech. The time of the event is the time that the predicated event happens. The time of reference is the time period that is topical or relevant to the discourse. Finally, the time of speech is the time at which a sentence is formed and produced. In simple tense expression, the time of reference is the same as the time of event, and the relationship between the time of speech and these two points in time is specified by the tense value of the predicate. However, in complex aspectual expressions, the time of event may not equal the time of reference.

For example, in (27) and (28) below, the statement using {-φειja:} makes reference to a moment in time, before which the action of “throwing” in (27) or “stopping” in (28) had already been completed. It is further necessary that the completion of this event bear some clear effect at the reference time. Whether this reference time is in the past or at the time of speech is not specified, and such information must be retrieved from the discourse in which the statement is grounded. Therefore, the time of event is specified as being before the time of reference, but the relationship between the time of speech and these two points in time is not specified.

- (27) a. jɛ:ko:mu        sa:di-**φ**ɛija:  
walking.stick    throw.away-PERF  
‘I had/have thrown away the walking stick,’
- b. jɛ:ko:mu        sa:di-**ta**:  
walking.stick    throw.away-TEL  
‘I was/am throwing away the walking stick,’
- (28) a. ha:nɛ    kɛ:-**φ**ɛija:  
water    stop-PERF  
‘The rain had/has stopped.’
- b. ha:nɛ    kɛ:-**ta**:  
water    stop-TEL  
‘The rain was/is stopping.’

In contrast, the statement in (27) and (28) describes an action which is incomplete and in progress without specifying the time of the event as past, present or future. In this case, the time of event is specified as being the same as the time of reference, but again, the morphology does not specify relationship between the time of speech and these two points in time, i.e. tense.

In (29) this contrast is more subtle, and also slightly altered by the semantics of the verb root. Two consecutive clauses utilize the same verb *a:si* ‘to sit’ to provide two differing aspectual perspectives of the same situation. First in (29)a {-φɛija:} specifies that the events described occurred before the time of reference, then in the following example in (29)b, {-ta:} specifies that the event is occurring at the time of reference. At first this may seem to be self-contradictory, but with stative verbs such as *a:si* ‘to be seated’, the duration of the event allows for both statements to be true: the event began before the reference time, and continues on into time of reference.

(29) a. ha:nε    ka:    tila:            a:si-φεija:  
water    FOC    go.down    sit:PST-PERF

‘I had gone down to the water and had been sitting.’

b. a:si-ta:        dεna::        toko    di  
sit:PST-TEL    stay:DUR    stand    PFV

‘I was seated there a while then I stood up.’

Example (29) also illustrates the possibility of tense being morphologically expressed along with aspect, which is only possible in verbs which inflect for tense by means of suppletive stem changes.

As a side note, it seems likely that {-φεija:} historically derives from the completive suffix {-jo:φo:} and the past tense {-ja:}; however, from a synchronic perspective, the semantics and form of {-φεija:} are sufficiently distinct to warrant a description above and beyond a simple concatenation of these two suffixes. Additionally, {-ta:} sometimes appears to have a resultative interpretation, which describes a state of affairs which persists as a result of some previous event, as in (30).

(30)    ta:lε-ta:  
finish-TEL

‘(We) are finished.’

This is accounted for by taking into consideration the telicity of the verb stem, as discussed in §3.3.2.2. In this section, the imperfective aspectual semantics of the morpheme {-ta:} are emphasized, while in §3.3.2.2, this suffix is described with regard to its specific interactions with aspectual classes in verbs, and by changing the aspectual semantics of an event, this morpheme also functions to change the aspectual class of a verb.

#### 7.4.2 Aspects of Completion

While perfective aspect describes a complete event, with a beginning and an end, it is also possible to specify a frame of reference focusing on the end or completion of an event.

Two suffixes in Eibela specify whether an event has been successfully completed or is about to be concluded.

#### 7.4.2.1 *Incomplete {-mo:ɸo:}*

The suffix {-mo:ɸo:} (sometimes shortened to *-mo:*) refers to the imminent completion of an event. This is an event which has been initiated and is about to be completed. Whether or not the event actually achieves completion is not specified. For instance, example (31) is from a text which describes something that has begun, but does not actually finish. The action of cutting is actually never completed.

- (31) ka:      bulu      di-**mo:ɸo:**  
FOC      cut      PFV-INCOMP  
  
'(He) was (about to finish) cutting (them) off.'

In contrast, the event of falling in (32) does in fact conclude. Example (32) describes the moments after the speaker had lost all sense of balance, and perceived that a fall was imminent.

- (32) su:da:      ti-**mo:ɸo:**  
fall      descend-INCOMP  
  
'I was about to fall.'

Both of these examples give an “internal” or imperfective perspective to an event which is in progress and has a natural conclusion; however, since the event is in progress, the conclusion of the event is not pre-supposed.

#### 7.4.2.2 *Completive {-jo:ɸo:}*

The morpheme {-jo:ɸo:} specifies that an event was successful and complete. This results in the formation of a telic verb if the stem is an atelic verb. For example, the verb {ɸili:} ‘go up’ is an atelic verb of motion, but when it combines with the suffix {-jo:ɸo:} as in (33), it describes a completed action of climbing, which specifies that the agent has reached the top of whatever geographical feature they were ascending, or has arrived at their final destination.

- (33)  $\phi i:li$      $da$      $\phi i:li\text{-}jo:\phi o:$   
 ascend    be.at    ascend-COMP

‘Going up, they reached the top.’

When  $\{-jo:\phi o:\}$  is not the final morpheme in a verb, the form may reduce to  $-wo:$  or  $-jo:$ , as in (34) below. In (34), the action of shooting is specified to be completed and successful, resulting in the interpretation that the cassowary was killed. The perfect suffix  $\{-\phi eija:\}$  fuses with the morpheme  $\{-jo:\phi o:\}$  in a process similar to that found in other morphemes containing bilabial consonants (cf. §7.3.2, §7.5.2.1, §7.5.2.3). See also §2.7.2 for more on allomorphic variation.

- (34)  $ha:su\epsilon\text{-}ja:$      $kosu:wa:\text{-}ja:$      $o:lo:\text{-}wo:\text{-}\phi eija:=\text{jo:}bo:$      $nulu$   
 NAME.MALE-ABS    cassowary-ABS    shoot-COMP:PERF=INF    night

‘Hasuwe had/has shot and killed a cassowary.’

While a verb may be specified as completive in the future tense using the portmanteau suffix  $-\phi\epsilon:na:$  (see §7.3.2.2), there does not appear to be a tense distinction between past and present. This could either be from a genuine lack of a tense distinction, or due to a simple lack of data describing the completion of actions in the present tense. Semantically, instances of  $\{-jo:\phi o:\}$  have almost exclusively past tense reference.

### 7.4.3 Habitual Aspect and Nominalization $\{-s\epsilon\epsilon\}$

The habitual suffix  $\{-s\epsilon\epsilon\}$  has a variety of functions deriving from a core meaning of habitual aspect. When this suffix appears on a final predicate, the event is specified as occurring regularly or habitually. In other contexts,  $\{-s\epsilon\epsilon\}$  functions as a nominalizer in various ways.

#### 7.4.3.1 Habitual Aspect

When  $\{-s\epsilon\epsilon\}$  is used with a final predicate, it represents habitual action which occurs regularly as a matter of course. In example (35)  $h\epsilon\epsilon s\epsilon\epsilon$  functions as a final predicate and specifies a regular and recurring event.

- (35)  $ko:s\epsilon:$      $do:g\epsilon:$      $h\epsilon\epsilon\text{-}si:=ja:$      $na:$      $ba:l\epsilon$      $h\epsilon\epsilon\text{-}s\epsilon\epsilon$   
 sago.pulp    house:LOC    go-MED:PFV=TOP    mother:1    COORD    go-HAB

‘When I go to the bush camp, I go with my mother.’

This habitual meaning may also be bound to specific circumstances by means of a preceding conditional clause, as in (35). The conditional meaning results from a non-final clause being topicalized by the clitic {=ja} (see §9.3.4 on topic clauses). In this usage, the habitually occurring event is stated to occur under the stated circumstances. A habitual clause may be unconditioned as well, as in (36)b, which describes a generalized habit without any condition.

#### 7.4.3.1.1 Habitual under Negation

When negated, habitual predicates specify events that never occur. As demonstrated in (36) and (37), this may carry elements of dynamic and epistemic modality respectively.

(36) a. ε-ta:-lo:lu=wa:          edijo:bi-ja:          sɛlɛ-si-ki:=ja:  
do-TEL-ASS.EV=TOP      NAME-ABS      say-MED:PFV-CONT=TOP

b. nɛ:      ma:      o:gɛ:      di-sɛnɛ      kei  
1:SG      NEG      carry      PFV-HAB      ASSER

‘When that happened, Edijo:bi said, "I've can't carry (people)."'

(lit. ‘When that happened, Edijo:bi said, "I habitually do not carry (people)."'

(37) do:ga:          ma:      bɛdɛ-sɛnɛ  
house:ABS      NEG      see-HAB

‘The house cannot be seen.’

(lit. ‘One habitually does not see the house.’)

#### 7.4.3.2 Nominalizations using {-sɛnɛ}

A variety of event and participant nominalizations may be formed using {-sɛnɛ}. These can be seen as resulting from the semantic core of habituality since these nominalizations refer to recurring events or arguments which are habitually involved in such an event (see Aikhenvald [2011, pp. 247-251] and Comrie and Thompson [2007] for more detailed discussion of types of nominalization).

##### 7.4.3.2.1 Nominal Modifiers

In the first type of nominalization, a clause forms a nominal which modifies another nominal head, as in example (38).

(38) [i:sa:-jɛ: do:-sɛnɛ] a:bo:  
 ground-LOC stay-HAB bird

‘birds who live on the ground.’ (e.g. cassowaries)

This construction functions in many ways like a relative clause, but is structurally and semantically distinct in a number of ways (see also §9.3.2 on relative clauses). The most significant differences are the position, morphology, and semantics of the modifying clause. The most obvious difference is semantic and follows from the habitual meaning of {-sɛnɛ}. These habitual clauses describe events that are not bounded in time, and are instead recurring or ongoing events. The morphology and position mirror that of nominal modifiers (see §8.2.1) rather than resembling types of relative clauses. Like the example of a nominal modifier in (39), a habitual clause precedes the noun it modifies, as shown in (40).

(39) φu:sɛ: da  
 bamboo:LOC sago

‘bamboo sago.’ (Sago cooked in bamboo.)

(40) nɛ: [do:gu di-sɛnɛ:] ma:nɛ a:ka: la: wa:lɛ-mɛ:na:  
 1:SG house make-HAB:LOC way PRO:FOC DEF tell-1:FUT

‘I will tell about the methods of house building.’

Additionally, as in (40) the occasional lengthening of the final vowel of a habitual clause may indicate the case-marking convention of nominal modifiers by inflecting for locative case in this modifier position, since many nouns may express locative case through a final vowel being expressed as /ɛ:/, as in (39). These nominalized clauses may be formed from complex predicates, which may include oblique locative arguments as in (38), direct object patient arguments as in (40) and even serial verb constructions as in (41).

(41) ɛ: la: [ja:si na:-sɛnɛ] do:go  
 3:SG DEF kill eat:-HAB house

‘His house where killing and eating take place.’

#### 7.4.3.2.2 Subject Nominalization

Nominalizations formed with {-sɛnɛ} may also be the head of a noun phrase as in (42), where the derived nominal refers to the agent of the verbal root.

- (42)   wa:lɛ-**sɛnɛ**  
          teach-HAB  
          ‘Teacher’

These subject nominalizations can also be formed from a predicate and object such as (43) where an object is lexicalized as part of the nominalization.

- (43)   [ma:nɛ wa:lɛ-**sɛnɛ**]  
          way    teach-HAB  
          ‘pastor’ (lit. ‘the one who teaches the way.’)

#### 7.4.3.2.3 Locative Nominalization

These nominalizations may also make reference to an oblique argument of the root verb, as in (44) and (45). In (44) illustrates a locational nominal which is derived from a complex predicate, in this case a serial verb construction. Example (45) demonstrates another complex nominal derivation where the agent of the verbal root is included in the resulting nominal formed by {-sɛnɛ}.

- (44)   [tɛbɛ do:-**sɛnɛ**]<sup>5</sup>  
          land   STAT-HAB  
          ‘helipad’

---

<sup>5</sup> The verb {do:} can have either a perfective meaning as a grammaticalized auxiliary in serial verb constructions as in (44), or function as a lexical verb meaning ‘to stay’ or ‘to stand’ as in (45). (see also §6.4.3 on auxiliaries)

(45) [ko:lu do:-sɛnɛ]  
 man stay-HAB

‘A place where people live.’ (‘An inhabited region’)

These locational nominals may then be used in a clause as an oblique locative argument, as in (46)b where *disɛnɛ* is inflected as an oblique argument expressing a location.

(46) a. φili: a:nɛ:-gɛ: o:lomo: di wa:wi di sa:gɛ-jɛ:-mi:  
 ascend go:PST-ITER NAME COORD NAME COORD river.mouth-LOC-ASS

b. [[jɛ:bɛsola: la: dijo: di-sɛnɛ]-jɛ:-mi:]  
 canoe DEF put PFV-NOM-LOC-ASS

‘We went up to the outlet of the Olomo river into the Wa:wi river, by the place where people put canoes.’

Similarly, in (47), *udu tila: φili: do:sɛnɛ* forms a complex nominal clause which specifies a location, but is not case-marked.

(47) [udu tila: φili: do:-sɛnɛ] sɛsɛ-φɛija:  
 game.trail descend ascend STAT-HAB bend-PERF

‘We had put a snare where the game trail going down and back up.’

#### 7.4.3.2.4 Instrument Nominalization

The reference of a nominalized verb may also be an oblique argument referring to an instrument. For example in (48), the complex nominalization *ko:lu sɛdɛsɛnɛ*, which consists of a verb and its patient, forms a nominal which is used to modify a noun, *wogli*, which functions as the instrument in this nominalized clause.

(48) [ko:lu sɛdɛ-sɛnɛ] wogli-ja: di-ja:  
 man kill-HAB club-ABS take-PST

‘He took his man-killing club.’

These nominalizations which co-refer to the instrument of the root verb may also function independently as the head of a noun phrase as in (49). In this example, the verb {dogulu}

meaning ‘to cover something (i.e. with a cloth)’ may be nominalized with {-sɛnɛ} to refer to an object which is habitually used in this way.

- (49) dogulu-**sɛnɛ**  
 cover-HAB  
 ‘A cloth used to cover food.’

#### 7.4.3.2.5 Event Nominalization

The final example of the semantic scope of {-sɛnɛ} nominalization is event nominalization, in which the resulting nominal does not have reference to any of the arguments of the root verb, but instead refers to the entire event. An example of this is (50), where the reference of the nominalized clause *ɛja:ge dimi disɛnɛ* is the habits and actions that butterflies perform rather than being a particular butterfly that performs these actions.

- (50) [ɛja:ge      dimi      di-**sɛnɛ**]    wa:lɛ-mɛ:na:  
 butterfly    happen    PFV-HAB    tell-1:FUT  
 ‘I will tell about what butterflies do.’

#### 7.4.4 Durative Lengthening

Durative lengthening is an imperfective aspect-marking strategy which is used when two clauses are combined to describe consecutive events. The initial clause will end with an extremely lengthened segment, and depicts an event which continues for some time until the occurrence of the following event. This initial clause is often a dependent clause modified by the topic-marker {=ja:}, as in (51) but may also be juxtaposed without this suffixation, as in (52). One common application of this construction is to describe a conclusion to an atelic event. For example, in (51) an atelic event of motion is described, which then terminates with a following telic event. That is to say that the agent went and kept going until he crossed the river.

- (51) [[a:nɛ:=ja:]<sub>TOP</sub>      wa:wi-ja:      ta:-nɛ:]<sub>FIN</sub>  
 go:PST=TOP:DUR    NAME-ABS    cross-PST  
 ‘We went and crossed the Wa:wi river.’  
 ‘We kept going until we crossed the Wa:wi river.’

(52) a. [no: ε:na: o:gε: di=ja: φili:-nε::]MED  
DISJ DEM:ABS pick.up take=TOP walk.up-PST:DUR

b. [to:ja ka: φili:-jo: di-si]MED  
hilltop FOC walk.up-COMP PFV-MED

'I picked up that (bag) and was going up and then I got up to the top and then...'

Similarly, in (52) an atelic event of motion continues until a telic event occurs. The agent continues the act of climbing until the top of the hill is reached.

## 7.5 Mood and Modality

In this section, a variety of verbal categories are presented which modify the type of speech-act represented by the predicate, or which provide the speaker's perspective on the event described. These categories include emotive mood particles discussed here in §7.5.1 and previously discussed in §4.6.1, several morphological constructions of hypothetical events in §7.5.2, a broad discussion of interrogative morphology and types of questions in §7.5.3, and finally a section discussing imperative morphology and command strategies in §7.5.4.

### 7.5.1 Emotive Mood Particles

There are three mood particles, {kei}, {ba:}, and {jo:}, which specify declaration, uncertainty, and emphasis respectively. These particles appear almost exclusively post verbally, always bear stress, and do not undergo phonological changes due to the form of the preceding verb.

#### 7.5.1.1 Assertive Mood {kei}

The first of these particles, {kei}, specifies a strong assertion. This can be a statement past (53), present (54), or future (55), and always suggests a high level of certainty regarding the statement.

(53) nɛ: sɛgai-jɛ: sɛna: ma: **kɛi**  
 1:SG NAME-ERG hit:PST NEG ASSER

‘Sigai did NOT hit me!’<sup>6</sup>

(lit. ‘It is not the case that Sigai hit me.’)

(54) [ko:lu ɛmɛ: sɛlɛ-si]<sub>MED</sub> [nɛ: la: ti:sa ko:lu **kɛi**]<sub>FIN</sub>  
 man that:ERG say-MED:PFV 1:SG TOP teacher man ASSER

‘That man said, “I’m a teacher.”’

(55) nɛ: ɛ:mɛlɛ: mi-jɛ:na: **kɛi**  
 1:SG back come-1:FUT ASSER

‘I will come back.’

Additionally, in complex clauses, {kɛi} is more likely to appear in order to clearly define the end of a clause, and highlight the ultimate conclusion of the chain of events, as in (56).

(56) a. [[kosu:wa:=ja:]<sub>TOP</sub> [nɛ:]<sub>A</sub> [sa:nɛ-jo:-fɛija:=ja]<sub>PRED</sub>]<sub>TOP</sub> [ka:]<sub>PRED</sub>]<sub>FIN</sub>  
 cassowary=TOP 1:SG kill-COMP-PERF=TOP FOC

b. [[nɛ:-fɛ:ni: fɔfɔ:nɛ-mɛ:na:=ja:]<sub>TOP</sub> moga:ɣɛ do: bɛda:]<sub>MED</sub> [mi-ja: **kɛi**]<sub>FIN</sub>  
 1:SG-EXC pluck-1:FUT=TOP badly STAT CONS come-PST ASSER

‘I have killed a cassowary, but if I trying to pluck it myself would be difficult, so I came (to ask for your help).’

#### 7.5.1.1.1 Interaction with {-bi}

The particle {kɛi} may follow a verb inflected for the delayed imperative mood (see §7.5.4.1.2), which results in a statement prescribing a future event that will certainly occur rather than having the illocutionary force of a command.

(57) hɛna: do:ga: dijɛ:=bi: **kɛi**  
 go house:ABS build=DEL.IMP ASSER

‘(We/you) shall go build that school.’

<sup>6</sup> Note that the emphatic “NOT” in the translation of this clause is meant to represent the fact that the negator *ma:* is the predicate of the clause rather than being a reflection of the use of the particle *kɛi*.

- (58) hɛna: do:ga: dije:=bi:  
 go house:ABS build=DEL.IMP

‘Go build that school!’

#### 7.5.1.1.2 Prohibitive =ta:b ma: kɛi

Similarly, the prohibitive {=ta:bo:} and the mood particle {kɛi} may co-occur with specific formal and semantic properties. First of all, the negative verbal particle {ma:} appears post-verbally as the head of the predicate. Additionally, {=ta:bo:} is typically shortened to =ta:b, as in (59) and (60).

- (59) ka: gɛtɛɛ=**ta:b** **ma:** **kɛi**  
 FOC forget=PROH NEG ASSER

‘But don’t (ever) forget!’

‘One should not forget.’

- (60) ka:da ti=ta:b ma: kɛi  
 leave descend=PROH NEG ASSER

‘Don’t (ever) leave it behind.’

‘One should not leave it behind.’

(lit. ‘Don’t ever leave it and go down.’)

- (61) wo:ga:=ja: do:-wa:=**ta:bo:** **ma:** **kɛi**  
 do.thus:PST=TOP STAT-PST=PROH NEG ASSER

‘Don’t (ever) be like that.’

‘One shouldn’t do that.’

The semantic result of this construction is a general prohibition rather than a single order. As with the positive imperatives mentioned above, this serves to form a declarative clause which differs from a prototypical prohibitive or imperative mood.

#### 7.5.1.1.3 Rhetorical Questions

The particle {kɛi} may also occur in clauses which are morphologically marked by an interrogative enclitic to form explicitly declarative interrogatives, i.e. rhetorical questions. These are questions which bear the illocutionary force of an assertion, as in (62), where a

genuine question in (62)a questions the identity of an apparent attacker. The following clause by the same speaker in (62)b rephrases the question as a rhetorical question which asserts the answer to the initial question.

- (62) a. wai ko: a:bi sɛna:=jɛi  
 hey DEM:DIST who attack:PST=Q:N.PRS:EMPH
- b. sɛgai-jɛ: gɛ: sɛna:=jɛi kɛi  
 NAME 2:SG attack:PST=Q:N.PRS:EMPH ASSER
- ‘Hey! Who hit you? Sagai hit you, didn’t he!?’

### 7.5.1.2 Uncertain modality {ba:}

In contrast to {kɛi}, which marks certainty, the particle {ba:} is used to describe events that the speaker views as uncertain or dubious. The illocutionary force of statements formed by this particle range between assertions as in (63), to dubitative rhetorical questions as in (64), and finally to outright requests for information as in (65). The assertion in (63) additionally has the verbal form of the strong imperative for unknown reasons which require additional research. It may be that this imperative form may be used as an emphatic irrealis or apprehensive marking strategy.

- (63) kudu-mɛ:na:=ja: kɛ: lɛ: sɛ:bo: ba:  
 follow-1:FUT=TOP pig DEF:ERG attack:ST.IMP DUB
- ‘If I follow it, the pig might attack.’
- (64) du:lu-wa: ja: ba:  
 NAME-ABS DIR:VEN DUB/Q
- ‘Du:lu is coming.(?)’
- (65) ɛja:lɛ: ɛ:na: hɛ:-mi: hɛna: ba:  
 COORD:DU DEM where-ASS go Q
- ‘Where are those two going?’

The usage of this particle in (63) is clearly a statement, with no intonational or pragmatic features of a question; however, in (64) the utterance is accompanied by a rising interrogative

intonation, but is not a request for information. This may be viewed as a type of rhetorical question showing surprise or skepticism. Finally, the usage seen in (65) shows both rising intonation as well as a pragmatic context of information seeking.

The particle {ba:} is also used to form questions and statements regarding the internal states of others, presumably because of the inherent speculative nature of such statements. The formation of questions using the interrogative enclitic {=ja:} (cf. §7.5.3.3 on interrogative enclitics) is not possible with verbs which specifically describe internal states, as illustrated in (67), but {-ja:} is used to form questions from active verbs as in (68).

(66) ge: da: ma:ni ba:  
 2:SG sago hunger.for Q  
 'Are you hungry?'

(67) \*ge: da: ma:ni=ja:  
 2:SG sago hunger.for=Q:N.PRS  
 'Are you hungry?'

(68) ge: da mɛ:na:=ja:  
 2:SG sago eat:FUT=Q:N.PRS  
 'Will you eat?'

In assertions regarding the internal state of one's self, the particle {ba:} may be excluded, as in (69), but when questioning or describing the internal state of another, this particle must be used, as in (70) or (71). As in (71), an assertion may be marked by two mood particles to form a relatively certain declaration concerning the internal state of another.

(69) nɛ: ho:golo: kɛi  
 1:SG be.tired ASSER  
 'I am tired.'

(70) ge: ho:golo: ba:  
 2:SG be.tired DUB  
 'Are you tired?'

(71) ge: ho:golo: **ba:** **kɛi**  
 2:SG be.tired DUB ASSER

'You are tired.'

(72) \*ge: ho:golo: **kɛi**  
 2:SG be.tired ASSER

'I am tired.'

### 7.5.1.3 Exclamatory {jo:}

The third and final mood particle signifies emphatic assertions due to excitement, unexpectedness, insistence, or intensity. In (73) {jo:} illustrates surprise or emphasis regarding an event which is exciting and unfortunate (a pig which had been shot with an arrow managed to remove the arrow and attack the hunter!).

(73) ε-ta:-lo:lu=wa: kɛ: ε:na: bɛ:nɛ:-ja: do:ge **jo:**  
 happen-TEL-ASS.EV=TOP pig that:ABS arrow-ABS dig.out EXCL

'After that happened, then the pig took out the arrow!'

(74) [[ge:-φɛ:ni:]<sub>s</sub> [ka: a:lije:-bi **jo:**]<sub>PRE</sub>]<sub>FIN</sub>  
 2:SG-EXC FOC sleep-DEL.IMP EXCL

"You go ahead and sleep alone" (A.4.24)

In (74) on the other hand, the speaker is making an emphatic assertion that someone should stay behind and sleep in a bush camp rather than accompanying him to the village. In the example given in (74), {jo:} serves as an intensifier of the predicate. This is remarkable in that the predicate {ma:li:} is not verbal, but even more so in that the particle {jo:} precedes the predicate. As described in §6.2 and §6.3, these predicate particles follow the predicate in the overwhelming majority of cases.

(75) a:ge:=ja: a:ge: φɛφɛ-ja: **jo:** ma:li:  
 dog=TOP dog skinny-ABS EXCL much

'The dog, the dog was very skinny.'

This unusual placement of the particle remains unexplained, and highly unusual. It may be that {jo:} forms the head of the predicate, with {ma:li:} being appended as a modifier to the predicate rather than the reverse. Alternatively, {jo:} may in fact be a modifier of the argument rather than the predicate.

## 7.5.2 Hypothetical Modalities and Irrealis

Unreal scenarios may be represented by a variety of modalities which describe hypothetical situations which contradict actual events, possible future events, or prescribed behaviors.

### 7.5.2.1 *Counterfactual {-ba:bɛ}*

The first scenario mentioned, a hypothetical situation which is contrary to reality, may be expressed through the use of the suffix {-ba:bɛ}, which may ultimately originate from a combination of the morphemes {ba:} ‘DUB’ and either {=bi:} ‘DEL:IMP’. This compositional analysis seems quite unlikely from a synchronic perspective, however, since {-ba:bɛ} is no longer a phonologically independent particle, and there is no other context where a suffix follows the particle {ba:}. Semantically, the particle {ba:}, the suffix {=bi:} ‘DEL:IMP’, and the suffix {-ba:bɛ} all have similar functions in expressing specific types of modality. The particle {ba:} describes what might be, the enclitic {=bi:} what should be done, and {-ba:bɛ} describes what could have been if some real event were untrue (see also §7.5.1.2 on the dubitative-marker {ba:} and §7.5.4.1.2 on the delayed imperative {=bi:})). In this way, {-ba:bɛ} generally describes an event which is a consequence of a hypothetical, untrue circumstance.

For example, in (76) below, a speaker describes what would have happened if one man, Ka:la:ma:be:, had not been prevented from killing another man, Sa:goi (fortunately the speaker’s ancestor was able to intervene and prevent this occurrence). Had this occurred, then Ka:la:ma:be: would have eaten Sa:goi, and Sa:goi’s descendants, Diki:no: and the Ha:bila: clan, would not exist today.

(76) a. sa:goi-ja:      ka:la:ma:bɛ:-jɛ:    sɛdɛ    hɛna:-nɛ:      mɛi-**ba:bɛ**  
 NAME-ABS    NAME-ERG      kill      DUR-MED:IPFV    eat:HYPO-CF

‘Sa:goi, if Ka:la:ma:be: had killed him, he would have eaten him.’

b. ka:la:ma:be:    ɛ:na:      sɛna:-**ba:bɛ**  
 NAME            DEM:ABS    kill:PST-CF

‘Ka:la:ma:be: would have killed that (man).’

c. diki:no:    do:sa:      ma:      ɛga:lɛma:      do:-**ba:bɛ**  
 NAME    ACCOMP    NEG    be.nothing    STATE-CF

‘Diki:no: and the others would not be alive.’

d. i:                    ha:bila:    ɛga:lɛma:      do:-**ba:bɛ**  
 3:N.SG:MOD    NAME    be.nothing    STATE-CF

‘Those Ha:bila: people wouldn't be here.’

In this case, {-ba:bɛ} is used to describe an alternate past events (76) as well as an alternate present (76). Alternatively, a completely hypothetical scenario which does not presuppose or contradict any actual events may also be expressed with {-ba:bɛ}, as in (77) where the verb is also inflected for future tense.

(77) [do:go no:=wa:    sɛlɛ-si]<sub>MED</sub>    [bi:jo: ɛna:    a:mi:    ta:gobi-mɛ:na:-**ba:bɛ** jo:]<sub>FIN</sub>  
 house INDEF=TOP say-MED:PFV drum that:ABS PRO:ASS dance-1:FUT-CF      EXCL

‘Regarding the other house, (I would say,) "I want to go dance there with this drum!"’

Similar to other morphemes which contain bilabial consonants (e.g. the future morpheme {-mɛ:na:} in §7.3.2 and the completive morpheme {-jo:ɸo:} in §7.4.2.2), a bilabial phoneme in a preceding syllable will result in a fused form, such as the completive suffix {-jo:ɸo:} and the counterfactual suffix {-ba:bɛ} fusing into the form {-jo:ɸa:bɛ}. For a more detailed discussion, see §2.7.2.3 for more discussion of patterns of morphological allomorphy.

When hypothetical future events are grounded in actual events or intentions, rather than counterfactual musings, {-ba:bɛ} is not used, and instead the morphemes described below, {-jo:no:} and {-mɛi} are more appropriate.

### 7.5.2.2 *Cautionary/Possibility {-jo:no:}*

For statements warning against some undesirable event that may occur, the suffix {-jo:no:} (sometimes shortened to *-no:*) may be used to warn that this thing may happen. For example, the sentence in (78) was offered to me as a warning not to cut myself while preparing food.

- (78)   bulu-**wo:no:**  
          cut-**CAUT**  
          ‘(You) might cut (yourself)!’

While cautionary expressions such as in (78) seem to be the prototypical use for this suffix, some speakers have been observed to use verbs suffixed by {-jo:no:} to describe any kind of hypothetical event. For example, in (79) the speaker describes what he would do upon making a new bow, and uses {-jo:no:} as a more general irrealis-marker without the implications or warning seen in (78).

- (79)   na:-ja:           a:mi:           o:lo:-**no:**  
          animal-ABS   PRO:ASS       shoot-**IRR**  
          ‘I would shoot animals there.’

### 7.5.2.3 *Expectation and Prescription {-mei}*

In abstract procedural or prescriptive texts, the descriptions of what one should do are most often suffixed by the suffix {-mei}. Less commonly, {-jo:no:} or {-ba:bε} will be used as a strategy of talking about these hypothetical descriptions.

- (80) a. [to:ko-wε:   dijo:-**φei**<sup>7</sup>           di-si]<sub>MED</sub>  
          shelf-LOC   put-**COMP:HYPO**   PFV-MED:PFV  
          ‘One should put them on the shelf above the fire pit and then...’

---

<sup>7</sup> A bilabial phoneme in a preceding syllable will result in a fused form as in (144) where the morphemes {-jo:fo:} and {-mei} fuse into the form *-o:φei*. See §2.7.2 for more discussion of allomorphy.

- b. [mɛ:ki      ga:lɛ-**mɛi**]<sub>FIN</sub>  
vine.rope    shave-SIM-**HYPO**

‘One should shave the rope thin.’

Outside of these procedural descriptions, {-mɛi} is the most general semantically general than {-jo:no:}. Most often, {-mɛi} is used to express the possibility of an event without any assertions of intent or causation, as in (81).

- (81) to:mulu    ho:no-mi:=ja:      sa:nɛ-mɛ:na:      φili:      do:-**mɛi**      kɛi  
front      DEM:LVL-ASS=TOP    injure-PURP      go.up      PERF-**HYPO**    ASSER

‘In the future, it may come to be that something bad will happen.’

While the event described in (81) is clearly negative, the statement does not feature the cautionary meaning conveyed by {-jo:no:}, or the counterfactual interpretation of {-ba:bɛ}.

It is also worth noting that this hypothetical future suffix {-mɛi} is homophonous with the third person form of the indicative future suffix {-mɛi}. These two morphemes may be differentiated by person agreement, which only occurs with the indicative future suffix, and is not found in the hypothetical future, as shown by the examples (82) and (83) which reference different person subjects, but do not change in form.

- (82) nulu=wa:    jɛ:bi    da:si-**mɛi**  
night=TOP    snake    roam:N.SG-**HYPO**

‘Since it’s night, the snakes might come out.’

- (83) su:da:    ti-**mɛi**  
fall      descend-**HYPO**

‘(You) might fall.’

### 7.5.3 Questions and Uncertainty

Questions in Eibela are primarily marked by sentence final enclitics, but may also be formed by predicative interrogative pro-forms. Interrogative enclitic forms are determined by tense, while non-verbal interrogative predicates do not show any tense, aspect, or mood specification. Sentence intonation is not particularly indicative of most interrogative clauses.

For further information on questions formed by the particle {ba:} described in §7.5.1.2. For more information regarding sentence level intonation, also see §2.6.4, and for a description of interrogative pronouns, see §4.1.9.

### 7.5.3.1 *Person Neutralization*

In interrogative clauses in the future tense, the person agreement distinction between third and non-third person is neutralized. In declarative clauses, the future tense-marking suffix {-mɛ:na:} has two forms depending on the person of the subject (see §5.6), as in (84).

- (84) a. [ko:lu-wa:]<sub>s</sub> to:bo: [gi:ja:]<sub>x</sub> kudu mi-jɛi kɛi  
 man-ABS all 2:PL follow come-3.FUT EMPH  
 ‘All of the men will follow you.’
- b. [[nɛ: la:]<sub>s</sub> [a:ga:]<sub>x</sub> [mi-jɛ:na: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG DEF today:ABS come-1:FUT ASSER  
 ‘(I said) "I will come today.”’ (A.4.50)

However, in interrogative clauses, the two future forms are neutralized as in (85).

- (85) a. no:lo:-mo: wa:lɛ-mɛ:na: kɛi no:lo:-mo:=wa:  
 other-DAT tell-FUT ASSER other-DAT=Q:N.PRS  
 ‘Is it alright if he tells it to others?’ (lit. ‘Is he going to tell it to others?’)
- b. i:sa: togo: a:bi wa:lɛ-mɛ:na:=jɛi  
 ground clay who teach-FUT=Q:NON.PRS:EMPH  
 ‘Who will teach us about the hard earth?’

### 7.5.3.2 *Interrogative, Conditional and Topic Clauses*

Topic clauses describing causal and conditional clauses have properties very similar to interrogative clauses marked by the enclitic {=ja:}. In all cases, the clause is formally marked by a clause-final enclitic {=ja:}. This may not be surprising given that considerable functional and formal overlap has been shown cross-linguistically between these three clause types (Haiman, 1978). In (86) a conditional clause raises a hypothetical scenario which defines the real world reference of the main clause.

(86) [[gɛ: sa:wa sugu:lu:-mɛ:na:=**ja:**]<sub>TOP</sub> ɛ:lɛmɛ:ntri: ti:sa-ja: kɛlɛ=ma:]<sub>FIN</sub>  
 2:SG child attend.school-FUT=TOP elementary teacher-ABS find=IMP

‘If your children are going to attend school, then find a teacher!’

In (87) a topic clause similarly establishes a premise for the following clause, which narrows the relevance of the main clause to the domain established by the topic clause. This conditional meaning which presents a possible scenario without asserting the truth of that scenario is similar to a polar question which presents a scenario without an assertion of whether or not the statement is true.

(87) [[ɛja:lɛ: ɛ:na: ja: do:-si=**ja:**]<sub>TOP</sub> ja: ja: do:-wa:=bo:]<sub>FIN</sub>  
 COORD:DU DEM DIR:VEN STAT-MED:PFV=TOP DIR:VEN DIR:VEN stay-PST=INF

‘Those two having come, they came here and stayed.’

An interrogative clause formed by the enclitic {=ja:} may therefore be seen as an analogous clause, which presents a possible scenario in an independent clause, with the illocutionary force of a question. While the formal similarity of the interrogative enclitic {=ja:} and the topic enclitic {=ja:} in addition to the semantic similarities between these three clause types are suggestive of a historical relationship, they must be considered to be synchronically distinct constructions. See also the independent sections on conditional and topic clauses (See also §9.3.4 on topic clauses).

### 7.5.3.3 Interrogative Enclitics

Table 7: Interrogative Enclitics

	Non-Present		Present
Emphatic	=jɛi	=ɛdɛi	=lɛi
Non-emphatic	=ja:	=ɛdɛ:	=la:

In interrogative clauses which have a verbal predicate, mood and tense information is expressed by one of three pairs of sentence final enclitics. These enclitics are characterized by a

sentence-final position, interrogative mood, and a two-way contrast between emphatic and non-emphatic forms.

These interrogative enclitics occur sentence finally, which is usually the position immediately following the predicate of the clause, as in (88). These enclitics are used for both content questions with interrogative pronouns, as in example (88), and polar questions, as in example (85)a and (89).

(88)	<i>di:k-a:</i>	<i>osɛ:mi:</i>	<i>sɛ:-ja:=ja:</i>
	NAME-ABS	concerning.what	say-PST=Q:N.PRS
	'What was Dik talking about?'		

Additionally, the status of these mood-markers as enclitics, rather than particles like the emotive mood particles described in §7.5.1, or suffixes such as most of the verbal morphology presented in this chapter is supported by the allomorphic variation shown in (85)a, where the form {=wa:} is conditioned by a preceding back vowel. The influence of the preceding vowel shows that the mood enclitic is phonologically dependent on the preceding stem; however, the syntactic domain conditioning the position of these morphemes is the clause rather than a particular word class or clausal constituent. These enclitics differ from affixes, which attach to specific word classes and/or clausal constituents, and sentence particles, which are not phonologically dependent on another word stem.

#### 7.5.3.3.1 Emphatic and Non-Emphatic Enclitics

Each of the three interrogative enclitics in Table 2 has a two-way contrast between emphatic and non-emphatic clauses. When a question is particularly emphatic, the final vowel of the enclitic is realized as a diphthong, resulting in the forms {=jei}, {=ɛdɛi}, and {=lei}. This emphasis may be used in varying contexts which warrant particular prominence, such as a sign of emotional involvement, a means of narrative focus, or simply shouting over a distance.

An example of emotional involvement is seen in example (89), where a speaker is reciting a poetic dirge about where the spirit of a deceased relative might have gone.

(89) *ge: da: mo:=ja: tebe do:=ta: hena:=lei*  
 2:SG sago base=TOP descend PERF=TEL go=Q:PRS:EMPH

‘Are you going down to be by the roots of the sago trees?’

Similarly, rhetorical questions may be used to introduce prominent themes within a narrative as in (85)b, where the speaker is describing the early efforts to build roads and an airstrip, and the need for specialized outside knowledge. A final example in (90) is a question shouted over a long distance.

(90) *ga:ga: he:-mi: hena:=lei*  
 2:DU where-ASS go=Q:PRS:EMPH

‘Where are you (du) going?’

Each of these examples, (89) to (90), demonstrates varying types of prominence which may condition the use of the emphatic interrogative enclitics. It is also worth noting that the declarative particle {*kei*} in declarative clauses is in many ways similar in terms of illocutionary force and pragmatic usage (see §7.5.1.1 on the particle {*kei*}).

#### 7.5.3.3.2 Non-present Interrogative Enclitics {=*ja:*} and {=*jei*}

The enclitics {=*ja:*} and {=*jei*}, and the corresponding allomorphs =*wa:* and =*wɛi* following back vowels, are used to form questions with past or future time reference, as in (88), (91), and (92).

(91) *djo:b-a: he:-mi: a:nɛ:=ja:*  
 NAME-ABS where-ASS go:PST=Q:N.PRS

‘Where did Job go?’

(92) *wa:gɛ-mɛ:na:=ja:*  
 do.what-FUT=Q:N.PRS

‘What will we do?’

The enclitics {=*ja:*} and {=*jei*} may be used for content interrogatives, as in (91) and (92) above, and for polar interrogatives, as in (93) below.

- (93) nɛ: jɛ:=bi:=**jɛi**  
 1:SG DI:VEN=DEL:IMP=Q:N.PRS:EMPH  
 ‘Shall I come?’

#### 7.5.3.3.3 {=ɛdɛ:} and {=ɛdɛi}

The enclitics {=ɛdɛ:} and {=ɛdɛi} have a very similar function to the previously mentioned enclitics {=ja:} and {=jɛi} pair. As in (94) and (95), {=ɛdɛ:} and {=ɛdɛi} are used in interrogative clauses with non-present time reference.

- (94) hɛ:-mi: a:nɛ:=**ɛdɛ:**  
 where-ASS go:PST=Q:N.PRS  
 ‘Where did she go?’

- (95) gɛ: hɛ:ga:=**ɛdɛi**  
 2:SG do.how:PST=Q:N.PRS:EMPH  
 ‘What happened to you!?’

It is also similar in that an emphatic diphthongized form may be used, as in (95).

The enclitics {=ɛdɛ:} and {=ɛdɛi} may be used for content interrogatives, as in (94) and (95) above, but are not attested in polar interrogatives. {=ɛdɛ:} also differs from {=ja:} by having a non-interrogative function. The enclitic {=ɛdɛ:} is similar to the particle {ba:} in marking both interrogative clauses and dubitative declarative clauses (see §7.5.1.2 on the particle {ba:}). In (96) {=ɛdɛi} is used in a declarative statement to cast doubt on the statement and weaken any possible claim of the truthfulness of the statement.

- (96) a. wo:ga:=**ɛdɛi**  
 do.thus:PST=Q:N.PRS:EMPH  
 ‘Maybe that happened, ...’  
 b. nɛ: ma: bo:bo: kɛi  
 1:SG NEG see:PST ASSER  
 ‘...I didn’t see.’

Unlike the enclitics {=ja:} and {=la:}, {=ɛde:} does not have any apparent allophonic variation. However, due to the sentence-final position and the opposition between emphatic and non-emphatic forms is sufficient to place this enclitics in the same class of the interrogative enclitics {=ja:} and {=la:}.

#### 7.5.3.3.4 {=la:} and {=lei}

The interrogative enclitic {=la:} is seen in interrogative clauses with present time reference, as in (90). Like the other interrogative enclitics in this paradigm, a contrast exists between an emphatic diphthongized form and a non-emphatic form, as seen in the contrast between examples (90) and (97).

- (97) wa:ge-mɛ:na:=ta: wo:gu:=la:  
do.what-FUT=TEL do.thus=Q:PRS

‘Why are you doing that?’ (lit. ‘You doing that in order to do what?’)

The enclitics {=la:} and {=lei} may be used for content interrogatives, as in (97) above, and for polar interrogatives, as in (90).

#### 7.5.3.4 *Interrogative Pro-forms in Predicate Roles*

The two pro-verbal interrogative roots {wa:ge} and {hɛ:gu:} are the most poly-functional interrogative predicates, while other interrogatives such as {ɛ:bi} ‘who/what’, {ɛibɛ} ‘who/what’ and {hɛ:} ‘where’ have more limited predicative functions. Predicate roles in Eibela can be loosely categorized into three types, non-main clause predicates, medial clause predicates, and final clause predicates. Non-main clause predicates head a dependent clause which is morphologically marked by subordinating morphology. Medial predicates are predicates or a medial clause with clause chaining morphology. Lastly, final predicates are the predicate of an independent clause or the final clause of a clause chain. Final predicates are the only one of these predicate positions to present the full array of verbal tense, aspect, mood, and evidentially distinctions (see also chapter 6 on main clause predicate structure and chapter 9 on clause types for a more detailed description of non-main clauses and clause chaining). Predicates may also be complex, meaning they may be formed from multiple verb stems (see

§6.4 on complex predicates). Of these stems, only the final verb stem of the predicate is inflected with the full range of tense aspect, modality and evidentiality morphology.

Only the interrogative pro-verbs {hɛ:gu:} and {wa:gɛ} are attested in non-main clauses and non-final positions within a complex predicate, and in these positions, both interrogative pro-verbs may bear a wide array of verbal morphology. The contrast between these two pro-verbs appears to be a difference in agency. In most contexts, the lexeme {wa:gɛ} is best translated as ‘do’ and describes a deliberate action carried out by an agent. In contrast, the lexeme {hɛ:gu:} is generally used in more indefinite or vague contexts where an agent is not specified, and the translation ‘happen’ is more appropriate.

#### 7.5.3.4.1 Interrogative Subordinate and Medial Predicates

In non-main clauses, {hɛ:gu:} and {wa:gɛ} appear in a variety of clause linking constructions such as the past purposive seen in (98) and the consequential medial clause seen in (99).

- (98) **wa:gɛ**-mɛ:na:=ta: wo:gu:=la:  
do.what-FUT=TEL do.thus=Q:PRS  
‘Why did you do that?’  
(lit. ‘You did that in order to do what?’)
- (99) [**hɛ:gu:** bɛda:]<sub>MED</sub> [moga:ga: do:gɛ di]<sub>FIN</sub>  
what.happen CONS bad dig.out PFV  
‘Why did you dig up the bad ones (potatoes)?’  
(lit. ‘What happened that lead you to dig up bad ones.’)

In both cases, the clause might be translated as ‘why’, however the morphology linking the clauses makes clear that (98) requests information about a subsequent event which is the purpose for an action, while (99) requests information about a preceding cause of an event.

As a non-final stem in a complex predicate, the semantic contrast between {hɛ:gu:} and {wa:gɛ} is more subtle since the final verb stem of the predicate tends to override subtle semantic features such as agency and definiteness. In both cases, the interrogative element of the predicate functions as a descriptor of manner as in (100) and (101).

(100) dija: mi-je:na:=ja:      **hε:gu:**      togo:-mε:na:=ja:      ε:se=ja:  
 take    come-1:FUT=TOP    what.happen    lift-1:FUT=Q:N.PRS    bilum=TOP

‘If we are going to bring it, how will we lift that bilum (string bag)?’

(101) **[[wa:gε    mεnε:na:=εdεi]<sub>PRE</sub>]<sub>FIN</sub>**  
 do.what    go:FUT=Q:N.PRS:EMPH

‘How do I go there?’ (A.3.61)

#### 7.5.3.4.2 Interrogative Final Predicates

The final predicate position offers the greatest number of possibilities in terms of interrogative pro-forms. Verbal as well as non-verbal pronouns may appear as a final predicate, although non-verbal predicates do not appear with verbal morphology.

##### 7.5.3.4.2.1 Interrogative Pro-verbs

As final predicates, {hε:gu:} and {wa:gε} generally appear inflected by an interrogative enclitic as in (103), but there are instances where this omitted as in (102). Clauses headed by both {hε:gu:} and {wa:gε} appear to be intransitive, with differing semantic specification for the S argument.

(102) gε:      si:jebe:ki: ko:      **hε:ga:**  
 2:SG    shin      DEM:DIST    what.happen:PST

‘What happened to your shin?’

(103) gε:      **hε:ga:=εdεi**  
 2:SG    what.happen:PST=Q:N.PRS:EMPH

‘What happened to you?’

The S argument of {hε:gu:} is typically a patient as in (102) and (103), whereas an S argument of {wa:gε} is an agent as in (104).

(104) **[[wa:gε-mε:na:=ja:]<sub>PRE</sub>]<sub>FIN</sub>**  
 do.how-FUT=Q:N.PRS

‘What will we do?’ (A.3.60)

#### 7.5.3.4.2.2 Interrogative Non-verbal Predicates

The interrogative pronouns {ε:bi} and {hε:} also appear in predicate positions as well as {εibε}, which appear to be a specialized form of {ε:bi} which only occurs as an interrogative predicate, but does not display the morphological properties of a verb. In (105) and (106), {ε:bi} and {εibε} appear to be in a similar semantic and function in a predicate position, but unlike {ε:bi}, {εibε} is not attested in argument roles.

(105) gε:      **ε:bi**  
2:SG    who  
  
'Who are you?'

(106) gε:      wi:-ja:      **εibe:**  
2:SG    name-ABS    what  
  
'What is your name?'

In questions seeking information on the static location of an argument, {hε:} may also be used as a predicate as in (107) and (108).

(107) stalo:n-a:      **hε:**  
NAME-ABS    where  
  
'Where is Stalone?'

(108) no:-wa:      **hε:**  
INDEF-ABS    where  
  
'Where's the other one?'

#### 7.5.3.5 Interrogative Argument Modifiers {ε:bi}, {hε:}, {hε:gu:}

Two of the interrogative pro-forms discussed in §4.1.9 are used as argument modifiers as well as one of the interrogative verbs discussed above. These argument modifiers occur in questions as possessors, locations, qualities, and quantities of arguments. The interrogative {ε:bi} 'who/what' may appear in a suffixed form with the possessive suffix {-na:} to refer to a possessor as in (109). A similar example is a comitative modifier as in (110).

(109) ke:     **a:bi**-na:     wε  
 pig     who-POSS     this  
 ‘Whose pig is this?’

(110) **ε:bi**     ba:lε  
 what     COORD  
 ‘With whom?’

The interrogative pro-verb {hε:gu:} is also used in interrogative constructions regarding the quality or quantity of a noun phrase. When {hε:gu:} is used in a relative clause as in (111), it denotes a quality of that argument.

(111) mama     **hε:ga:**                     **la:**     bεbε:na:=ja:  
 picture     what.happen:PST     DEF     see:FUT=Q:N.PRS  
 ‘Which pictures do you want to see?’

This may be compared to other verbs in this relative clause construction, which uses a past tense inflected verb as a nominal modifier (see also §9.3.2 on relative clauses).

(112) ko:             **kεde:-ja:**     **la:**     ko:             no:-wa:     wε             no:-wa:     ho:no:  
 DEM:DIST     sit-PST     DEF     DEM:DIST     INDEF-ABS     DEM:PROX     INDEF-ABS     DEM:LVL  
 ‘Those ones sitting, this one here (and) that other one there’

The root {hε:gu:} may also be inflected by the quantifying suffix {-φεija:} to denote the quantity of an argument in a question as in (113) and (114).

(113) **hε:gu:-φεija:**                     da:=ja:  
 what.happen-QUANT     lie=Q:N.PRS  
 ‘How many are there?’

(114) ha:ge:=ja:     **hε:gu:-φεija:**                     do:-mε:na:=ja:  
 time=TOP     what.happen-QUANT     stay-FUT=Q:N.PRS  
 ‘How long will they stay?’

This follows the usage of the quantifying suffix in declarative clauses like (115) below.

(115) ha:ge: a:nε ε:meli:-**φειja**: di-meib  
 day two one-QUANT get-HYPO

'One should get them (sago leaves) for three days.'

#### 7.5.4 Imperatives and Obligation

Commands, obligations and prohibitions in Eibela are expressed in four morphological categories based on the degree of obligation and timing of the expected action. Two of these classes express basic commands, differentiated by whether the action should be carried out immediately or at a later time and are described in §7.5.4.1. Another is a prohibitive used specifically for negative commands described in §7.5.4.2. The final function expresses general obligations or duties, but does not necessarily refer to a specific action which shall be carried out or a specific time-frame in §7.5.4.3.

##### 7.5.4.1 *Commands*

Commands are divided into immediate and delayed commands. Immediate commands may additionally express exclamatory emphasis.

##### 7.5.4.1.1 Immediate Commands {=ma:} and {=mo:}

Immediate commands are expressed by an imperative-marking enclitic which occurs following the predicate. The immediate imperative {=ma:} demands immediate action as in (116) through (118), and are limited to second person addressees which are the subject of the imperative predicate.

(116) [nε: seβε ε lε-ki:]<sub>MED</sub> bi:nou φili:**=ma:**]<sub>FIN</sub>  
 1:SG caretaker do do-CONT breadfruit ascend=IMP

'My midwife/caretaker/godmother said (to me), "Go up the breadfruit tree!"'

(117) togo:la: kolo ε-φo:**=ma:**  
 door:ABS open do-COMP=IMP

'Open the door!'

(118) [[gɛ so:wa sugu:lu:-mɛ:na:=ja:]<sub>TOP</sub> ɛ:lɛmɛ:ntri: ti:sa-ja: kɛlɛ=**ma:**]<sub>FIN</sub>  
 2:SG child attend.school-FUT=TOP elementary teacher-ABS find=IMP

'If your children are going to go to school, then find a teacher!'

#### 7.5.4.1.1.1 Strong Imperatives

Particularly urgent or emphatic immediate commands may be expressed by an exclamatory form of the immediate imperative, {=mo:}. The form and function and form of this strong imperative form mirrors the exclamatory particle {jo:}. The command in (119) carries more force and urgency than a similar command formed by the neutral form {=ma:}, but is otherwise identical in meaning and is likewise limited to second person addressees which are the subject of the imperative predicate.

(119) ɛ:sɛ ko: ka: tɛka:**=mo:**  
 string.bag DEM:DIST FOC take.down=ST.IMP

'Take down that bag!'

#### 7.5.4.1.1.2 Suppletion

A small number of verb forms which display suppletive forms for both future and past tense forms also have suppletive immediate imperative forms. These forms are irregular, but the final vowel retains a regular contrast between a neutral final /a:/ and an exclamatory final /o:/. For example, the verb {hɛna:} 'to go' does not have predictable tense or imperative forms, as shown previously in (13), and reprinted below as (120) with the additional example of the imperative form in (120)d.

(120) a. i:ja: jɛ:ba: ɛime do:ge: lɛ-li: **a:nɛ:**  
 3:PL tree:ABS already dig.out do-SIM go:PST

'They were already going and digging up trees.'

b. a:bo-wa: do:lo **hɛna:** kɛi  
 bird-ABS fly go ASSER

'The bird is flying (away).'

c. ni:ja: ha:ne      mu:lu:-mɛ:    **mɛnɛ:na:** kei  
 1:PL water:LOC bathe-PURP go:1:FUT ASSER

‘We are going to bathe.’

d. **ma:la:/ma:lo:**

go:IMP/go:ST.IMP

‘Go!’

Similarly the verb ‘to stay/to sit’ has distinct unpredictable tense and imperative forms as shown in (14) above, and reprinted as (121).

(121) a. ni:ja:    keɛɛ:gi: **a:si**  
 1:PL    NAME    stay:PST

‘We stayed at Wawoi Falls’

b. nɛ:    go:dɛ    ba:le    **sa:**    kei    la:  
 1:SG    God    COORD    stay    ASSER    QUOT

‘(I said) "I am with God"’

c. nɛ:    do:gɛ:      **mɛɛɛ:na:**  
 1:SG    house:LOC    sit:1:FUT

‘I will stay in the house.’

d. **mɛɛɛ:ja:/mɛɛɛ:jo:**

sit.down:IMP/sit.down:ST.IMP

‘Sit down!’

Other suppletive examples include:

*na:* ‘consume’      →      *ma:ja:/ma:jo:*      ‘eat:IMP/eat:ST.IMP’

*mi* ‘come’      →      *mina:/mino:*      ‘come:IMP/come:ST.IMP’

*dimi:* ‘give’      →      *dimi:na/dimi:no:*      ‘give:IMP/give:ST.IMP’

#### 7.5.4.1.2 Delayed Imperative {=bi:}

Commands which are less urgent or meant to be carried out at a later time are inflected by the enclitic {=bi:}. This enclitic is not limited to second person subjects, and is additionally used for both first and third person subjects as seen in (122) through (124) below.

- (122) di-mɛ:        hɛnɛ:=bi:        kɛi  
take-PURP    go=DEL.IMP    ASSER

‘Let's go and get it (later)!’

- (123) sɛ:li        konulu=bi:        kɛi  
properly    take.care=DEL.IMP    ASSER

‘Take care of it properly (for an extended time)!’

- (124) ɛ:        ga:lo:        jɛ:=bi:  
yes        afternoon    come=DEL.IMP

‘Yes, (he) shall come in the afternoon.’

Third person jussive uses like (124) indicate obligation or expectation. For example, it may have been previously agreed or commanded that this action should take place. In questions, the delayed imperative may be used to request permission or ask about potential obligation, as in (125).

- (125) nɛ:        jɛ:=bi:=jɛi  
1:SG    DIR:VEN=DEL.IMP=Q.N.PRS:EMPH

‘May I come?/Should I come?’

The use of {=bi:} may also be used as a politeness strategy as in (126), where a church congregation is asked to close their eyes before a prayer.

- (126) si:-ja:        sugu:=bi:  
eye-ABS    close=DEL.IMP

‘Close your eyes!’

The delayed imperative {=bi:} is used despite the obvious desire for the action to be carried out immediately. This frames the command as more polite and less authoritative than the use of the immediate imperative {=ma:}.

#### 7.5.4.1.2.1 Morphophonology

The enclitic {=bi:} and the suffix {-li:} described in §6.4.2.2 regularly accompany the raising of a vowel preceding the bound morpheme as a simple form of regressive vowel harmony. When the final vowel of a verb stem is the low vowel /a, a:/, it is raised, and if necessary lengthened, to the mid vowel /ε:/. This can be seen by comparing the root {da} ‘lie’ in (127) to the stem *dε:* in (128) below.

- (127) *sa:-ja: dε:φε bεda:-lo:lu=wa: ili: da=ta: bεda:-si*  
 rafter-ABS measure see-ASS.EV=TOP suffice lie=TEL see-MED:PFV

‘Measure the roof sticks and see if it would be alright.’

- (128) *ε: ka: a:li dε:=bi: kei*  
 yes FOC sleep lie=DEL.IMP ASSER

‘Yes, you go ahead and sleep (here)’

Another example is illustrated by the root {ja:} ‘DIR:VEN’ in (129) and (130).

- (129) *ε: wa: ε: ka: la: ja: kei*  
 3:SG DIR:AND 3:SG FOC DEF DIR:VEN ASSER

‘That one there, that one came.’

- (130) *ε: ga:lo jε:=bi:*  
 yes afternoon DIR:VEN=DEL.IMP

‘Yes, (he) shall come in the afternoon.’

#### 7.5.4.2 Prohibitive {=ta:bo:}

Negative commands, or prohibitives, are expressed by the addition of the enclitic {=ta:bo:} (=ta:b in fast speech) to the root. These commands prohibit a certain course of action, as in (131) through (133) below, and are only attested with second person subjects.

(131) wo:gu:=**ta:bo**:  
do.thus=PROH  
'Don't do that!'

(132) hi:je:=**ta:bo**:  
play=PROH  
'Don't play!'

(133) ta:li:=**ta:bo**:  
grasp=PROH  
'Don't grasp it!'

The allomorph =*ta:b* typically occurs in fast speech when the verb form is not the final element of the clause. This may occur if a sentence final mood particle follows the predicate as in (134).

(134) dijo:=**ta:b**      kei  
put=PROH      ASSER  
'Don't put (it there)!'

This reduced form most commonly occurs in a specialized idiomatic construction shown in (135). In this construction, the form =*ta:b ma: kei* is fixed, and is not regularly compositional. As in (135), this construction is used for general prohibitions rather than the prohibition of a specific action at a specific moment.

(135) ha:bila:    gi:ja:      to:-wa:      kuluφeija:-ja:    ne:-mo:    sele=**ta:b**      **ma:**    **kei**  
NAME    2:PL-ABS    speech-ABS    angry-ABS      1:SG-DAT    say=PROH    NEG    ASSER  
'You Ha:bila:, you must not speak angry words to me.'

Whereas the basic prohibitive enclitic would be used to prohibit a specific speech-act, i.e. *sele=ta:bo*: 'Don't say that!', the specialized construction in (135) is a general prohibition of a certain kind of behavior for an extended time period.

### 7.5.4.3 *Duty and Obligation* {=*moko:no:*}

A final strategy of prescribing an action is the enclitic {=*moko:no:*}, which expresses deontic modality, i.e. duty or obligation. It is useful to compare this to the hypothetical modality described in §7.5.2.3. While both enclitics describe an action which is expected to occur and are not limited to second person commands like the immediate imperative {=*ma:*}, there is a clear contrast in deontic versus epistemic modality. In (136) the event is expected because of social obligation. It is expected that a certain person will do the washing because it is that particular person's responsibility.

- (136) *tluka tla:ge=moko:no:*  
clothes wash=DEO  
'(She) should wash the clothes (because it is expected of her).'

- (137) *su:da: ti-mei*  
fall go.down-HYPO  
'You might fall.'

In contrast, the likelihood of falling expressed in (137) by {-*mei*} is due to external non-social factors such as a steep slope or slippery conditions. A deontic expression may be negated, as in (138).

- (138) *moga:ga: ma: ha:=moko:no:*  
sin NEG wipe.away=DEO  
'(They) should not have to wipe away their sins.'

This clause is from a sermon which states that humanity is no longer required to cleanse themselves of sin because of the sacrifice of Jesus Christ.

In questions, this deontic construction is also used to establish permission or expectation as in (139) and (140). In (139) a speaker is unsure of whether or not some meat has been placed for them to eat, and is asking whether or not they are expected to take it.

(139) na: wε nili: di=**moko:no**:=wo:bo:=la:  
 meat this 1:PL:EMPH take=DEO=INF=Q:PRS

'Should we take that meat?'

(140) wa:lε=**moko:no**:=wa:  
 tell=DEO=Q:N.PRS

'Should I tell a story?'

Similarly, a consultant asked the question in (140) when it was unclear whether or not she was expected to tell a story.

Both epistemic and deontic modalities express a general possibility or expectation unbound to any specific instance, which is distinct from the commands described in §7.5.4.1 which refer to a specific event. In this respect, they are more similar to the construction used for general prohibitions, =*ta:b ma: kei*, in §7.5.4.2. While =*ta:b ma: kei* expresses a general prohibition, =*moko:no* expresses a general obligation.

## 7.6 Evidentiality

In Eibela, a speaker's source of information is expressed in four evidential categories expressing direct, inferred, and reported knowledge, as well as direct quotations. This set of four distinctions corresponds to a C3 evidentiality system as described by Aikhenvald (2006a). These evidentials are organized into three morphosyntactic systems. The direct evidential is a suffix which is incompatible with tense morphology, and only occurs with third person subjects. The inferred and reported evidentials are enclitics which may co-occur with tense, aspect and mood morphology, and occur with all persons. Finally, the quotative evidential category is a special predicate which may take limited verbal morphology and follows a direct speech report. A verb may be morphologically and semantically unmarked for the category of evidentiality, in which case information source is not specified as in (145). If an event has been witnessed visually or aurally by the speaker, the direct evidential {-sa:} is present as in (141) and (142). Statements based on inferences and indirect evidence are specified with the enclitic {=jo:bo:}, as in (143). Finally, hearsay or reported information is specified by the enclitic {=jo:nε:} as in (144).

- (141) di-**sa**:-bi:=ja:  
 take-**3:DR-D.S=Q.N.PRS**  
 'Did he take it?' ('Did you see him take it?')
- (142) ε: di-**sa**:-bi: kei  
 yes take-**3:DR-D.S** ASSER  
 'Yes, (he) took (it).' 'Yes, I saw him take it.'
- (143) di=jo:bo:  
 take=**INF**  
 '(He) took (it).' ('I infer that he took it.')
- (144) di=jo:nε:  
 take=**REP**  
 '(He) took (it).' ('I have been told he took it.')
- (145) ma: di  
 NEG take  
 '(He) didn't take (it).'

The information source of a speaker may also be unspecified, as seen in (145). The use of an evidential does not appear to be obligatory, although it is more common in contexts where the information source is viewed as more relevant or possibly ambiguous. Where a third person actor is known in a discourse, and the context makes it clear that the speaker must have witnessed the information, then the direct third person evidential {-sa:} is unlikely to be used. Where a third person actor is introduced, or is the unexpected subject of a clause, the direct, inferred, or reported evidential is used. In clauses describing an action which is directly witnessed by a speaker and which includes a first or second person subject, the direct evidential is not used. The result of these conditions is that evidentials are almost exclusively present in clauses with third person subjects. The only clear instances of an evidentiality-marked predicate with a non-third person subject is the indirect evidential {=jo:bo:} in (146), which described an event which knocked the speaker unconscious, and was therefore not directly witnessed.

- (146) nɛ:      su:da:    ti-nɛ:=jo:bo:  
 1:SG    fall      descend-PST=INF  
 'I fell.' (non-witnessed)

The unmarked option of a predicate with no evidential marker, as in (145), is possible if the information source of the speaker is clear or if the speaker does not wish to specify.

### 7.6.1 Direct Experience {-sa:}

An event which was directly experienced by the speaker through visual or auditory means, and which is performed by a third-person agent, may be expressed by a verb-stem and the suffix {-sa:} as in (147) and (148). This presence of the direct evidential neutralizes the expression of tense in a verb. In past and present tense contexts, no tense-marking co-occurs, and the predicate is formed from the uninflected form of the verb root and the direct evidential as in (147). The direct evidential is not attested in future tense contexts. If the direct evidential examples in (147) and (148) are compared to (149), (150), and (151), it can be seen that the verb root has three distinct forms.

- (147) mo:ti    hɛ:bɛ    ka:      tulu      **hɛnɛ-sa:-bi:**  
 close    side    FOC    fall      **go-3:DR-D.S**  
 'It fell close to the hut.' (visible)

- (148) i:                    ɛna:            ha:nɛ            mu:lu:-mɛ:    **hɛnɛ-sa:**    la:      kɛi  
 3:N.SG:MOD    DEM:ABS    water:LOC    bathe-PURP    **go-3:DR**    COP    ASSER  
 'They are going to bathe.' (visible)

- (149) nɛ:      a:li-mɛ:      **hɛna:**    kɛi  
 1:SG    sleep-PURP    **go**      ASSER  
 'I am going to sleep.'

- (150) ɛ:na:    **hɛna:**    φili:      do:-wa:  
 DEM    **go**      ascend    STAT-PST  
 'And then they had arrived.'

(151) i:            ena:            ha:nɛ            mu:lu:-mɛ:ni   a:nɛ:        kɛi  
           3:N.SG:MOD   DEM:ABS    water:LOC   bathe-FUT   **go:PST**   ASSER

‘They are going to bathe.’

A bound root form is suffixed with the direct evidential suffix in (147) and (148). This bound form differs from a free form inflected for past tense in (151) and the free form in (149) and (150) which is used for present tense as in (149) and as an uninflected free form in non-final positions within a complex predicate as in (150). Despite the lack of tense morphology, the mere fact that the semantics of the direct evidential means that the event would be immediately apparent if it were occurring presently and ambiguity is therefore very unlikely.

A clause with a direct evidential may also be negated, as in (152), which indicates the speaker has direct evidence that the event did *not* occur.

(152) i:ja:        nɛ:        mi-ja:=ja:        **ma:**        ili:        bɛdɛ-**sa:**-bi:  
           3:PL    1:SG    come-PST=TOP   **NEG**    suffice    see-**3:DR**-D.S

‘They didn’t realize that I had come.’

### 7.6.1.1 *Pro-verb {ɛ}*

A pro-verb {ɛ} is used as a predicate marked with a direct evidential to describe speech reports and arrivals. In this context, the meaning of {ɛ} is much more restricted than in other contexts where {ɛ} is a generic pro-verb with no substantial semantics of its own.

#### 7.6.1.1.1 Speech Reports

The root {ɛ} can be used with {-sa:} to describe a directly experienced speech report. This is one of several strategies of forming a speech report (see also §9.5 for further discussion of speech reports). This most often function to frame a direct or exact quotation, as in (153) and (154).

(153) gɛ:            hɛ:ga:=ja:            **ɛ-sa:**  
           2:SG        how:PST=Q:N.PRS    **do-3:DR**

‘‘What happened to you?’’ he said.’

(154) [[ha:geɛbo:ja=ja:]<sub>TOP</sub> [ɛ:]<sub>A</sub> [waija:=ja: hɛna: kɛi]<sub>O</sub> [ɛ-sa:-bi]<sub>PRED</sub>]<sub>FIN</sub>  
 morning=TOP 3:SG NAME=TOP go ASSER do-3:DR-D.S

‘In the morning, he said, “I’m going to Lake Campbell” (A.4.22)

The predicate *ɛsa:* can additionally be used for generic speech reports, as in (155). In this utterance, the speaker is not referring to any specific speaker, and is instead stating that the story he has told is commonly recounted as a folk tale.

(155) ɛ: ba:ge wa:ta: ɛ:na:-mi: wo:gu: kɛi ɛ-sa:-bi:  
 3:SG kina.shell waste:PST DEM-ASS do.thus ASSER say-3:DR-D.S

‘It is said “He wasted that kina shell by doing that.”’

This particular function is a bit odd given that in most contexts, the direct evidential {-sa:} generally requires a very specific event which the speaker has experience. It is not completely contradictory, of course, since the speaker has directly experienced the speech report(s) they are describing, even if the source is left unspecified or generic.

#### 7.6.1.1.2 Come, Arrive, Appear

Another function of the light *ɛ* verb with the direct evidential {-sa:} is to describe an appearance or arrival. This might alternatively be translated as come, arrive, or appear, as shown in the examples below.

(156) gɛ: a:dɛ ɛ-sa:  
 2:SG sibling do-3:DR

‘Your sibling is coming.’

(157) hɛna: dɛɛ kɛi kɛ: ko:loɸu-ja: a:mi: ɛ-sa:-bi:  
 go PROG ASSER pig medium-ABS there do-3:DR-D.S

‘While I was going, a medium-sized pig came there.’

(158) ko:lu a:lɛbi ɛna: ɛ-sa:-bi:  
 man NAME there do-3:DR-D.S

‘That man Alfie arrived.’

Other venitive predicates such as the verb {mi} ‘come’, or the directional {ja:} ‘hither, come’ are not attested with the direct evidential {-sa:}, although they may occur with inferred and reported evidential categories.

### 7.6.1.2 *Non-visual Direct Experience*

The suffix {-sa:} is prototypically used for events which are visually witnessed by the speaker, but in some cases may be extended to other types of direct experience such as tactile or auditory experience. In example (159) below for example, a speaker is describing his experiences when a white researcher arrived in his village by plane. He did not see the plane, but he heard it arrive and subsequently verified what had happened.

- (159) nili: ka:φε ho:la wε a:mi: to:di ε-sa:-bi:  
 1:PL skin white this PRO:ASS bring do-3:DR-D.S

‘Then it (a plane) came bringing our white man.’

His experience regarding what he heard, and what took place, is expressed by the direct evidential {-sa:}. Another similar example is (160), where a speaker heard his father calling him. Again, the speaker has directly experienced the event through aural rather than visual means.

- (160) sεnε-kε:-mi: a:mi: nε: ε:ja:-ja: wελε-sa:-bi:  
 stay-ITER-ASS then 1:SG father-ABS call-DR-D.S

‘While I was still sitting, my father called.’

Aural information is not necessarily clear evidence of an event, however. In (159) and (160), the speaker is speaking about a past event and has the benefit of hindsight. What happened is already known by the speaker, and the speaker can be certain what it was that they heard, and what the sound signified. Less clear situations, where the events are audible, but not entirely known or seen, are more likely to be expressed with the inferred enclitic {=jo:bo:}, as in (161) below (see also §7.6.2 on the inferred evidential {=jo:bo:}). In this example, the speaker is describing an event in progress, and is less likely to be confident describing what might be happening based on non-visual information.

- (161) *so:pa: ja:=bo:*  
 helicopter come=**INF**  
 ‘A helicopter is coming.’ (audible, but not visible)

### 7.6.2 Inferred Information {=jo:bo:}

Information which is known through indirect evidence, including apparent results of an event or reasonable inferences, is expressed using the indirect evidential enclitic {=jo:bo:}. Unlike the direct evidential {-sa:}, the indirect evidential {=jo:bo:} may co-occur with tense-marking as in (162) through (164). In (162), the speaker was too young to remember the event, and therefore describes it as an inferred event, and when co-occurring with the regular past-tense suffix {-ja:}, as in (162), the indirect evidential has a shorter form =bo:.

- (162) *nε: ε:ja: u:gei o:do:-wa: ka: kudu mi-ja:=bo:*  
 1:SG father NAME sister-ABS FOC follow come-**PST=INF**  
 ‘My father U:gei came following his sister.’

- (163) a. *na:-wε:-mi: golo-φo: tεε-si-jε:-mi: di=ja*  
 mother-LOC-ASS push-COMP descend-MED:PFV-LOC-ASS PFV=TOP  
 ‘While I was being pushed down by my mother...’

- b. *dε:=ja: ka: ti ja:-nε:=jo:bo:*  
 fire=TOP FOC descend DIR:VEN-PST=INF  
 ‘I came down into that fire.’

- (164) a. *[[ja: do:ge: di-si]<sub>PRE</sub>]<sub>MED</sub>*  
 DIR:VEN house:LOC PFV-MED:PFV  
 ‘We arrived at the house and then...’

- b. *[[diki:no: εja:lε: ho:mi:jo: εja:lε:]<sub>S</sub> [ε:mεlε:]<sub>X</sub> [nε:nε: kεlε-mε:na:-ta:]<sub>X</sub>*  
 NAME COORD:DU NAME COORD:DU back 1:DU search-PURP-TEL

- c. *[εna]<sub>X</sub> [a:nε:=jo:bo:]<sub>PRE</sub>]<sub>FIN</sub>*  
 still go:PST=INF

‘Dikino and Homijo were evidently still gone looking for us.’ (A.3.68-69)

In other morphological environments, such as the past suffix {-nɛ:} in verbs of motion (see §7.3.1 on past tense-marking) like example (163), or suppletive past-tense forms like *a:nɛ:* in (164), the full form *=o:bo:* is used (see also §2.7.2 on allomorphy).

One particularly remarkable aspect of the inferred evidential enclitic {=*jo:bo:*} is that it has been attested on non-verbal predicates such as the proper name *u:gei* in (165) below.

(165) *ti:φɛ:          u:gei=jo:bo:*  
 afterward    NAME=INF

‘The last one was U:gei.’

No clear examples are attested for direct or reported evidential categories appearing on non-verbal predicates, but this could be due to the scarcity of this type of equative clause in the corpus of texts.

#### 7.6.2.1.1 Unwitnessed Events

One function of {=*jo:bo:*} is to specify that an event was not witnessed first-hand. For example, the sentence in (166) could be uttered upon seeing a dead pig if the speaker had not seen the pig die.

(166) *kɛ:-ja:          gu:du:=wo:bo:*  
 pig-ABS    die:PST=INF

‘The pig died.’

In this context, there can be no doubt as to whether the pig died, and the indirect evidential in no way suggests uncertainty. Instead, the indirect suffix only indicates that the speaker did not witness the event, and knows of the event by observing the resulting situation: a dead pig. In contrast, a speaker may specify that they actually witnessed the pig die by using the direct evidential form in (167).

(167) *kɛ:ja:          ka:          gu:du:-sa:-bi:*  
 pig-ABS    FOC    die-3:DR-D.S

‘The pig died.’ (Visually witnessed)

In other contexts, the inferred evidential can be used to describe knowledge derived from oral history. This describes information which is not doubted or questioned, but was not personally experienced by the speaker. For example, in (168) and (169), a speaker is describing when members of his clan were living during his grandfather's lifetime well before the speaker had been born.

(168) ni:                    φili:so wa:bε    sε:=ja:        a:si=**jo:bo**:  
 1:N.SG:MOD    NAME    NAME    bank=TOP    stay:PST=**INF**

'We Fili:so were staying beside Wa:bi creek.'

(169) ε:γε:-ja:            i:sa:subε:lε-ja:    ε:na:        do:-wa:=**bo**:  
 someone-ABS    NAME-ABS    DEM    stay-PST=**INF**

'Someone, Isasubeli was staying there.'

#### 7.6.2.1.2 Suppositions and Inferences

Indirectly experiences statements can also include suppositions and inferences based on expectations and logical conclusions. For example, in (170) the speaker describes events that took place while they were unconscious, and describes what logically must have taken place.

(170) do:go    su:-wε:        di-jo:φo:=wo:bo:  
 house    inside-LOC    take-COMP=**INF**

'He put me into the house.'

Similarly, in (171) there is an excellent example of the contrast between a directly witnessed action in (171)a, and a supposition regarding the motivation of this action in (171)b.

(171) a. εdijo:bi-ja:    a:mi:        ja:            hε:li        do:-**sa**:-bi:  
 NAME-ABS    PRO:ASS    DIR:VEN    come.out    STAT-3.DR-D.S

'Edijo:bi came out (of the bush) there.'

b. nε:        bebε:ni:        mi-ja:=**bo**:  
 1:SG    see:PURP    come-PST=**INF**

'She came to see me.'

In this text, the speaker is staying at a bush camp, and Edijo:bi, his wife, has arrived. It is certainly reasonable to assume that she has come to see her husband, and this is overtly specified as an inference by the speaker. Another example is given in (164)c, where the speaker returns to an empty house after being lost for quite some time, and infers that the occupants must be out searching.

#### 7.6.2.1.3 Other Clause Types with Inferred Evidential Markers

Inferred evidential-markers are also attested in subordinate and interrogative clause types. In (172) below, a subordinate topic clause describing a location features a predicate suffixed by the indirect evidential {=o:bo:}.

(172) a. do:gɛ:      migi ka:    took=**wo:bo:**=ja:  
           house:LOC front FOC stand=**INF**=TOP

b. ɛ:na:    dɛ:-ja:    gɛjɛ    lɛ:    hɛnɛ    ka:miga:    φa:-ja:  
       DEM fire-ABS make do DUR DIR            sleep:N.SG-PST

‘Where the front of the house had been standing, we made a fire there and we slept there.’

In this context, the speaker is supposing that the place where they made the fire and slept must have been the same as place that at the front of a recently collapsed house had been standing. An indirect statement may be used as a polar question, as in (173). The speaker is asking whether or not they may infer that they should take some apparently offered meat.

(173) na:      wɛ            nili:            di=moko:no:=**wo:bo:**=la:  
       meat DEM:PROX 1:PL:EMPH take=DEO=**INF**=Q:PRS

‘Should we take that meat?’

#### 7.6.3 Reported Information {=jo:nɛ:} and Quotative {la:}

The final evidential categories are used to describe speech events or information known through speech events. The reported evidential enclitic {=jo:nɛ:} is used when an event is known through the reports of others, where the exact wording of the speech and the author of the speech is not explicitly given. This evidential construction is therefore used for hearsay or

indirect speech reports. For example, in (174) the speaker claims that a man left in order to go to sleep, and it is specified that the speaker knows this because they were told by someone else.

- (174) a:li-mɛ:ni:      a:nɛ:=jo:nɛ:  
 sleep-PURP      go:PST=**REP**  
 ‘He (reportedly) went to sleep.’

However, in this construction, it cannot be known who gave the speaker this information or the precise wording that was used to do so. The quotative predicate {la:} signals that the preceding clause is a direct quotation. This means that the clause *domu: ko: gɛ: wɛ:dɛ=la:* in (175) is a direct speech report. The reported evidential may be used together with the quotative predicate {la:} as show in the example below.

- (175) domu: ko:      gɛ:      wɛ:dɛ=la:      **la:=jo:nɛ:**  
 kitchen EMPH    2:SG    buy=Q:PRS      QUOT=**REP**  
 “‘You are buying that kitchen/fireplace?’” he (reportedly) said.’

- (176) [[a:nɛ: jo:]<sub>S</sub>    **[la:-bi]**<sub>PREL</sub>]<sub>FIN</sub>  
 go:PST EXCL    QUOT-D.S  
 ‘It’s said “he went (like that).”’ (A.1.35)

In (175) the speaker gives an exact quotation, and specifies that they know what was said due to some non-specified reported information source. The quotative predicate {la:} may appear with the evidential enclitics {=o:nɛ:} and {=o:bo:} as well as the different-subject marker {-bi:}, as in (176), and the emotive particles described in §7.5.1, but no other verbal morphology is attested with this evidential predicate. For more on speech reports, see §9.5.

#### 7.6.4 Inferences Based on Reported Information =*bo:nɛ:*

In some circumstances, multiple evidential suffixes may occur on a single predicate, which specify more than one information source. The fusion of the indirect evidential enclitic {=jo:bo:} and the reported evidential enclitic {=jo:nɛ:} is realized as the reduced form =*bo:nɛ:*. This is most common in the context of church sermons, as in (177) and (178).

(177) kɛlɛ:ɡɛ      do:-mɛi=**bo**:=**nɛ**:  
disappear    PERF-3.FUT=INF=REP  
  
'(It) will reportedly disappear.'      (B4.p14)

(178) ɛ:mɛ:              di-mɛi=**bo**:=**nɛ**:  
DEM:ERG      get-3.FUT=INF=REP  
  
'That (man) will reportedly get (it).'

In this context, a speaker is making an assertion derived from reported knowledge, namely the biblical account of the teachings of Jesus Christ, that earthly things will perish (177), but a righteous man will get eternal, salvation (178). Based on what sources report, the speaker infers a general statement. In this way, the complex evidential fusion {=bo:nɛ:} asserts that the statement as an inference based on reported information. This particular combination of inferred and reported evidentials has been reported in other evidential systems, notably the evidential system of Ersu described in Zhang (2014).

## Chapter 8 Noun Phrases and Argument Realization

### 8.1 Introduction

Arguments in Eibela are prototypically formed by noun phrases, which are nouns accompanied by optional modifiers such as adjectives, demonstratives, quantifiers, and other word classes. As the prototypical argument, nouns allow the greatest number of possible modifiers and phrasal complexity. Other word classes, such as pronouns, demonstratives, quantifiers, and others may also form arguments, but in more limited environments and with a simpler phrase structure. For example, non-nominal arguments typically allow fewer types of phrasal modifiers, or appear only in anaphoric contexts. This chapter excludes clausal arguments, such as complement clauses, relative clauses, and adverbial clauses, which are discussed in chapter 9.

### 8.2 Nominal Arguments

Just as verbal predicates are the most complex and versatile predicates, nouns may form the head of the most complex arguments in terms of the different constituents which may be included in the argument phrase. As seen in Scheme 1, nouns may be modified by nouns, pronouns, adjectives, numeral and exhaustive quantifiers, determiners, and demonstratives quantifiers, as well as allowing for morphological inflections of case (for extensive discussion of the functions of case-marking see §5.4 and §10.3). Nominal and pronominal arguments may be possessors, as described in §8.2.1.

Scheme 1: Nominal Argument Structure

Pre-head modifier	Argument head	Post-head modifier				
Pronominal	<b>HEAD</b> (case)	Adjective (case)	Numeral Quantifier (case)	Demonstrative (case)	Determiner	Particles
Nominal					Exhaustive Quantifier	

Case is expressed on argument head, adjective, numeral quantifier, or demonstrative, appearing on the last of these argument elements. The structure of a nominal argument phrase is much more clearly defined than a verbal predicate, with less fusion due to its predominately periphrastic rather than synthetic morphological structure. As shown in (1), an argument with a nominal head may contain multiple modifiers, including possessors, adjectives, quantifiers, and coordinating determiners.

- (1) [nɛ            sa:wa    ga:lɛni    a:nɛ    ba:lɛ]x    ɛ-ta:-bi:  
 1:SG:MOD    child    small:N.SG    two    COORD    do-TEL-D.S  
 ‘(I) was with **my two small boys.**’ (41.13)

More detailed description of many of these argument modifiers can be found in chapter 4. Specifically §4.1 Pronouns, §4.2 Adjectives, §4.3 Demonstratives, §4.4 Determiners, §4.5 Quantifiers, and §4.6.2 Polar Particles.

### 8.2.1 Pre-head Modifiers

Nouns and pronouns may modify a nominal argument by preceding the argument head. When modifying an argument head, nouns may be either unmarked or marked with the locative case, and pronouns assume specific modifier forms denoting possession. Nominal modifiers may represent a wide variety of semantic relationships to the head noun, including meronymy, possession, material composition, or other types of association. In some cases, compounds may be formed, which are characterized by phonological fusion and conventionalized idiomatic meanings. A nominal modifiers of an argument head may be embedded in complex constructions, as in (2), where the head of the argument has two nominal modifiers, one of which specifies the name of the owner of the bag, *Edijo:bi*, and the other, *kɛ*: ‘pig’, which specifies the type of bag, i.e. it is a bag for carrying pigs. Similarly, in (3), a nominal modifier of an argument head is itself modified by a pronominal possessor.

- (2) ɛ:sa:            [ɛdijo:bi-je: [kɛ: lɛ:    ɛ:sɛ:]]s    ka:    di    hɛ:    dɛn=o:bo:  
 string.bag:ABS    NAME-LOC    pig    DEF:LOC    string.bag    FOC    take    hang    PROG=INF  
 ‘A bag, Edijo:bi’s piglet bag was hanging there.’

- (3) [[**nε**        **ε:ja:]**        **wi:-ja:]<sub>s</sub>**        [u:gei]<sub>PRE</sub>]<sub>FIN</sub>  
 1:SG:MOD    father        name-ABS    NAME  
 ‘My father’s name is U:gei.’                    (A.1.2)

Kin relationships may be expressed by pronominal and nominal modifiers. In (4) and (5), a pre-head modifier is a human referent and the nominal head is a kin term specifying the relationship of the pre-head modifying to the argument. In (4) the first person possessive pronoun *nε* modifies the head of the argument kin term *ε:ja*: ‘father’. Example (5) is similar, with the proper name *εwa:lu* serving as a modifier to the kin term *ε/ε* ‘daughter’.

- (4) [[**nε**    **ε:ja:**    **wεbε:na:]<sub>s</sub>**        [ε:]<sub>s</sub>    [[sa:goi la:]<sub>s</sub> [a:nε:]<sub>PRE</sub>]<sub>x</sub> [ma:    a:nε:    kεi]<sub>PRE</sub>]<sub>FIN</sub>  
 1:SG    fatherPROX:DEM:ANA    3:SG    NAME    DEF    go:PST        NEG    go:PST    ASSER  
 ‘My father here, he didn’t go where Sagoi went.’ (A.1.31)
- (5) [**pa:sta**    **εwa:lu-wε:**        **ε/ε**]  
 pastor    NAME-LOC        daughter  
 ‘(She was) Pastor Ewa:lu’s daughter.’

A nominal modifier may be inflected by the locative case, as in (5), or may be unmarked, as in (3). In Example (3) the phrase *nε ε:ja:* is an unsuffixed modifier of the noun *wi:* ‘name’. In addition to kinship relationships, nominal and pronominal modifiers can reference an owner in a relationship of possession when the head of the argument is a non-animate entity, as in (6) and (2).

- (6) a. [[**ε**        **ma:si-jε:]<sub>x</sub>**        da:li        kε/ε        bεda:-lo:lu=wa:]<sub>TOP</sub>  
 3:SG:MOD    sago.bag-LOC    feel.around    search    see-ASS.EV=TOP  
 ‘He felt around in his sago bag and saw(felt)...’
- b. ba:ge-ja:        ma:li]<sub>FIN</sub>  
 kina.shell-ABS    much  
 ‘...a kina shell that was very (good).’

Pronominal modifiers with particularly topical reference may be marked by the definite determiner {*la:*}, as in (7). This construction is used when the referent of the modifier is the

topic of the discourse and remains more topical than the head of the argument. In (7), the pronominal modifier *nɛ:* refers to a topical participant, which remains more topical in the discourse than the referent of the noun *wɑ:* ‘story’ which forms the head of the argument.

- (7) [[*nɛ:* *la:* *wɑ:-ja:* *ja:*]<sub>s</sub> [*wa:*]<sub>x</sub> [*ka:* *hɛna:* *ɛɛ-ta:*]<sub>PREP</sub>]<sub>FIN</sub>  
 1:SG DEF story-ABS DIR:VEN DIR:AND FOC DUR finish-TEL  
 ‘My story here has come to a stop there.’ (A.1.65)

Other semantic relationships are commonly represented by nominal modifiers in addition to kinship and ownership, including material make-up, as in (8), and part-whole relationships, as in (9) and (10) where the head of the argument is a part of a whole which is denoted by the modifier.

- (8) *φu:sɛ:* *sɛgɛli*  
 bamboo:LOC raft  
 ‘Raft made of bamboo’

- (9) *nɛ* *ɛnɛ:ba:*  
 1:SG:MOD leg:ABS  
 ‘My leg’

- (10) *dobo:lɛ:* *ki:*  
 black.palm:LOC bone  
 ‘Black palm board’ (A.2.63)

In addition to these common relationships, almost any association between two nouns can be expressed by a preceding nominal modifier. Two examples are listed in (11) and (12). In (11), the noun *ko:so* ‘sago pulp’ modifies the noun *do:go* ‘house’ in order to describe a bush camp, since these bush houses are often used to harvest sago pulp, or for hunting, where sago pulp is used as bait in traps for wild pigs. In (12), the proper name *U:ludi:ja* refers to a village which specifies the region of the land being referenced. In (13) and (14), the modifiers *φili:ta* ‘skillet’ and *φu:sɛ:* refer to the instrument which was used in the preparation of the *da:* ‘sago’ which is the argument head.

- (11) ko:sɛ:            do:go:  
       sago.pulp:LOC    house  
       ‘bush camp’  
       (lit. ‘sago pulp house’)
- (12) u:ludi:ja    i:sa:  
       NAME        land  
       ‘U:ludi:ya: land’
- (13) *φeli:ta* da:  
       fry.pan sago  
       ‘sago cooked in a frying pan’
- (14) φu:sɛ:            da:  
       bamboo:LOC    sago  
       ‘sago cooked in bamboo’

Associations, such as that in (5) and (12), may extend to constructions describing titles and names. In (5), a title describing a profession is used as a modifier to a proper name, and in (12) a proper noun is used to identify a geographical feature.

The case-marking of a nominal modifiers, as seen in (6), (8), (10), and (11), does not seem to be strictly conditioned by any obvious factors such as animacy or the semantic relationship to the argument head. Nouns which show case-marking via a final vowel shift rather than a complete concatenative suffix nearly always appear in the locative case when functioning as a nominal modifier, as in (8), (9) and (10), but in other nouns with concatenative case-marking there appears to be a tendency for more common or conventionalized phrases to forego the locative case on the nominal modifier. For example, while the construction in (13) *φeli:ta da:* ‘sago fried in a skillet’ has no case-marking, the similar expression *φu:sɛ: da:* ‘sago cooked in bamboo’ has a case-marked modifier. Both expressions are highly conventionalized and very common. The omission of the locative case may be viewed as the first indications of a historical process of compounding, which may also be accompanied by increasing conventionalization of a specific semantic interpretation as well as phonological fusion,

including reduction of the modifier and stress alternations showing a compound to be a single phonological word. For example, the second syllable of the noun *si: 'jɛ' bɛ:* 'lower leg' becomes destressed in the construction *si: jɛ' bɛ: 'ki:* 'shin/shinbone', which suggests a process of lexicalization when the periphrastic construction  $[[si: 'jɛ' bɛ:]_{MOD} ['ki:]_{HEAD}]$  has become a single phonological word *si: jɛ' bɛ: 'ki:*. The shift in stress pattern seen in *si: jɛ' bɛ: 'ki:* 'shin bone' and *ka: 'φo: 'la:* 'white person' in (16) indicates a shift from two phonological words to a single phonological word, since phonological words are characterized by stress falling on the final two syllables (see §2.6.3 on phonological word characteristics). In other instances, the reduction of the modifying noun suggests a similar lexicalization process. One example of this is the noun *jɛ: bɛ:*, which occurs in many fixed compounds in the reduced form *jɛ:*, listed in table 1.

Table 1: *jɛ: bɛ: > jɛ:* Reduction in Compounds

<i>jo: φo:</i> 'log'	<b>jɛ:</b> <i>jo: φo:</i> 'tree trunk'
<i>ko: mo:</i> 'stick'	<b>jɛ:</b> <i>ko: mo:</i> 'walking stick'
<i>φo:</i> 'fruit'	<b>jɛ:</b> <i>φo:</i> 'fruit from a tree'
<i>φa:</i> 'leaf'	<b>jɛ:</b> <i>φa:</i> 'tree leaf'

This is in contrast to novel or less frequent constructions where *jɛ: bɛ:* is used as a modifier, which are more productive and compositional, and *jɛ: bɛ:* is not phonologically reduced, as in (15).

- (15) **[jɛ: bɛ ɛ bɛ]s** ka: to: ko: di=ja: ti-nɛ: kɛi  
 tree moss FOC get.up PFV=TOP descend-PST ASSERT

'Since the moss on the tree had grown up, he fell (slipped) back down (while climbing).'

While most examples of this lexicalization process are noun-noun compounds originating from a nominal argument head and a pre-argument nominal modifier, a final example of

lexicalization in (16) shows phonological reduction of an adjectival modifier and the head of the argument.

(16)	'ka:'φε	'ho:'la:		ka:'φo:'la:
	skin	white		white.person
	'white skin'			'white (i.e. Caucasian) person'

This process of lexicalization should be viewed as a spectrum, with transparent and morphologically marked nominal modifiers such as example (5) on one end, and conventionalized fused forms such as *ka:'φo:'la:* 'white person' becoming independent single lexemes and a single phonological word. Forms which are highly conventionalized, with a specific and possible opaque meaning, phonological reduction to a single phonological word, and not morphological markers of dependency on the modifier are routinely referred to as compounds, specifically noun-noun compounds or noun-adjective compounds, throughout this grammar.

### 8.2.2 Post-head Modifiers

The majority of argument modifiers follow the head of an argument (for more detail regarding these modifier types, see chapter 4 on closed word classes). These modifiers are arranged into five slots based on patterns of co-occurrence. There isn't any attested example of all possible types of argument modifier appearing in a single argument, which aligns with Papuan principles of information distribution outlined in de Vries (2006). By comparing the ordering of various co-occurrences of argument modifiers, the relative ordering of all modifiers may be inferred. For example, if adjectives precede demonstratives, and demonstratives precede polar particles, then the relative ordering adjective-demonstrative-polar particle may be inferred.

Adjectives immediately follow an argument head, and precede other modifiers, as seen in (1). Case suffixes may occur on an adjective if there is no following numeral modifier or demonstrative, as in example (17).

- (17) [a:ge: **φεφε-ja:**]<sub>A</sub> [ε:na:]<sub>x</sub> [do:bo:su:-wε:]<sub>x</sub> ti a:ne:  
 dog skinny-ABS there underneath-LOC descend go:PST

‘The skinny dog went down underneath there.’

Numeral modifiers may follow adjectival modifiers in an argument, as in (1), and precede demonstratives as in (18). As also seen in (18), case suffixes appear on the last of four possible argument constituents. When present, the case suffix in an argument appears on the final constituent of the argument that is the nominal head, an adjective, a numeral, or a demonstrative modifier.

- (18) [sa:wa ε:meli: **no:-wa:**]<sub>s</sub> hena: he:lene je: φo: kada-ta: dene la:-bi:  
 child one INDEF-ABS go side tree fruit make.hut-TEL PROG QUOT-D.S

‘One of the children went out to the other side and having made a tree-fruit hut he was sitting there.’

Other post-head modifiers may not bear case-marking suffixes. Exhaustive quantifiers, {to:bo:} ‘all’ and {εga:lεma:} ‘none’, and the quantifying adjective {ma:li:} ‘many’ appear after the argument head, as in (19), and the case-marking suffix appears on the nominal argument head.

- (19) [**sε:-ja: to:bo:**]<sub>s</sub> oma:ni:-je: o: go:la: wo:ga: kei  
 bank-ABS all blood-LOC lake pool do.thusly ASSER

‘All the sand was like an entire lake of blood.’

Nouns that inflect for case by means of a stem change rather than concatenative suffixes still express case on the nominal head of the argument rather than a suffix on the argument modifier, as in (20), where the absolutive case is expressed by the final vowel of the noun ε:sa: ‘string.bag:ABS’. The uninflected form of this noun is εε ‘string bag, bilum’.

- (20) wo:ko-mo sε:-ja: [**ε:sa: a:ne**]<sub>o</sub> di-mε:ni:-jo:gu: kei sε:-ja:  
 NAME-DAT say-PST bilum:ABS two take-PURP-IMM ASSER say-PST

‘I told Wo:ko, I said, "I will take two bags."’

As in (18), the indefinite demonstrative {no:} may attach case suffixes, but the demonstrative anaphor {εna:} has two case forms: εna: for absolutive case, and εmε: for the

ergative case<sup>8</sup>. For example, absolutive case is expressed in example (21), while example (22) shows the ergative form of this demonstrative.

(21) [kɛ: iso ɛna:]<sub>o</sub> ka: so:φo:  
 pig small that:ABS FOC cook:PST  
 ‘I cooked those little pigs.’

(22) [[ko:lu ɛmɛ:]<sub>A</sub> sɛlɛ-si]<sub>MED</sub>  
 man DEM:ERG say-MED:PFV  
 ‘That man said...’

The indefinite demonstrative {no:} may also co-occur with definite determiners, as in (23), where *no:* occurs with the definite determiner *la:*, whereas the demonstrative anaphor {ɛna:} is not attested to co-occur with any determiners.

(23) [ko:lu no: la:]<sub>s</sub> wɛ:lɛ ba:dɛ do:-φɛija:  
 man INDEF DEF top side stay-PERF  
 ‘Some of the people were staying on top.’

Exhaustive quantifiers follow demonstratives, as in (24). These quantifiers have not been attested co-occurring with the definite or additive determiners {la:} and {la:la:}, but they are observed following coordinators, as in (25).

(24) [a:gɛ: tɛ: wɛ to:bo:]<sub>s</sub> hɛna: bɛda:  
 dog real this all go CONS  
 ‘All the dogs (apparently) left, so...’ (33.33)

(25) a. [[nɛ inɛ:ba: mo: [sa:bo ka:φo ba:lɛ to:bo:]<sub>o</sub> wa:li di=ja:]<sub>TOP</sub>  
 1:SG:MOD leg:ABS just fat skin COORD all slice PFV=TOP  
 ‘(On) my leg, all the fat and skin had been sliced off...’

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<sup>8</sup> For the determiner {ɛ:na:}, initial vowel is a long vowel when the demonstrative is in a head position, as in (33), but in a modifier role, the initial vowel is shorted to *ɛna:*, as in (53) and (22).

- b. ka: sa: di-φειja:]<sub>FIN</sub>  
 FOC throw.away PFV-PERF  
 ‘and it had been thrown away.’

When modifying an argument, the polar particles {ma:} ‘NEGATION’ and {ka:} ‘FOCUS’ always appear as the final constituent, as in (26) and (27), although there are no attested example of these particles co-occurring with coordinators or exhaustive quantifiers, so the relative ordering of polar particles in relation to these modifiers remains uncertain.

- (26) [kɛ:φɛ ha:nɛ ka:]<sub>o</sub> mɛna:  
 coconut water FOC drink:PST  
 ‘We drank coconut milk.’

- (27) [a:gɛ: la: ma:]<sub>s</sub> ka: la:  
 dog DEF NEG FOC exist  
 ‘No dogs were there.’

Coordinators in particular are likewise always the final element of an argument, as in (28) and (29), and may either appear once following the entire conjoined argument, or after two or more constituent argument that is forming the conjoined whole, as in (29).

- (28) [kɛisa:lɛ sa:wa ba:lɛ]<sub>o</sub> sa: di  
 woman child COORD give:birth PFV  
 ‘(She) gave birth to a baby girl too.’

- (29) [[jɔlosa:-ja:]<sub>o</sub> [mɛɛ lɛ:-ki:]<sub>pred</sub> [jɔlosa: φɔ:gono ba:lɛ φɔ:gono ba:lɛ]<sub>o</sub>]<sub>fin</sub>  
 scaffolding-ABS tie do-CONT scaffolding other.side COORD other.side COORD  
 ‘Tie the scaffolding, the scaffolding on one side and the (other) side.’ (A.2.32)

All post-head modifiers are arranged into five slots based on patterns of co-occurrence, but since there is not any attested example of all possible types of argument modifier appearing in a single argument, the relative ordering or possibility of co-occurrence is particularly speculative regarding determiners, exhaustive quantifiers, and polar particles.

### 8.3 Non-nominal Argument Heads

Many of the word classes which have been described in §8.2 as argument modifiers may also be used as an argument head when a nominal head in the clause is omitted and recoverable from context. Arguments with non-nominal heads follow the same argument structure illustrated in Scheme 1, but these arguments with a non-nominal head are limited in the number and type of argument modifiers attested. Additionally, the properties of a lexical item from some word classes may display different properties when functioning as an argument head compared to a context where it is functioning as an argument modifier. These properties are briefly summarized in Table 2, where the different modifier types are listed along with the possible argument modifiers which are attested in the research corpus.

Table 2: Syntactic Functions of Non-nominal Word Classes Within an Argument

Word Class	Pre-head modifiers	Argument head Function	Post-head modifiers		
Possessive Anaphors formed from {-na:}	NONE	YES	NONE		
Pronouns	NONE	YES	Determiner	Exhaustive Quantifier	Polar Particles
Adjectives	NONE	YES	Numeral Quantifier	Demonstrative	Polar Particles
Numeral Quantifiers	NONE	YES	Polar Particle		
Demonstratives	NONE	YES	Determiner		
Determiners	N/A	NO	N/A		
Polar Particles	N/A	NO	N/A		
Determiners and Particles with bound root (e.g. <i>aka:</i> , <i>ala:</i> )	NONE	YES	Determiner		

Nouns, pronouns, and demonstratives may form possessive constructions with the suffix {-na:}, which references an anaphor that is possessed by or associated with the root of the construction. These derived forms are not used as nominal modifiers, and are only used as argument heads. For example, in (30), the argument *keisa:le:na:* ‘the women’s (side)’ makes anaphoric reference to something associated with the noun {*keisa:le*} ‘woman’, which in this case is the side of a house used by the women, as opposed to the men’s side of the house, since housed are typically separated by gender. Similarly, in (31), the third person possessive pronominal form *ena:* references an entity associated with a known third person referent. In this case the third-person pronoun *ε:* references a topical participant in the discourse, which is present as a pre-argument modifier, and the argument *ena:* references this participant’s father. This particular construction with *ena:* appears to be particularly conventionalized in this meaning of referencing someone’s father, since this is generally the prototypical reference for this construction. Possessive demonstratives are formed from the locative demonstrative *ε:mε:* ‘DEM:LOC’ as in (32). Note that this is homophonous with the ergative form *ε:mε:* ‘DEM:ERG’.

(30) [[[[**keisa:le-na:**]<sub>o</sub> [mε:le-li: a:nε:=ja:]<sub>pred</sub>]<sub>top</sub> [ta:le-ta:]<sub>pred</sub>]<sub>fin</sub>  
 woman-POSS tie-SIM go:PST=TOP finish-TEL  
 ‘Continue to tie on the women’s (sleeping area) and finish it.’ (A.2.85)

(31) *kega:da:* [**wo:gu: ε:-na:**]<sub>x</sub> [**wo:gu: ε:-na:-mo:**]<sub>x</sub> *sele-si*  
 old.person NAME 3:SG-POSS NAME 3:SG-POSS-DAT say-MED:PFV  
 ‘The old man, Wo:gu:’s father, I said to Wo:gu:’s father...’ (21.19)

(32) a. [[nε: ko:lu na:gla haba:je na:gla: [**ε:mε:-na:**]<sub>o</sub> a: sa:lowa:ke-na:  
 1:SG man be.sick NAME be.sick that:LOC-POSS HES NAME-POSS

b. *sa:lowa:ke ho:dosu: a:ka: la: di=ja:]<sub>top</sub> hεnε di-si]<sub>med</sub>  
 NAME small PRO:FOC DEF get=TOP go PFV-MED:PFV*

‘I went to get that (medicine) for the sick people, Haba:ye, that one’s (medicine), and Sa:lowa:ke’s (medicine), that little Sa:lowa:ke.’

These derived possessive forms are not attested with any argument modifiers, and are inherently definite. Underived pronouns may be modified by determiners, exhaustive

quantifiers, and polar particles however, as seen in (33) through (35). Pronouns are further limited in argument roles, however, in that adjectival modifiers, nominal modifiers, and numeral quantifiers are not attested in arguments with a pronominal head.

(33) a. [[**nɛ:** **la:**]<sub>A</sub> hɛlɛnɛ      bɛ:bɛ      ka:      la:      bɛbɛ-ta:=ja:]<sub>TOP</sub>  
 1:SG DEF fish.species fish.scale FOC DEF remove-TEL=TOP

b. na:na:-mo:      dija:      jɛ:=bi:]<sub>FIN</sub>  
 1SG:PAT-DAT take come=DEL.IMP

‘The Helena fish from which I’ve removed a scale, bring it to me!’

(34) [**ni:ja:** **to:bo:**]<sub>S</sub> jɛ:bɛsola:-jɛ:-mi:  
 1:PL all canoe-LOC-ASS

‘And we were all in the canoe.’

(35) [**nɛ:** **ka:**]<sub>S</sub> a:li-ta:      do:-wa:  
 1:SG FOC sleep-TEL PERF-ABS

‘I was sleeping.’

Pronouns have dedicated case forms as well as inflecting for oblique cases in some cases. For greater detail, see §4.1 on pronouns. Pronouns may utilize the modifier {-φɛ:ni:} which is unique to pronouns and signified exclusive reference, and is described in §4.1.8.

Adjectives also appear with other argument modifiers, including pronominal possessors as in (36), numeral quantifiers as in (37), demonstratives as in (38), and polar particles as in (39); however, determiners and exhaustive quantifiers are not attested modifying adjectival heads.

(36) [**nɛ**      **molu:wa:**]<sub>S</sub> wa:      ka:m  
 1:SG:MOD old DIR:AND that’s.all

‘My old (story) is finished.’

(37) [**iso**      **a:nɛ**]<sub>O</sub> ka:      ja:si      di  
 small two FOC kill:N.SG.A take:PST

‘...I killed and took two small (piglets).’

(38) **[ho:la ena:]<sub>x</sub>** o:ma:ni:-ja: ena: miε:na: la:-bi:=ja: ka:  
 white DEM:ABS blood-ABS still come:FUT COP-D.S=TOP FOC

‘Where the fat was exposed, it wasn’t bleeding yet.’

(lit. ‘The white (part), the blood (there) was still about to come.’)

(39) mo: **[ho:la ka:]<sub>s</sub>** la:-bi:=ja: ka:  
 just white FOC exist-D.S=TOP FOC

‘There was only white (fat).’

Since determiners and exhaustive quantifiers are possible with various other argument-head types, it seems likely that adjectives may allow such modifiers, but is uncommon enough that it does not appear in the present research corpus.

Numeral quantifiers are very limited, with only polar particles attested as modifiers, but these quantifiers are set apart from other argument heads in the use of the quantifying suffix {-φειja:} which is used when a numeral quantifier is used as an argument head, as seen in (40) (see also §4.5.2 on numeral quantifiers). Exhaustive quantifiers may also be used as the head of an argument, and in this position, they may be inflected for case, as in (41). In contrast, when an exhaustive quantifier functions as an argument modifier, as in (19).

(40) [[ha:gε:=ja:]<sub>TOP</sub> **[a:nε ε:meli:-φειja:]<sub>x</sub>** [di-mεi]<sub>PRED</sub>]<sub>FIN</sub>  
 day=TOP two one-QUANT take-HYPO

‘(Continue) getting (sago leaves) for three days.’ (A.2.54)

(41) **to:bo:-wε:** do:goba: ena: a:mi: di  
 all-ERG airstrip that:ABS PRO:ASS build:PST

‘And then the airstrip was built.’

Quantifiers are particularly interesting because these morphological categories of case and quantification are not attested when the quantifier is the modifier of an argument, and are only possible when the quantifier is the argument head.

Demonstratives may be used as the head of an argument with non-animate reference, as described in §4.3, and in the case of the demonstrative {ε:na:}, the initial vowel is a long vowel in a head position, but in a modifier role, the initial vowel is shorted to εna:, as in (42).

- (42) no: wε ko:lu-wa: [wa:sa εna:-mi:]<sub>x</sub> o:ga: dowa:ge-li:  
 CONT here man-ABS veranda DEM-ASS pandanus squeeze-SIM  
 ‘...the man was squeezing the seeds out of cooked pandanus.’

Case-marking of core arguments is evident in {ε:na:}, which has a separate ergative (ε:mε:) and absolutive (ε:na:) forms, and the indefinite demonstrative {no:} allows regular case suffixes; however, the proximal demonstratives {wε} and {wεbε:na:} do not have any attested case-marking in any syntactic role. The associative case-marker {-mi:} may also appear as a suffix on {ε:na:} when this demonstrative is functioning in an oblique argument with locative or temporal reference, as in (42).

The determiner {la:} is attested as a modifier of demonstrative arguments, as in (43), but no other argument modifier has been observed modifying a demonstrative argument.

- (43) [no: la:]<sub>s</sub> do:go ka: sε:-ki:=ja:  
 INDEF DEF house FOC stay-CONT=TOP  
 ‘...some stayed in the house...’

Determiners themselves cannot form the head of an argument, except in pronominal forms with the bound anaphoric element {a:-}. For example in (44) and (45) the determiners {la:} and {la:la:} appear in a bound form in order to form an anaphoric argument.

- (44) a:la: a:mi: sa:-lε  
 PRO:DEF PRO:ASS put.in-S.S  
 ‘...Then we put that one in there.’
- (45) a:la:la: ta:lε-ta: di-si  
 PRO:ADD finish-TEL PFV-MED  
 ‘That finished, then...’

This bound root {a:-} can also be used to form an argument from the focus particle {ka:}, as in (46).

(46) a. [a:ka: do:-si=ja:]<sub>TOP</sub> [a:mi: ja: do:-si=ja:]<sub>TOP</sub>  
 PRO:FOC STAT-MED:PFV=TOP PRO:ASS DIR:VEN STAT-MED:PFV=TOP  
 ‘Having done all that, having come here...’

b. [u:ludi:ja la: do:-φei:ja:]<sub>FIN</sub>  
 NAME DEF stay-PERF  
 ‘I stayed in U:ludi:ya.’

(47) [ka:la:ma:be:=ja: [a:ka: la:]<sub>o</sub> sele-si=ja:]<sub>TOP</sub>  
 NAME=TOP PRO:FOC DEF say-MED:PFV=TOP  
 ‘Ka:la:ma:be: said that...’

These anaphoric forms with the bound stem {a:-} must be inanimate and may function as textual anaphora referring to propositions or events rather than participants in the discourse (see Dixon 2010b, pp.248-250), as in (47). These constructions do not appear with any argument modifiers with the notable exception of the determiner {la:}, as seen in (47).

#### 8.4 Coordination, Apposition, and Pronoun Elaboration

Multiple argument phrases may be combined to occupy a single argument slot in a clause. In coordination, the coordinators {di} and {ba:le} overtly mark the conjunction of the constituent arguments into a single argument role within the clause. This is exemplified in (48) and described in greater detail in §4.4.1.

(48) [dɛda:nɛ ba:le komo:lo ba:le]<sub>o</sub> dija: hɛna:-nɛgɛ:  
 crayfish COORD fish COORD take go-MED:IPFV  
 ‘We went carrying prawns and fish and then...’

In addition to the overtly marked coordination, apposition and elaboration are two additional constructions in which fully formed arguments are presented in juxtaposition without an overt marker of coordination. In apposition, two coreferential arguments are used without an overt coordinator and occupy a single argument position of a clause. For example, in

(49), the phrases *nε ε:ja:* ‘my father’ and the name *u:gei* could each function independently as an argument, and have an identical referent. Both arguments serve the same semantic and syntactic role in the clause, as a patient and an object.

- (49) [[*nε ε:ja:*]<sub>x</sub> [*u:gei-mo:*]<sub>x</sub> [*sεlε-ki:-jε:-mi:*]<sub>PRED</sub>]<sub>x</sub>  
 1:SG:MOD father NAME-DAT say-CONT-LOC-ASS  
 ‘(He) said to my father U:gei...’ (A.1.21)

Despite the lack of an overt coordinator, there are morphosyntactic indications that the two constituent argument phrases form a single argument in the clause. The apposed constituents must be contiguous, and case is only marked on the final element of the apposition construction.

Elaboration constructions (see also §4.1.4) differ from apposition in that the constituent argument phrases which are conjoined do not have the exact same reference, though they do have overlapping reference. This sort of construction most commonly occurs with a noun phrase following by a non-singular pronominal element which has a referent that included the noun phrase and additional referents. For example, in (50), the noun phrase *oso:luwa* references a single person, while the following dual pronoun *na:nεε:* has a first-person reference to two individuals. The semantic reference of this pronoun elaboration is therefore the speaker and one other individual, specifically *oso:luwa*.

- (50) [***oso:lu:wa na:nεε:***]<sub>s</sub> *ha:nε mu:lu:-wε: hεnε ja-gεnε:*  
 NAME 1:DU water bathe-LOC DUR DIR:VEN-MED:IPFV  
 ‘Osoluwa and I went to bathe and came back and then...’

This construction is not limited to first person reference, and freely occurs in other persons, such as in (51), where three noun phrases are conjoined in a single clausal argument role. Once again, it must be noted that each constituent phrase is capable of functioning independently as a clausal argument, and the elements can form three distinct constituent arguments.

(51) [a:nɛ:=ja:]<sub>TOP</sub> do:gɛ: no: [[wɛ] [a:gɛ:] [i:ja:]]<sub>s</sub>  
 go:PST=TOP house:LOC DISJ DEM:PROX dog 3:PL

‘They went to the house, this dog and them.’

It is not possible to interpret the demonstratives *no:* and *wɛ:* as modifiers of the noun *a:gɛ:*, since these are post-argument modifiers. The element *no:* is somewhat ambiguous here, since it may be interpreted as a clause linker or a demonstrative making reference to the dog (see §4.8.2 on clause linkers). The behavior of pronoun elaboration constructions can be generalized to state that the pronominal element is always the final constituent in elaboration constructions, and has a broad reference which includes the preceding nominal element as well as additional, less topical referents.

## 8.5 Conclusion

To conclude, arguments in Eibela are presented broadly as nominal arguments and non-nominal arguments. Nominal arguments are the prototypical type of argument, and as such allow the largest number of argument modifiers both before and after the argument head. Case-marking only appears on a limited number of word classes, namely nouns, adjectives, numeral quantifiers, and demonstratives, and in an argument, case-marking appears on the final constituent of the argument which allows case-marking. Exhaustive quantifiers may also allow case-marking, but only when functioning as the head of a non-nominal argument. Non-nominal arguments are a heterogeneous group of argument types, which differ in the possible argument modifiers depending on the word class of the argument head. Non-nominal arguments are almost exclusively anaphoric, and may refer to clauses and events as well as discourse participants.

## Chapter 9 Clause Types

### 9.1 Introduction

In this chapter, clauses in Eibela will be described in terms of syntactic and functional characteristics. In terms of their syntactic properties, the primary distinction between clauses is whether or not a clause is a dependent clause or a main clause. Dependent clauses modify another clause or clause constituent, while main clauses are not syntactically dependent on any other speech unit.

In §9.2, main clauses are classified primarily by the type of predicate and the resulting semantic relationships between the clause constituents. For instance, a copula clause has a specific predicate type associated with it, and is primarily used to describe a relationship or attribution or identity between constituent arguments. In §9.3 non-main clauses, or dependent clauses, are described more in terms of the syntactic role they serve. For example, clauses which modify an argument of a clause or function as a clause argument serve as complementation and relativization strategies, while adverbial clauses modify the predicate of a clause or the clause as a whole. Clause chaining is a specific type of clause linking which is discussed separately from non-main clauses in §9.4 since it is quite different and warrants more detailed description from other types of non-main clause. Lastly, §9.5 discussed speech events specifically, and details the different morphosyntactic realizations of speech-acts and reported speech. In many instances, the properties of a clause may be determined by the predicate of the clause, and this discussion will touch upon topics relating to predicates, including §3.3 on verbs as a word class, chapter 6 on predicate structure, and chapter 7 on verbal morphology.

### 9.2 Main Clauses

Main clauses may have both verbal and non-verbal predicates, which vary in their morphological and functional characteristics. Copula clauses are typically morphologically deficient, and describe notions of existence, location or the attribution of traits. Clauses with a non-verbal predicate may also describe similar relationships of identity or attribution between the subject of the clause and the predicate.

Clauses with a non-copula verbal predicate are the most complex, and may be used to form transitive, intransitive, and ditransitive clauses (see §3.3.2.1 on transitivity classes and §6.2 on verbal predicate structure in main clauses). Verbal clauses are also the most diverse in terms of the speech-acts that can be formed, including commands, declarations, and questions. Clauses with a non-verbal predicate may form statements, but must be cast as verbal clauses with a copula predicate in order to form questions or commands. Some nouns may be rarely used as commands with the implication of a speech-act as discussed in §6.3 on non-verbal predicates.

### 9.2.1 Copula Clauses

Copula clauses are constructions which specify a relationship of identity or attribution between the clause subject and a copula complement, and are formed by the copula {*la:*} or the auxiliary {*do:*}. For example, in (1), the argument *do:ga:* ‘house’ is identified by the complement *i:sa: do:go* ‘house built on the ground (as opposed to a typical elevated house)’, and the two arguments are identical. This construction is rather uncommon, and an equative clause is more likely to be formed by a nominal predicate, as in (2) where the nominal predicate *ti:sa: ko:lu* ‘teacher’ serves a similar role to the copula complement *i:sa: do:go* in (1).

(1) [[*do:ga:*]<sub>CS</sub> [*i:sa: do:go*]<sub>CC</sub> [*ka: la:*]<sub>PRED</sub>]<sub>FIN</sub>  
 house:ABS ground house FOC COP  
 ‘That house was a house on the ground.’

(2) [[*ne: la:*]<sub>S</sub> [*ti:sa: ko:lu kei*]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG DEF teacher man ASSER  
 ‘I am a teacher.’

In terms of case-marking, copula clauses with two arguments are distinct from transitive clauses in that both the subject of the clause and the copula complement may be marked by the absolutive case. In addition to the relationship in (1) of equative identity, a quality or feature may be used as the copula complement, which is attributed to the subject of the clause, as in (3). In this case, the copula complement, *ma:li:* ‘much’, is a property describing a quality of the subject rather than a statement of the subject’s identity. Just as with relationships of

identity, attribution is also commonly expressed by non-verbal predicates as well as copula constructions. In (4), for example, *ma:li:* ‘much’ functions as the predicate of the clause, and serves to ascribe the attribute to the clause complement without the need of a copula.

- (3) [[do:φu-wa:]<sub>CS</sub> [ma:li:]<sub>CC</sub> [la: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 smoke-ABS    much    COP    ASSER

‘There is a lot of smoke.’

- (4) [[kona:-lo:lu=wa:]<sub>TOP</sub> [da:=ja:]<sub>TOP</sub> [no:ja-ja:]<sub>S</sub> [ma:li:]<sub>PRED</sub>]<sub>FIN</sub>  
 taste:PST-ASS.EV=TOP    sago=TOP    tasty-ABS    much

‘When he tasted it, the sago was very tasty.’

The semantic difference between the copula construction and a non-verbal predicate is unclear, and both constructions seem synonymous. In terms of the copula’s morphological characteristics, {do:} is a fully functional verb with tense, aspect, modality, evidentiality, and mood-marking, as described for main clause verbal predicates in §6.2. The copula {la:} is a deficient predicate, and does not inflect for tense, aspect, modality or mood categories, although evidentiality and interrogative enclitics as well as predicate particles may occur with {la:}.

In some circumstances, a copula is required, and a non-verbal predicate is not possible. For instance, a copula is needed to form a question from an equative or attributive clause, as in (5), since non-verbal predicates cannot be used with interrogative morphology.

- (5) [[gɛ:]<sub>CS</sub> [hɛ:-mi:]<sub>CC</sub> [la:-leɪ]<sub>PRED</sub>]<sub>FIN</sub>  
 2:SG    where-ASS    COP-Q:PRS:EMPH

‘Where are you?!’

Copula constructions are also necessary to express special expressions such as the attribution of a noun phrase describing the subject’s location as in (6) or the attribution of a spatial adverb in (7).

- (6) [[nɛ ɛja:-ja:]<sub>CS</sub> [mumu:nɛ ɛlɛ:bɛ]<sub>CC</sub> [la:-bi:]<sub>PREDEFIN</sub>  
 1:SG:MOD father-ABS NAME river.head COP-D.S

‘My father was at the head of Mumu:ne creek.’ (A.1.4)

- (7) a. [[ə:]<sub>X</sub> [gi:ja: ho:go:ja:]<sub>CS</sub> [sugu:lu:]<sub>CS</sub> [ala:]<sub>CS</sub> [komu:nɛ:di:sugu:lu:]<sub>CS</sub> [a:la:]<sub>CS</sub>  
 HES 2:PL big school PRO.DEF community school PRO.DEF

- b. [rɛ:dʒɛsta:-mɛ:na:-ta:]<sub>X</sub> [mo:ti]<sub>CC</sub> [la: kɛi]<sub>PREDEFIN</sub>  
 register-FUT-N.TEL close COP ASSERT

“Your big school, that one, the community school, that one, is close to being registered.”

In the case of the attribution of a locative noun phrase in (6), if the locative noun phrase *mumu:nɛ ɛlɛ:bɛ* ‘the head of Mumu:ne creek’ were cast as the predicate of the clause, then only an interpretation of an identity relationship between the subject and predicate would be possible, i.e. that *nɛ ɛja:ja:* ‘my father’ was identical to the predicate *mumu:nɛ ɛlɛ:bɛ* ‘the head of Mumu:ne creek’, rather than simply being at that location. In the case of the adverb *mo:ti* ‘close’, an adverb simply cannot function as a clause predicate. The copula *la:* may also express a relationship of possession between the subject and the copula complement, as in (8).

- (8) [[bɛ:sɛ: da]<sub>CC</sub> [ka: la:]<sub>PREDEFIN</sub>  
 tooth be.at FOC COP

‘It (a pig) had tusks.’

(lit. ‘It was tusk-having.’)

In this case, the implied subject of the clause is in a semantic relationship that could be characterized as a part-whole relationship, or more broadly as a possession relationship.

### 9.2.1.1 {la:}

The copula {*la:*} may be used in constructions with a clausal complement. In main clauses, the imperfective telicity changing suffix {-*ta:*} and the perfect suffix {-*φɛija:*} commonly occur as copula complements. In constructions where the copula complement is suffixed by the imperfective suffix {-*ta:*}, the subject of the clause corresponds to the subject of the copula complement, as in (9) where the understood first person plural copula subject corresponds to the subject of the copula complement *kɛ:ga:ta:*, which describes the ongoing actions of the

copula subject. In contrast, copula complements formed by the perfect suffix {-φεija:} have a resultative meaning, where the subject of the copula clause corresponds to the object of the copula complement clause. For example, in (10) the understood first person plural subject of the copula clause corresponds to the object of the copula complement *dijo:φεija:*, which describes the resulting state of the copula subject after the event had affected it.

- (9) [[kε:ga:-ta: la:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
stand-TEL COP-D.S  
‘We were standing (there).’
- (10) [[kosu:wa:-ja:]<sub>CS</sub> [ε:na:]<sub>X</sub> [dijo:-φεija:]<sub>CC</sub> [la:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
cassowary-ABS DEM put-PERF COP-D.S  
‘We saw the cassowary put there’

Clauses with tense-marking may also function as a copula complement, as in (11). In this case, the semantics are similar to the resultative construction with {-φεija:} in (10) except that the subject of the complement is coreferential with the subject of the copula complement.

- (11) [[a:nε:=ja:]<sub>TOP</sub> [εnola:-ja:]<sub>CS</sub> [gu:-ta: ti-nε:]<sub>CC</sub> [la:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
go:PST=TOP:DUR broken.branches-ABS break-TEL descend-PST COP-D.S  
‘We went and there were broken branches there from a storm.’

These copula constructions formed with {la:} may be used as embedded clauses, which is described in greater detail in §9.3.2.3, and even in main clause functions, these copula constructions may appear with switch-reference-marking as seen in (9) to (11) when the subject of the clause differs from the discourse topic and serves to highlight an unexpected or non-topical subject. In addition, {la:} lacks tense, aspect, and modality morphology. These copula clauses are therefore morphologically deficient and likely originate from dependent clauses, although they may be produced in isolation as a main clause with the functions described above. In discourse, copula clauses formed with {la:} may occur as a prosodically independent main clauses with past, present, or future time reference, but are semantically dependent in the sense that the morphologically unspecified time reference is the same as the surrounding discourse context.

### 9.2.1.2 {do:}

While the copula {la:} is the morpheme most dedicated to the copula role, the auxiliary {do:} also serves many copula functions (see also §3.3.2.4 on positional and existential verbs, and §6.4.3.1 on auxiliary constructions using {do:}). Unlike {la:}, {do:} allows for tense, aspect and modality morphology, as in (12) and (13). In both of these constructions, the copula complement could appear as the clause predicate, but without the morphological marking present of {do:}. By forming a copula construction with {do:}, the entire array of verbal morphological categories becomes available. For example, the attributive complement in (12) may refer to a state which has not yet occurred by utilizing {do:} in the future tense. Similarly, in (13) utilizes counterfactual morphology that is not possible with a non-verbal predicate.

- (12) [[mo:lu:wa:]<sub>CC</sub> [do:-mei]<sub>PRED</sub>]<sub>FIN</sub>  
 old                    STAT-N.1:FUT  
 ‘It will be old’

- (13) [[i:                    ha:bila:]<sub>S</sub> [ɛga:lɛma: do:-ba:bɛ]<sub>PRED</sub>]<sub>FIN</sub>  
 3:N.SG:MOD    NAME            nothing            STAT-CF  
 ‘Those Ha:bila: people wouldn't be here.’            (A.1.62)

Similarly, a copula clause formed with {la:} could not be inflected for these tense or modality categories, and these morphological categories can only be utilized through the use of {do:} as an auxiliary. Copula clauses may be formed with a variety of complement types, including adjectives (12), quantifiers (13), nouns denoting the identity of the subject (14), and nouns denoting an attribute or location of the subject (15).

- (14) [[[a:gɛ:]<sub>S</sub> [do:-wa:    kɛi]<sub>PRED</sub>]<sub>O</sub> [ɛ-sa:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 dog                    STAT-PST    ASSER            do-3:DR-D.S  
 ‘(They) turned into dogs, so it's said.’  
 (lit. ‘It is said they were dogs.’)

- (15) [[na:nɛɛ:]<sub>S</sub> [do:gɛ:]<sub>X</sub>            [do:-si]<sub>PRED</sub>]<sub>MED</sub>  
 1:DU                    house:LOC    stay-MED:PFV  
 ‘We two were at the house and then...’ (A.4.12)

A nominal complement is not marked for case when functioning as a complement denoting the identity of the subject, and appears marked with the locative case when serving a locative function. This auxiliary may also appear with an anaphoric demonstrative as a complement, as in (16).

- (16) [[ε:γε:-ja:]<sub>S</sub>      [i:sa:subε:le-ja:]<sub>S</sub>    [ε:na:]<sub>X</sub>    [do:-wa:=bo:]<sub>PRED</sub>]<sub>FIN</sub>  
 someone-ABS    NAME-ABS            DEM        stay-PST=INF

‘Some guy, I:sa:subε:le apparently stayed there.’

In this example, the demonstrative ε:na: functions as a locative demonstrative which describes the location of the copula subject. While quantifiers, adjectives and nouns may function both as the complement of a copula and as a non-verbal predicate with similar semantic result, the anaphoric demonstrative {ε:na:} cannot function as a clause predicate, and the sort of statement seen in (16) must be formed with a copula.

Copula clauses formed by {la:} with clausal complements suffixed by {-ta:}, such as (9) and (11), may also be formed with {do:} when verbal morphology is necessary, as in (17) and (18).

- (17) [[wejo:gu:    kulu:                    sa:-ta:    do:-wa:        kei]<sub>PRED</sub>]<sub>FIN</sub>  
 do.like.this    with.head.bent    sit-TEL    STAT-PST    ASSER

‘He was sitting like this, with his head down.’      (A.1.24)

- (18) [[sε:= ja:]<sub>TOP</sub> [ka:    a:li-ta:]<sub>CC</sub>    [do:-wa:        kei]<sub>PRED</sub>]<sub>FIN</sub>  
 bank=TOP    FOC    sleep-TEL    STAT-PST    ASSER

‘I was sleeping on the sand.’

In both examples, the subject of the clause corresponds to the subject of the copula complement, and the clausal complement describes the ongoing actions of the copula subject. It is unclear whether other copula complements are possible with {do:}, e.g. the type of complement clause formed with {-φεija:} in (10), or the type of tense-marked clause in (11).

### 9.2.2 Verbless Clauses

As discussed in §6.3, clauses may be formed with a predicate from a variety of word classes, and may generally be classified into verbal and non-verbal predicates based on the morphological predicate categories which may be represented on the predicate. In this section, the semantic relationships between the non-verbal predicate and the subject of the clause will be explored, and include statements of identity, possession, attributions of qualities or changes of qualities, destinations in events of motion, and locations.

Expressions of identity state that the subject of the clause and the referent of the predicate are coreferential, as opposed to a statement of attribution, which simply ascribes a property to the subject of the clause. Predicates formed by nouns, see (2), and pronouns, see (19) and (20), may be interpreted as statements of identity.

(19) [[gɛ            da:jo]s        [nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
      2:SG:MOD    namesake    1:SG

‘Your namesake is me.’

Statements of identity may also be formed from possessive pronouns as in (20) in order to form statements of possession.

(20) [[wɛ]s    [a:ga:]<sub>x</sub>        [nɛ:-na:        kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
      this    today:ABS    1:SG-POSS    ASSER

‘Today, this is mine.’

Other word classes functioning in a predicate role are typically used to predicate an attribute to the subject rather than a statement of identity. In most cases, this will be realized as a statement that some attribute exists as a quality of the subject, as in (21), where the adjective *gɛ:ja*: ‘red’ describes a quality of the subject *a:bo*: ‘bird’. In addition, a small number of adjectives may appear with tense, aspect, and mood morphology to describe the acquisition of the adjectival quality, as in (22).

(21) [[a:bo: wɛ]s [gɛ:ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 bird this red  
 'This bird is red.'

(22) [[ho:do:su=ma:]<sub>PRED</sub>]<sub>FIN</sub>  
 small=IMP  
 'Become small!'

Since most adjectives do not allow verbal tense morphology, and have corresponding formally similar verbal counterparts, it may be more accurate to interpret examples such as (22) as cases where a verbal lexeme and an adjectival lexeme are homophonous (see §4.2.2.3 for a more detailed discussion of corresponding adjectival and verbal lexemes). Other qualities described by non-verbal predicates formed by non-adjectival lexemes, are not attested with any verbal morphology, such as quantifiers, demonstratives, or polar predicate particles. For instance, the predicates below formed by a quantifier in (23), a demonstrative in (24), and a polar particle in (25), ascribe attributes to the subjects, but could not describe the acquisition of those attributes without using a copula construction formed with the auxiliary *do*: such as described in §9.2.1.2.

(23) [[to:gola:]s [ɛga:lɛ:ma:]<sub>PRED</sub>]<sub>FIN</sub>  
 road:ABS nothing  
 'There was no path.' (A.3.43)

(24) [[gɛ da:-ja:]s [wɛ]PRED]<sub>FIN</sub>  
 2SG:MOD food-ABS DEM:PROX  
 'Your food is here.'

(25) [[kɛ:]<sub>CC</sub> [ma:]<sub>PRED</sub>]<sub>FIN</sub>  
 pig NEG  
 'It isn't/wasn't a pig.'

Non-verbal predicates may also be used with non-main clauses to attribute a characteristic to the clause. For instance, in (26) an adjectival predicate semantically intensifies an event described in a complement clause. An interpretation of this clause which would label the verb

*sɛga:lɛ* as the predicate of the entire clause and *ho:go:ja:* as an adverbial modifier of the predicate is less desirable since this is inconsistent with other verbal predicates, which appear in the final position, following any adverbial modifiers in the clause. In some cases, the complement clause is clearly marked as subordinate, as in (27), where the topic enclitic {=ja:} appears, and clearly marks the complement clause as a non-main clause.

- (26) [[nɛ: sɛga:lɛ]<sub>S</sub> [ho:go:ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG be.happy big

‘I am very happy.’

(More literally ‘My being happy is big.’)

- (27) [[[o:gu:-li:=ja: ka:]<sub>TOP</sub> [nɛ:] [tila:]<sub>PRED</sub> [ka: do:-si=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ka:]<sub>PRED</sub>]<sub>FIN</sub>  
 do.thus-SIM=TOP FOC 1:SG descend FOC STAT-MED:PFV=TOP FOC

‘That was happening, but it was indeed the case that I was still standing there having gone down.’

In these examples, a functional element of a clause which would precede a verbal predicate appears in the final position, which is typically reserved for the predicate, and the clause may or may not be overtly marked as a non-main clause which is semantically described by the final element of the main clause, which is here interpreted as the predicate. In (26) this predicate is an adjective, and this is the sole adjective that has been observed functioning as a predicate with a clausal argument. Examples, such as (27), where a polar particle serves as the predicate of a clausal argument are much more common. In the case of (27), the affirmative focus-marking particle functions as the predicate asserting that the event has occurred. Similarly, the negative polar particle *ma:* may function as a predicate asserting that it is not the case that a given event has occurred, as in (28).

- (28) [[[no:]<sub>X</sub> [wɛ] [ɛ:]<sub>O</sub> [bɛdɛ-si=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ma:]<sub>PRED</sub>]<sub>FIN</sub>  
 DISJ DEM:PROX 3:SG see-N.SG=TOP NEG

‘But this one, (they) didn’t see him.’

Similarly, a nominal predicate may serve as the predicate of a clausal argument. This occurs most often in cases such as (29) where a nominal predicate occurs with a dependent-marked

clause describing an event of motion, and the predicate describes the destination of that motion event. This may be viewed as an extension of the role of non-verbal predicates to denote the identity or attribute of the clause subject, where the predicate specifies an argument of the complement clause.

- (29) [[mi-jɛ:=ja:]<sub>TOP</sub> [do:gɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
come-PST=TOP house:LOC  
  
'I came to the house.'

In all of these instances of non-verbal predicates appearing with a clausal argument, the non-verbal element is elevated to the predicate position in order to place that piece of information into a central discourse role. For example, the event of seeing in (28) would be expected to occur in the discourse context, and in the ensuing discourse, the fact that the hidden actor was *not* seen is of great importance to the understanding of the sequence of events. The negation is therefore the most foregrounded element of the clause, and appears as the predicate.

Similarly, the predicate in (29) occurs in a narrative in which the speaker describes continually travelling for one place to another, and the traveling itself is less prominent or noteworthy than the spatial setting provided by the destination that the speaker had reached and which serves as the setting of the following events.

### 9.2.3 Deficient Clauses Formed by {-ta:} and {-φɛija:}

Clauses formed with a verbal predicate suffixed by the telicity changing imperfective suffix {-ta:} and the perfective suffix {-φɛija:} form a clause with a number of properties distinct from clauses with other verbal predicates. In particular, clauses formed with {-ta:} and {-φɛija:} are deficient, and allow only limited predicate morphology for categories of tense, aspect, modality, mood, and evidentiality. Additionally, predicates suffixed by {-ta:} and {-φɛija:} may function as both main clauses, as in §7.4.1, as copula complements, as in (9), (10), (17), and (18) above, and as constituents of a complex predicate as shown in §6.4.3.1.

When serving as a main clause, both {-ta:} and {-φɛija:} are incompatible with the concatenative past tense, but verbs which inflect for past tense with a non-concatenative suppletive form may appear in this past tense form with {-ta:} and {-φɛija:}, as in (30) and (31).

- (30) [[a:si-ta: dɛna:]:]PRED]MED [[to:ko: di]PRED]FIN  
sit:PST PROG:DUR stand.up PFV

‘I was seated there then I stood up.’

- (31) [[ha:nɛ]X [ka: tila: a:si-φɛija:]:]PRED]FIN  
water FOC descend sit:PST-PERF

‘I had gone down to the water and had been sitting.’

The future tense-marker {-mɛ:na:} on the other hand may occur with both suffixes, although this results in the fused form -φɛ:na:, seen in (32). When the suffix {-ta:} combines with the future tense, as in (33), the clause adopts a modal meaning of potentiality, and does not refer exclusively to events with future time reference (see also §7.3.2.1 describing constructions using the future morpheme {-mɛ:na:} in conjunction with the morpheme {-ta:}).

- (32) [[tɛ:gɛliba:]:]O [wɛjo:gu: dijo:-φɛ:na:]:]PRED]FIN  
walkway:ABS do.like.this put-COMP:1:FUT

‘I will finish putting the walkway in this way.’ (A.2.10)

- (33) [[gɛ:]:]S [mu: ja:]:]X [a:li-mɛ:na:-ta:]:]PRED]FIN  
2:SG fire.pit here sleep-FUT-TEL

‘‘‘You intend to sleep in the fire pit?’’’

In order to grammatically specify future time reference in this potential construction, the auxiliary {do:} must be used. Similarly, {do:} may be used to grammatically specify past time reference, even in cases where this is already specified by a suppletive past-tense verb stem as in (35).

- (34) [[o:-mɛ:na:-ta:]:]CC [do:-wa:]:]PRED]FIN  
shoot-FUT-TEL STAT-PST

‘(I) was about to shoot (it).’

- (35) [[ɛ bɛda:]:]PRED]MED [[nɛ:]:]CS [togo:lɛ:]:]X [ka: a:si-ta:]:]CC [do:-wa:]:]PRED]FIN  
do CONS 1:SG road:LOC FOC sit:PST-TEL STAT-PST

‘She did that so I was sitting on the road.’

This is similar to situations described previously in this chapter where {do:} is used with other deficient predicates to allow more complex grammatical categories available to verbs. As described in §3.3.2.2, {-ta:} and {-φειja:} may occur with the complete suffix {-jo:φo:}, and for the perfect suffix {-φειja:}, this is obligatory in atelic verb stems. Evidential morphemes may occur on verbs suffixed by {-ta:} and {-φειja:}, but other clitics and suffixes found in verbal main-clause predicates are not attested. Interestingly, a predicate formed with {-ta:} may freely combine with non-main clause morphology described in §9.3.2.5, while {-φειja:} may only occur with topic-marking, and does not occur with any other such clause linking or subordinating morphology.

### 9.3 Non-main Clause Types

Non-main clause are generally defined as semantically and/or syntactically dependent on another clause. The clause to which a non-main clause is dependent will be referred to as its matrix clause. Complement clauses are discussed in §9.3.1, and function as a core argument of a matrix clause predicate. Relative clauses are discussed in §9.3.2 and modify an argument head, though in many cases no nominal head is expressed and the clause functions as a headless modifier. Adverbial clauses are presented in §9.3.3 and typically use a clause to describe some aspect of the matrix clause predicate, which may specify when an event occurs, a desired outcome of an event, or a cause of an event. Topic clauses are described in §9.3.4, and occupy the morphosyntactic topic position described in §5.8, and may have a variety of semantic relationships to a matrix clause including temporal setting, cause, result, disjunct reference, or conditions. Clause chaining is a particular type of clause linking described in §9.4 separately from other non-main clauses.

#### 9.3.1 Clauses in Core Argument Roles as a Complementation Strategy

Clauses which function as a core argument of a verb may be present with overt nominalizing morphology, or may be morphologically indistinct from main clauses, and in both cases the clause serves as a complementation strategy and includes any arguments of the predicate of the clause used as a complementation strategy, which may or may not be shared with the arguments of the main clause. This section specifically references clauses which are

similar to nominal arguments in their ordering and morphology. In (36) for example, a clause is used as the argument of the verb {wa:lɛ} ‘tell’. The syntactic position of the clause parallels to default position of a core object argument. In (37) a clause is in an identical argument role with the same verb, but the verb is suffixed by {-sɛnɛ} which functions as a nominalizing suffix. For comparison, reference (38) in which the verb *wa:lɛ* takes a nominal object.

- (36) [[nɛ:]<sub>s</sub> [ko:sɛ: do:gɛ:]<sub>x</sub> [a:nɛ:]<sub>pred</sub>]<sub>o</sub> [wa:lɛ-mɛ:na:]<sub>pred</sub>]<sub>fin</sub>  
 1:SG bush.camp:LOC house:LOC go:PST tell-1:FUT

‘(I) will tell about when I went to a bush camp.’ (A.4.1)

- (37) [[nɛ:]<sub>s</sub> [da:no ga:lɛ-sɛnɛ]<sub>o</sub> [wa:lɛ-mɛ:ni:-jo:gu:]<sub>pred</sub>]<sub>fin</sub>  
 1:SG bow carve-NOM tell-FUT-INCH

‘I want to tell about bow carving.’

- (38) [[mo:lu:wa:]<sub>o</sub> [wa:-ja:]<sub>o</sub> [wa:lɛ-mɛ:na:]<sub>pred</sub>]<sub>fin</sub>  
 old.one story-ABS tell-FUT:1

‘I will tell an old one’s story.’

Clauses which are morphologically nominalized, as in (37), and those which are morphologically similar to main clauses in having tense-marking, as in (36), differ primarily in their semantic reference. Nominalized clauses refer to habitual events, or an abstraction of the event described by the verbal root, and may reference either the event itself, or an argument of the verb that is habitually involved in the action. For more discussion of the nominalizer {-sɛnɛ}, see §7.4.3. For example, the nominalized complement clause in (37) refers to the notion of bow-making, and how it is practiced in general. In contrast to this, the clause in (36) refers to a specific event that had taken place rather than an abstraction or repeating practice. Clausal arguments of a non-verbal predicate are also well attested, as discussed above in (26)-(29), and the subject status of these clauses is unclear. The homophony that exists between the absolutive case suffix {-ja:} and the topic-marking enclitic {=ja:} renders morphological criteria for determining the syntactic roles of these clauses difficult to assess. In practice, these argument clauses are the sole core argument of a predicate and function as the subject of the clause by default.

Medial clauses in clause chains may also function as a complementation strategy, as in (39) and (40). In these clause chains, the object of the matrix predicate is the entire event or proposition described by the preceding medial clause. The morphosyntax of clause-chaining will be discussed in greater depth in §9.4, but for the current discussion, it is most relevant that the semantic reference of the entire medial clause in (39)a is semantically coreferential with the inferred object of the predicate in (39)b, and similarly, the semantic reference of the entire medial clause in (40)a is coreferential with the inferred object of the predicate in (40)b. In this way, the omitted object argument of the verb {bo:bo:} ‘to see’ is described by a preceding medial clause.

(39) a. **[[o:mani:-ja:]<sub>CS</sub> [ma:li:]<sub>CC</sub> [da-bi:-ki:]<sub>PRED</sub>]<sub>MED</sub>**  
 blood-ABS          much          be.at-D.S-CONT

b. **[[bo:bo: kei:]<sub>PRED</sub>]<sub>FIN</sub>**  
 see          ASSER

‘He saw there was a lot of blood.’

(40) **[[ti:    la:-bi:]<sub>PRED</sub>]<sub>MED</sub> [[bo:bo:]<sub>PRED</sub>]<sub>FIN</sub>**  
 pick    COP-D.S          see.PST

‘We saw that someone had picked (the plants).’

Morphosyntactically, these medial clauses differ considerably from unmarked clauses such as that in (36), and nominalized clauses such as in (37), and the functional similarity shown in (39) and (40) is just on point of overlap of what is quite a distinct clause-linking structure, as will be explored in §9.4.

### 9.3.2 Relative Clauses

Relative clauses in Eibela are defined as a clause which modifies a core or oblique argument of a predicate, and when a nominal head is not expressed, a relative clause functions as a headless modifier of an unexpressed argument head. For example, the relative clause in (41), *so:na:* ‘tie:PST’, functions as a modifier of the argument head *ke:* ‘pig’, which is the object of the relative clause *so:na:*, as well as the object main-clause predicate *beba:*.

(41) [[[[kɛ: so:na:]<sub>REL-ja:</sub>]<sub>o</sub> [ka: bɛda:]<sub>PRED</sub>]<sub>FIN</sub>  
 pig tie:PST-ABS FOC see:PST

‘(He) looked at the pigs that had been tied up.’

A relative clause may function as a modifier of an argument head, as in (41), or may itself serve as an argument of a verb with no argument head being present outside of the clause, as in (42).

(42) [[wɛ:jo:molo: sɛ: a:nɛ:]<sub>REL</sub> [a:mi]<sub>x</sub> [do:ba:-ja:]<sub>o</sub> [a:mi:]<sub>x</sub> [bo:bo:]<sub>PRED</sub>]<sub>FIN</sub>  
 river.name shore go:PST PRO:ASS crocodile-ABS PRO:ASS see:PST

‘He saw a crocodile there where he had gone to the We:yo:molo: shore’

In both (41) and (42), an argument of the main clause is coreferential with an argument of the relative clause, and the entire relative clause serves to provide greater specification of this referent. These relative clauses may reference the subject, object, or oblique arguments of the relative clause. The formal representation of these clauses may be unmarked, i.e. identical to main clauses, specified as arguments through the use of demonstratives, or may take the form of copula or auxiliary constructions.

### 9.3.2.1 Unmarked Relative Clauses

Relative clauses may appear similar to main clauses, but are phonologically and syntactically dependent on a main clause predicate, as well as being semantically distinct in that they semantically refer to a single argument of the non-main clause rather than the entire event. For example, in the relative clause given in (41) the relative clause specifically references a pig, which functions as the reference of the object of both the relative clause and the object of the main clause. In contrast, a clause functioning as an argument, such as the unmarked clause seen in (36) makes semantic reference to the entire event rather than a specific argument of the relative clause, as in (41) and (42). Unmarked relative clauses may function in the role of absolutive-marked objects, as in (41), or as locative arguments as in (42) and (43).

(43) [[nɛ ɛ:ja: wɛbɛ:na:]<sub>s</sub> [ɛ:]<sub>s</sub> [[sa:goi la:]<sub>s</sub> [a:nɛ:]<sub>PRED</sub>]<sub>x</sub> [ma: a:nɛ: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG fatherPROX:DEM:ANA 3:SGNAME DEF go:PST NEG go:PST ASSER

‘My father here, he didn't go where Sagoi went.’ (A.1.31)

Unmarked relative clauses rarely occur in subject or possessor positions, and are often difficult to distinguish from a construction involving multiple main clauses. When these constructions do occur, they are best interpreted as a juxtaposition of clauses serving as a relativization strategy rather than a truly integrated non-main clause functioning as a relative clause. For example, a possessor in (44) is specified by a clause in (44)a which references a previously described event in the text, and a demonstrative noun phrase in order to foreground the referent of the subsequent possessor in (44)b, which is not overtly expressed.

(44) a. [[do:ba: la:]<sub>o</sub> [o:la:]<sub>PRE</sub>]<sub>FIN</sub>[ko:lu εna:]<sub>x</sub>  
 crocodile DEF shoot:PST man DEM:ABS

b. [[do:ge: u:su: ja:]<sub>s</sub> [ka: buta:-si]<sub>PRE</sub>]<sub>MED</sub>  
 house:LOC middle here FOC chop-MED:PFV

‘The man who shot the crocodile, his house broke in the middle and...’

(More lit. ‘He shot the crocodile; that man; his house’s middle broke and...’)

In this case, the clause in (44)a is prosodically separate from the ensuing clause, and followed by a clear pause. Additionally, the noun phrase *ko:lu εna*: ‘that man’ occurs following this clause, and is not morphologically marked as a possessor. These factors strongly suggest that the clause *do:ba: la: o:la*: ‘shot the crocodile’ and the noun phrase *ko:lu εna*: are not syntactically integrated into the following clause, and are separate independent utterances which foreground the referent of the implied possessor in (44)b, but do not serve syntactically as this argument. In this way, it is distinct from fully integrated relative clauses shown in (41)-(43), although it clearly serves a similar function. These fronted clauses may be seen as the relative clause counterpart to fronted nominal arguments, such as those described in §10.4.1, which serve a similar function of highlighting a discourse referent as given and topical.

### 9.3.2.2 *Relative Clauses Occurring with Anaphoric Demonstratives*

In addition to unmarked relative clauses, a demonstrative is often used following a relative clause. In (45), the relative clause *ke: o:la: he:neφekei* ‘the arrow he shot the pig with’ is followed by the demonstrative *ε:na:*, and the argument as a whole functions as the object of the main clause.

(45) [ [ [ [ [kɛ:]<sub>o</sub> [o:la:]<sub>PRE</sub> [hɛ:nɛφɛ-kɛi]<sub>x</sub>]<sub>FIN</sub> ɛna:]<sub>o</sub> [di-mɛ:na:]<sub>PRE</sub>]<sub>s</sub> [ma:]<sub>PRE</sub>]<sub>FIN</sub>  
 pig shoot:PST bamboo.type-INST DEM:ABS take-FUT NEG

‘The bamboo arrow he shot the pig with, He won’t miss with it.’

(lit. ‘With the bamboo arrow he shot the pig with, he won’t take it.’)

The reference of the object is further specified by the appearance of a final argument, *hɛ:nɛφɛ kɛi* ‘with the bamboo (arrow)’, which designates the argument in the relative clause that is coreferential with the object of the main clause. Without this right dislocated oblique argument specification, the relative clause could be ambiguous and could be understood as referring to the object of the relative clause, i.e. the pig, giving the erroneous interpretation ‘The *pig* he shot, He will not get (that *pig*).’. Relative clauses with demonstratives are most commonly used to refer to the object or oblique argument of the relative clause predicate, just as was noted regarding unmarked relative clauses in §9.3.2.1, but may also refer to the subject of both the relative clause, and the main clause, as in (46).

(46) [ [ [musu:la: la:]<sub>x</sub> [sa:=bo:-wɛ:]<sub>PRE</sub>]<sub>A</sub> ɛ:mɛ:]<sub>A</sub> [ka: bɛdɛ:-la:]<sub>PRE</sub>]<sub>FIN</sub>  
 NAME DEF stay=INF-ERG DEM:ERG FOC see-PRS

‘The ones staying in Musula are looking after it.’

In this case, the cause may be marked by the ergative case suffix, which is generally only used in ambiguous or contrastive environments, as discussed in §10.3. In this instance, the role of a relative clause referring to a transitive subject in a main clause is marked twice, once by the case-marking suffix of the relative clause itself, and once in the ergative form of the anaphoric demonstrative.

### 9.3.2.3 Relative Clauses Formed with {la:}

In addition to the anaphoric demonstrative {ɛ:na:}, relative clauses are often followed by the morpheme *la:*, which may be interpreted as one of two morphemes which appear elsewhere in the Eibela language. The definite demonstrative {*la:*} is used as an argument modifier on definite arguments. If a relative clause is taken to be structurally equivalent to an argument, then the relative-clause-marking morpheme {*la:*} may be interpreted as a demonstrative-marking an argument phrase in the same way as {ɛ:na:} in §9.3.2.2. Another

possibility is to interpret {*la:*} in relative clauses as the copula {*la:*}, which is attested in main clauses where a clause functions as a copula complement which described an attribute of a copula subject (see §9.2.1.1). In main clauses presented in isolation, these two morphemes are clearly distinct, but when copula clauses are used as a topicalization or foregrounding strategy, it becomes difficult to distinguish between a main copula clause which introduces a discourse referent, which is subsequently not expressed in a clause, and a relative clause which serves itself as the argument of a main clause.

The function of a copula clause is very much like the function of a relative clause formed with {*la:*} in that a copula subject is described using a clausal complement. The only significant difference is that in copula constructions, the copula {*la:*} functions as a main clause predicate rather than as an element of an argument. As an example, take the morpheme {*la:*} in the clause *dε: mε: la:* in (47) and (48), which is structurally quite ambiguous. On one hand, *dε: mε: la:* may be interpreted as a main clause, which is represented by the parsing given in (47). In this instance, the copula clause serves as a sort of topicalized cleft construction, in which discourse referent is foregrounded rather than serving directly as the argument of the main clause. This may be interpreted as a clefting construction serving as a relativization strategy.

(47) a. [[wε:ge εna:]<sub>x</sub> [[dε-ja:]<sub>CS</sub>            **[dε**            **mε:]**<sub>CC</sub> **[la:=ja:]**<sub>PRED</sub>]<sub>TOP</sub>  
 NAME    DEM    bow.arrows-ABS    bow.arrows    tie    COP=TOP

b. [kε:dε-jε:]<sub>x</sub>            [dijo:-ta:-gεnε:]<sub>PRED</sub>]<sub>MED</sub>  
 shoulder-LOC    take-TEL-MED:IPFV

‘We:ge: took a bow and arrows on his shoulder, it being a tied-up (bundle of) bow and arrows.’

(lit. ‘That We:ge:, a bow and arrows, which were a tied up bow and arrows, he took them on his shoulder.’)

In the analysis given in (48), the clause *dε: mε: la:* is presented as a topicalized argument of the main clause. In this instance, both structural interpretations are possible. Likewise, prosody is not a conclusive diagnostic feature, since fronted noun phrases can easily form a distinct prosodic phrase independent of the clause to which they are dependent.

(48) a. [[wɛ:geɛ ɛna:]<sub>x</sub> [dɛ-ja:]<sub>o</sub>            **[dɛ**            **mɛ:** **la:=ja:]**<sub>TOP</sub>  
 NAME    DEM    bow.arrows-ABS    bow.arrows    tie    DEF=TOP

b. [kɛ:dɛ-jɛ:]<sub>x</sub>            [dijo:-ta:-gɛnɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 shoulder-LOC    take-TEL-MED:IPFV

‘We:ge: took a bow and arrows on his shoulder, the tied-up (bundle of) bow and arrows.’

(lit. ‘That We:ge:, a bow and arrows, the tied-up (bundle of) bow and arrows, he took them on his shoulder.’)

A similar pair of analyses may be seen with the clause *a:mi: di ka: la:*, where this may be interpreted as a main clause, as in (49), or as an argument, as in (50). In (49), the first clause is interpreted as a resultative copula clause, similar to that seen in (11), which serves to foreground a location, which is then referred to anaphorically in the following clause in (49)b.

(49) a. **[[a:mi:]<sub>x</sub> [di]<sub>CC</sub> [ka: la:]<sub>PRED</sub>]<sub>FIN</sub>**  
 PRO:ASS    build    FOC    COP

‘They had built it there.’

b. **[[a:mi:=ja:]<sub>TOP</sub> [a:di:]<sub>PRED</sub>]<sub>FIN</sub>**  
 PRO:ASS=TOP    sleep:PST

‘They slept there.’

In (50), the analysis presents this as a single main clause, where the phrase *a:mi: di ka: la:* serves as a fronted argument rather than a separate main clause.

(50) **[[a:mi:]<sub>x</sub> [di    ka: la:]<sub>x</sub> [a:mi:=ja:]<sub>TOP</sub> [a:di:]<sub>PRED</sub>]<sub>FIN</sub>**  
 PRO:ASS    build    FOC    DEF    PRO:ASS=TOP    sleep:PST

‘They slept where they had built it.’

In phrases with this form and expository function, there is an inherent ambiguity, since the bare morpheme {la:} may be easily interpreted as either the definite determiner, or the copula. In some instances, however, switch-reference-marking may clearly identify this morpheme as the verbal copula rather than the determiner. For example, in (51) the phrase *dija tilɛ: la:bi* has the

same expository role as the phrases formed with {la:} in (47)-(50), but the subject of the phrase *dija tile: la:bi* differs from the subject of the following main clause. This is both evidence of the verbal status or the morpheme {la:} as well as being subordinate to the following matrix clause. In terms of the semantics of the construction, the phrase *dija tile: la:bi* serves the function of a relative clause in that it describes and references the discourse referent of the ensuing clause.

- (51) [[**dija:** **tile:** **la:-bi:**]<sub>o</sub> [ka: gu:-ta: di-si]<sub>PRE</sub>]<sub>MED</sub>  
 take descend COP-D.S FOC break-TEL PFV-MED:PFV  
 ‘He<sub>1</sub> had broken what he<sub>2</sub> was taking down and then...’

Additionally, the matrix clause may also have an object which is coreferential with the entire event described by a medial clause formed with {la:} as in (40), and the medial clause functions as a complementation strategy referencing the entire event rather than any specific argument. These constructions are best interpreted as a type of clefting, which is not fully independent in this specific discourse context. This is not to say that all clauses formed with copula *la:* are clefts, or subordinate clauses, since copula clause may also be used as fully main clauses with no syntactic or semantic dependence to a following clause, as illustrated in §9.2.1.1.

#### 9.3.2.4 *Relative Clauses Formed with {da}*

The positional/existential verb {da} may be used in a construction similar to that seen in §9.3.2.3 regarding {la:}, but is limited to clauses with temporal or spatial reference. These clauses may serve headlessly as both core arguments, as in (52), and as oblique arguments, as in (53). Like the clauses discussed in §9.3.2.3, clauses formed with {da} are attested in clauses as a core or oblique argument of the predicate. For example, in (52), the argument *gu:lu: da* ‘where the knee is’ serves as the subject of an embedded purpose clause describing what was burned. In (53), the adverbial argument *a:ge da* ‘Nowadays (lit. ‘where today is’)’ serves as an adverbial with temporal reference.

- (52) a. [ε-φειja:]<sub>MED</sub> [[gu:lu:]<sub>S</sub> [[**gu:lu:** **da**]<sub>S</sub> ha:dε-mε:na:]<sub>PURP</sub>  
do-PERF knee knee be.at burn-PURP
- b. [wε]<sub>X</sub> [dε:-jε:]<sub>X</sub> [ti a:nε:]<sub>PREDEFIN</sub>  
DEM:PROX fire-LOC descend go:PST

‘That had happened and my knee went down into the fire such that the area where my knee is was going to burn.’

- (53) [[**a:gε da**]<sub>X</sub> [so:bolo la:]<sub>CS</sub> [tεbε do:-wa:]<sub>CC</sub> [la:-bi:]<sub>PREDEFIN</sub><sub>MED</sub>  
today be.at airplane DEF to.land STAT-PST COP-D.S

‘Nowadays, this is where planes are landing.’

Unlike the copula {la:}, described in §9.2.1.1 and §9.3.2.3, {da} does not have the potential to function as a copula with either a clausal copula complement, such as the constructions with {la:} in (9) and (10), or a non-clausal complement, as in (1) and (2).

As a main clause, {da} asserts the location or existence of the subject, as well as a lying posture in the case of animate subjects (see §3.3.2.4 for more on verbs of posture, location and existence). In relative clause roles, the reference of the relative clause formed by {da} is a more diffuse location or time than would be expressed by using the subject of the relative clause directly as a non-verbal argument of the matrix clause. For example, in the example given in (52), the object of the verb *ha:dime:na:* is formed by the relative clause *gu:lu da* ‘where the knee is’, which is a more general statement of location than if the noun {gu:lu} were used directly as an object in the clause. That is to say that the area around the knee was burned, and the burning was not limited to solely the knee. Similarly, the statement in (53) is best translated as ‘nowadays’ whereas if the temporal noun {a:gε} ‘today’ were used alone in this context as an oblique argument, the meaning would be specifically ‘today’. Relative clauses formed with {da} may occur with different-subject marking when the subject of the relative clause is not coreferential with the subject of the matrix clause. For example, in the relative clause *o:mani:ja: ma:li: dabi:ki:* in (54), the subject of the relative clause is *o:mani:* ‘blood’, whereas the object of the matrix predicate *bo:bo:* ‘see’ refers to the narrator of the story.

- (54) [[o:mani:-ja:]<sub>CS</sub> [ma:li:]<sub>CC</sub> [da-bi:-ki:]<sub>PRED</sub>]<sub>MED</sub> [[bo:bo: kɛi] <sub>PRED</sub>]<sub>FIN</sub>  
 blood-ABS      much      exist-D.S-CONT      see      ASSER

‘He saw there was a lot of blood.’

In this respect, relative clauses formed with {da} closely resemble the use of switch-subject marking in relative clauses formed with {la:} such as in (51). This different-subject marking distinguishes both of these relative clause constructions, those using {la:} or {da}, from the unmarked relative clauses described in §9.3.2.1 and the clauses appearing with demonstratives in §9.3.2.2, which do not show switch-reference marking. Dixon (2010b, p.410) also discusses this type of clause linking in a cross-linguistic context which considers a typological overview of complementation strategies.

#### 9.3.2.5 *Relative Clauses Formed with {-φειja:} and {-ta:}*

Deficient clauses containing the aspectual morphemes {-ta:} and {-φειja:} may also appear as juxtaposed clauses serving as a relativization strategy (see also §9.2.3 for more on these clauses as main clauses). These relative clauses may be unmarked relative clauses such as those described in §9.3.2.1, and illustrated in (55), or may appear with a demonstrative, such as those clauses described in §9.3.2.2, and illustrated in (56).

- (55) [[si:jeβe:ki: wɛ] <sub>A</sub> [nɛ: sobo: **gɛ-φειja:**] <sub>O</sub> [ga:da:      ɛ-si] <sub>PRED</sub>]<sub>MED</sub>  
 shin      this      1:SG      knife      to.plant-PERF      to.impact:PST      do-MED

‘This shin bumped my planted knife and then...’

- (56) [[nɛ:] <sub>A</sub> [da:βɛ: **gu:-ta:**      wɛ:na:] <sub>X</sub> [mulo:mulo:] <sub>O</sub> [di-mɛ:na:-ta:-nɛ:] <sub>PRED</sub>]<sub>MED</sub>  
 1:SG      hand      break-TEL      DEM:PROX      medicine      get-FUT:1-TEL-MED:IPFV

‘That had happened, so I went to get medicine for this broken hand.’

Both aspectual morphemes have a very similar composition in terms of both syntax and semantics. Syntactically, these constructions are used to modify an argument of the matrix clause which is coreferential to the object of the relative clause. In terms of the aspectual semantics, both constructions can be broadly described as resultative, and both relative clause types refer to ongoing effects of the event of the argument in question. Only the *degree* of affectedness differs between {-ta:} and {-φειja:}. Relative clauses formed with {-φειja:} such as

(55) describe a completed or exhaustive event, whereas in (56) {-ta:} is used to describe events which are incomplete or in progress. In the example (55) for instance, the event *gεφεija:* ‘planted’ is a telic event which has been fully completed. In contrast, the event *guta:* ‘(partially) broken’ refers to an injured hand, which has not been completely destroyed or broken off.

### 9.3.2.6 Medial and Topic Clauses as Relative Clause Strategies

Medial clauses in clause chains may also be used in clefting constructions with a function similar to that of relative clauses. In these constructions, a medial clause highlights a discourse referent, which then serves as an unspecified argument in a subsequent clause. The unspecified clause may be referred to anaphorically, as in (57), or may be completely unexpressed, as in (58). In (57), the clause *do:go: da dije:lilu:wa:* ‘They were working where the house is.’ is a specific type of topic clause which also features the clause linking morpheme {-lolu:} which serves to specify that the following matrix clause acts semantically as a result or complement to the clause suffixed by {-lolu:} ({-lolu:} is described in greater detail in §9.4.1.1.3, and a similar construction is seen in topic clauses describing an event of perception, as in §9.5.2). In (57), the subject of this topic clause is coreferential with the subject of the pronoun *ala:* functioning as the subject of the following matrix clause *ala: ma: mija:* ‘They too didn’t come’.

- (57) [[**do:go: da dije:-li-lolu:=wa:**]<sub>TOP</sub> [ala:]<sub>S</sub> [ma: mi-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 house be.at take-SIM-ASS.EV=TOP PRO:DEF NEG come-PST  
 ‘Since they were building the house, those ones didn’t come.’

Similarly, in (58), a medial clause serves to specify an argument of the following matrix clause, but importantly, the coreferential argument of the medial clause and the matrix clause is a location which is not overtly specified in either clause. The subjects of the two clauses are also not coreferential, which is overtly specified by the different-subject marker {-bi:} on the medial clause verb.

- (58) [[[**u:gei εna:**]<sub>S</sub> [**sa:-bi:**]<sub>PRED</sub>]<sub>X</sub> [hεna: hε:li do:-wa:]<sub>PRED</sub>]<sub>O</sub> [ε la:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME DEM stay-D.S go go.out STAT-PST do QUOT-D.S  
 ‘They went out to where U:gei was staying.’

This construction is very similar to that seen with the copula {la:}, as in (51), except that *sa:* ‘sit, stay’ specifies a posture and/or a position rather than functioning solely as a grammatical copula.

### 9.3.3 Adverbial and Oblique Argument Roles

Two construction that are more commonly used to mark oblique nominal arguments may also be used to form adverbial clauses with spatial or temporal reference (see also Aikhenvald [2008] on extensions of nominal morphology to clausal constituents). The first of these constructions is the combination of the locative case {-jɛ:} and the associative case {-mi:}, and the second is the coordination and comitative-marker {-ba:lɛ}.

The first of these constructions, formed from the two morphemes {-jɛ:} and {-mi:}, may be used with a medial clause to form an adverbial clause with spatial or temporal reference (see §9.4 on the formation of clause chains for more on medial clauses as a clause type.). In nominal arguments, these two morphemes may appear separately, or in conjunction, as discussed in §5.7.2, but when used to form adverbial clauses with a non-copula verbal predicate, both morphemes must be used in conjunction, as in (59). In (59) three clauses are used as adverbial clauses with temporal reference, i.e. the event described in the adverbial clause is presented as being in progress when the event described by the matrix clause occurs. In (59)a, the clause *tokosi dija: sɛ:kijɛ:mi:* ‘Still standing having gotten up...’ refers to the timing of the following matrix clause, and in (59)b and (59)c the predicate *sɛlɛki:jɛ:mi:* ‘still speaking’ literally specifies that the matrix clause occurred while the speaking was in progress, and in this context, the implication is that the speech report is also the result of the speech event described in this adverbial clause.

(59) a. [[*toko-si di=ja:*]<sub>TOP</sub> [*sɛ:-ki:-jɛ:-mi:*]<sub>PRED</sub>]<sub>X</sub>  
 stand.up-PL PFV=TOP stay-CONT-LOC-ASS

‘They got up and were sitting.’

b. [[*kalema:bi-jɛ:*]<sub>A</sub> [*sɛlɛ-ki:-jɛ:-mi:*]<sub>PRED</sub>]<sub>X</sub>  
 NAME-ERG say-CONT-LOC-ASS

‘Ka:la:ma:be: said (something)...’

- c. [[nɛ           ɛja:           u:gei-mo:]<sub>X</sub>   [sɛlɛ-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>X</sub>  
 1:SG:MOD   father       NAME-DAT   say-CONT-LOC-ASS  
 '(He) said to my father U:gei...'
- d. [[nɛ:]<sub>A</sub> [so:ko       ha:do]<sub>O</sub> [mɛ:na:           do:   kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG   tobacco   green   consume:FUT   STAT   ASSER  
 "'I feel like smoking green tobacco.'"       (A.1.21)

Clauses formed with the existential verb and copula {la:} may also form an adverbial clause with the morpheme {-mi:}, as in (60), where is locative morpheme {-jɛ:} is not present. These adverbial clauses may refer to the spatial context of the matrix clause, as in (60).

- (60) [[ɛ:    la:-mi:]<sub>X</sub>   [hɛna:]<sub>PRED</sub>]<sub>FIN</sub>  
 3:SG   exist-ASS   go  
 'I'm going to where he is.'

Clauses formed with {-mi} may be used as a predicate of a clause in addition to the adverbial function described above. In (59), the clause *a:si la:mi:* 'where (his) friends were' functions as the destination of the event described by the topic clause *a:nɛ:ja:* 'having gone'.

- (61) [[a:nɛ:=ja:]<sub>TOP</sub> [ɛ           a:si       la:-mi:]<sub>PRED</sub>]<sub>FIN</sub>  
 go:PST=TOP   3:SG:MOD   friend       exist-ASS  
 'Being like that, he gathered the sago and went to his friends.'

The syntactic construction in (61) is parallel to that illustrated by the predicative noun in (29) described in §9.2.2. In (29) a noun referring to a destination appears in a predicate position with a topic clause describing an event of motion. Similarly, the entire spatial clause formed with {-mi:} in (61) functions as the predicate of a main clause, the topic clause as a topic argument.

### 9.3.3.1 *ba:lɛ*

The second construction discussed in this section is formed by a clause modified by {ba:lɛ}, which may also function as a coordinator or comitative-marker in non-clausal arguments. When used with a clause, {ba:lɛ} forms an adverbial with temporal reference, as in (62) where the

event described by the adverbial clause *tɛbɛ do:wa: ba:lɛ* ‘having descended’ refers to the results of an immediately prior event with relevance to the matrix clause. In the context of the utterance, the speaker had been sleeping in a house elevated above the ground, and another man in the house had just thrown the speaker to the ground from the house because a storm had caused two trees to collapse onto the house.

(62) a. [[**tɛbɛ do:-wa: ba:lɛ**]<sub>x</sub> [nɛ:]<sub>s</sub> [ɛna]<sub>x</sub> [a:di di]<sub>pred</sub>  
 descend STAT-PST COORD 1:SG still sleep:PST PFV

‘When I hit the ground, I had still been sleeping.’

b. [[jɛ:bɛ soso wɛ ba:lɛ kolo ba:lɛ]<sub>s</sub> [a:nɛ kɛi]<sub>pred</sub>]<sub>fin</sub>  
 tree tree.sp DEM:PROX COORD tree.sp COORD go:PST ASSERT

‘A soso and kolo tree were both falling there (where I had been sleeping).’

The use of {*ba:lɛ*} indicates that the event described in the adverbial clause is still in progress, as in (63), though it may refer to the ongoing result of a completed event, as in (62). As in (63), adverbial clauses with {*ba:lɛ*} are frequently formed from auxiliary constructions formed with {*dɛnɛ*}, which overtly specifies that the event is in progress, incomplete, or habitual (see §6.4.3.4 for more discussion of the auxiliary {*dɛnɛ*}).

(63) [[**hɛnɛ-si dɛnɛ ba:lɛ**]<sub>x</sub> [kɛ: ka:]<sub>o</sub> [ho:dɛ=ja: la:-bi:=ja:]<sub>pred</sub>]<sub>top</sub> [ka:]<sub>pred</sub>]<sub>fin</sub>  
 go-PL PROG COORD pig FOC to.bark=TOP exist-D.S=TOP FOC

‘While we were going the dogs were there barking at a pig.’ (A.3.22)

Adverbial clauses formed with {*ba:lɛ*} differ semantically from those formed with {-*jɛ:mi:*} in that they are not attested with any spatial semantics, and refer specifically to the relative timing of the adverbial clause and matrix clause.

### 9.3.4 Topic Clauses

Topic clauses present an event as the topic or theme of a clause. In Eibela, this pragmatic function is realized morphosyntactically by a left dislocated sentence position and the enclitic {=*ja:*}. A morphosyntactic topic may be formed from a clause or from an argument headed by a noun, demonstrative, quantifier or any other word class that can head a clausal argument (see

chapter 8 on argument realization for more on which word classes may form a clausal argument). Non-clausal topics are discussed in §5.8 and both clausal and non-clausal topics in Eibela are discussed in Aiton (2015) which discusses the use of topic clauses in Eibela discourse. When a topic clause is present, the role of the matrix clause is to expand upon a given topic and provide new information which has not yet been presented. For instance, example (64) is taken from a narrative which centers on transferring several bags from one location to another. This event of taking a bag is topical, and therefore is expressed as the topic of the complex sentence in (64).

- (64) [[**nε:**A**ε:sε:** **no:-wa:]O** **[o:ge di=ja:]<sub>PRED</sub>**]<sub>TOP</sub> [**φili:-nε::**]<sub>PRED</sub>]<sub>MED</sub>  
 1:SG string.bag INDEF-ABS carry take=TOP ascend-PST:DUR  
 ‘Taking another bag, I went up.’

The main predicate of the sentence, *φili:nε:*, describes an event being carried out in order to accomplish the topical goal. The topic clause in this instance has a function similar to a purposive construction. In some contexts, a topic clause can produce a semantically similar conditional reading, as in (65) (see also Haiman [1978]).

- (65) a. [[**ge so:wa]**<sub>S</sub> **[sugu:lu:-mε:na:=ja:]<sub>PRED</sub>**]<sub>TOP</sub>  
 2:SG:MOD child attend:school-FUT=TOP  
 b. [**ε:εmε:ntri: ti:sa-ja:]<sub>O</sub>** **[kεε=ma:]<sub>PRED</sub>**]<sub>FIN</sub>  
 elementary teacher-ABS find=IMP  
 "If your children are to go to school, then find a teacher!"

A purposive or conditional reading results from the topical event taking place after the event described as the main predicate.

Topical events may also precede the event described by the main predicate, as in (66). In this example, the events of the topic clause and main clause are sequential and do not portray the topic clause as an intention or goal.

- (66) [[**φili:-nε=ja:]<sub>TOP</sub>** **[owa:lo-wa:]<sub>O</sub>** **[sola: di]<sub>PRED</sub>**]<sub>FIN</sub>  
 ascend-PST=TOP tree.type-ABS peel.bark PFV  
 ‘Went up and peeled bark strips from an owa:lo tree.’ (A.3.12)

Instead, the topic clause clearly precedes the events of the main clause, and no intentional interpretation is possible. The topical status of the initial clause is instead motivated by a scene setting strategy which presents a previously described event as a topic in order to provide context for new information. This is the basis of the bridging constructions using topic clauses, which will be further described in chapter 10, and are discussed in Aiton (2015).

#### 9.4 Clause Chaining

Clause chaining is a form of clause subordination where one or more medial clauses with limited inflection appear in a sequence, or chain, and the full inflection of tense aspect and mood is expressed on the final clause of the chain (Longacre, 1985). A clause chain is the closest formal representation of a discourse episode or paragraph available in Eibela. As will be further discussed in chapter 10 on discourse organization, although there is some overlap between the sequences of events described by subsequent clause chains, a single clause chain largely corresponds to a series of closely related events and descriptions which form a coherent episode within a narrative. For example, in (67), there are two short clause chains given. The first is two clauses, (67)a-b, and the second is the two clauses (67)c-d. The medial clauses in (67)a and (67)c are not specified for tense. The verb in the first of these medial clauses in (67)a is suffixed by the imperfective clause chaining morpheme {-nɛɛ:} (sometimes reduced to -nɛ:), and the second medial clause in (67)c is suffixed by the perfective clause chaining suffix {-si}. Tense specification is only provided on the final verb of the first clause chain, *ta:nɛ:* ‘crossed’ in (67)b and the final verb of the second clause chain, *a:nɛ:* ‘went’. In terms of discourse structure, the clauses form a related sequence of events, in this case a series of clauses describing a single trip through the forest.

- (67) a. [[so:lo            di=ja:]<sub>PRED</sub>]<sub>TOP</sub>    [bɛda:-nɛɛ:]<sub>PRED</sub>]<sub>MED</sub>  
           become.dark    PFV=TOP            CONS-MED:IPFV  
           ‘It had gotten dark, so...’
- b. [[ka:    ta:-nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
       FOC    cross-PST  
       ‘We still crossed’

- c. [[ha:nɛ wa:wi-ja:]<sub>o</sub> [ka: ta:lɛ-si]<sub>pred</sub>]<sub>med</sub>  
 river NAME-ABS FOC cross-MED:PFV

‘We crossed the Wa:wi river and then...’

- d. [[a:nɛ:]<sub>pred</sub>]<sub>fin</sub>  
 go:PST

‘We went (on).’ (A.3.36-39)

Clause chaining morphology is limited to positional and existential verbs, auxiliaries, copulas, and a handful of lexical verbs. These verbs are listed in table 1 below. Switch-reference marking is present on a subset of medial clauses described in §9.4.1.1.2, but only the different-subject-marker {-bi} may be used in medial clauses and same-subject marking is unmarked. A same-subject marker {-lɛ} does exist, but is only used in main clauses as described in §9.4.1.3.

Table 1: Verbs allowing clause chaining morphology

Positional and Existential Verbs	Auxiliaries	Copulas	Lexical Verbs
{la:} ‘exist’	{hɛnɛ} ‘durative’	{la:}	{hɛnɛ} ‘go’
{da} ‘lie’	{do:} ‘perfect’	{do:}	{tilɛ} ‘descend’
{sa:} ‘sit’	{di} ‘perfective’		{ja} ‘come’
			{ta:lɛ} ‘cross’
			{ɛ} ‘do’
			{wo:gu:} ‘do thus’
			{sɛlɛ} ‘say’
			{bɛdɛ} ‘see’

As table 1 shows, the majority of lexical verbs that display clause chaining morphology are motion verbs. Two anaphoric verbs are also present, {ɛ} and {wo:gu:}, and only two other verbs

are attested with clause chaining morphology: {sɛlɛ} ‘say’, and {bɛdɛ} ‘see’. Clauses with any predicate not listed in table 1 may still form an element of complex medial clause predicate in conjunction with an auxiliary or copula. For example, in (68), the primary semantic predicate in the first two medial clauses, (68)a and (68)b, is the verb {ta:lɛ} ‘to finish’, which cannot appear with clause linking morphology. In order to form a medial clause using the verb {ta:lɛ} ‘to finish’, the pro-verb {ɛ} ‘to do’ must be combined with the inflected lexical verb to form the complex predicate *ta:lɛta: ɛsi* ‘finished and then...’. The pro-verb {ɛ} ‘to do’ does not have any apparent semantic contribution to the semantics of the event structure, and appear to serve the purely morphosyntactic function of allowing the medial clause predicate to appear with clause linking morphology.

- (68) a. [[[ɛ:joba:]<sub>o</sub> [dijɛ: ɛ sɛ:-li: a:nɛ:=ja:]<sub>pred</sub>]<sub>top</sub> [ta:lɛ-ta: ɛ-si]<sub>pred</sub>]<sub>med</sub>  
 rafter get do put-SIM go:PST=TOP finish-TEL do-MED:PFV  
 ‘Put the rafters on until that’s finished and then...’
- b. [[a:mi:]<sub>x</sub> [jo:losa:]<sub>o</sub> [mɛ:lɛ ta:lɛ-ta: ɛ-si]<sub>pred</sub>]<sub>med</sub>  
 PRO:ASS rafter tie finish-TEL do-MED:PFV  
 ‘Finish tying the rafters there and...’
- c. [[ɛ di-si-jɛ:-mi:]<sub>x</sub> [a:mi:]<sub>x</sub> [duφɛ:-ja:]<sub>o</sub> [a:mi:]<sub>x</sub> [ko:du-mɛi]<sub>pred</sub>]<sub>fin</sub>  
 do PFV-MED:PFV-LOC-ASS PRO:ASS roof.ridge-ABS PRO:ASS chop-HYPO  
 ‘That being done, then one would cut the stick for the spine of the roof.’ (A.2.33-35)

Aspectual auxiliaries may serve a similar role, but add aspectual semantics to the medial clause. For instance, in (69), the first two medial clauses in (69)a and (69)b are formed with a complex predicate utilizing the perfective auxiliary {di}, which specifies that discrete sequential events which conclude before the following event takes place.

- (69) a. [[mo:ko-wa:]<sub>o</sub> [sɛdɛ:-gɛ: hɛna: ta:lɛ-ta: di-si]<sub>pred</sub>]<sub>med</sub>  
 top.of.house-ABS put-ITER DUR finish-TEL PFV-MED:PFV  
 ‘Finish putting them on the top of the roof and then...’

- b. [[ε di-si=ja]<sub>TOP</sub> [ε:mεε:]<sub>X</sub>[tila: di-si]<sub>PRED</sub>]<sub>MED</sub>  
do PFV-MED:PFV=TOP back descend PFV-MED:PFV  
‘Having done that, then go back down (to the ground) and then...’
- c. [[[jolosɑ:-ja:]<sub>o</sub> [bεdε di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [sa:dε-φει]<sub>PRED</sub>]<sub>FIN</sub>  
scaffolding-ABS dismantle PFV=TOP discard-HYPO:COMP  
‘Dismantle the scaffolding and discard them.’ (A.2.59-61)

#### 9.4.1.1 Clause Chaining Morphology

Clause chaining in Eibela may be divided into three types of clause linkage based on the morphemes utilized. Clause linking suffixes from one type of clause-linking do not co-occur with the clause linking morphology associated with other linkage constructions.

##### 9.4.1.1.1 Imperfective {-nεgε:}<sup>9</sup>, Perfective {-si}, and Consequential {bεda:}

Three morphemes are associated with the first type of clause chaining construction. The most prominent suffixed is this construction are {-nεgε:} and {-si}. These two suffixes may not co-occur with one another, but they show similar semantic and morphological properties. The two clause linkers {-nεgε:} and {-si} are more or less synonymous with no obvious distributional differences. The aspectual differences represented by the glossing as imperfective form {-nεgε:}, and perfective for {-si}, reflects a tendency rather than a strict correspondence. The enclitic {-nεgε:} more frequently occurs with ongoing events that will still be co-occurring along with the subsequently described events, while the suffix {-si} more often occurs with perfective events which are completed and then followed by a consecutive event. The third clause chaining device associated with this type of clause chaining is the consequential auxiliary {bεda:}, which specifies causation and switch-reference, i.e. an event that causes a subsequent event with some other subject. In (67) the speaker describes how they had to cross the river and return to their camp, and that this was caused by the fact that it was getting dark. The auxiliary {bεda:} in (67)a specifies both the causative relationship between the clauses and the

<sup>9</sup> The forms {-nεgε:} and {-gεnε:} are synonymous and in free alternation. By free alternation, it is meant that these two forms are semantically and morphosyntactically interchangeable, though individual speakers typically favor one form or the other, with the form {-nεgε:} being the more common form in the Lake Campbell community.

change in subject. The clause linking suffix {-nεε:} in this clause specifies imperfective aspect, but in perfective contexts, no additional clause linking enclitic is necessary, as shown in (70)b.

- (70) a. [[gε: hε:ga:=ja:]<sub>o</sub> [ε-sa:]<sub>pred</sub>]<sub>fin</sub>  
 2:SG how:PST=Q:N.PRS do-3:DR  
 ‘He said "What happened to you?".’
- b. [[o:gu: **bεda:**]<sub>pred</sub>]<sub>med</sub>  
 do.thus CONS  
 ‘He did (said) that, so’
- c. [[nε εnε:bε wε]<sub>s</sub> [dε:ja]<sub>pred</sub>]<sub>s</sub> [wε kεi]<sub>pred</sub>]<sub>fin</sub>  
 1:SG:MOD leg this swollen this ASSERT  
 ‘(I said) "This leg that is swollen is here."’

The auxiliary {bεda:} may occur with either {-nεε:} or {-si}, but not any of the morphology associated with the other two clause chaining constructions which will be discussed the following two sections.

#### 9.4.1.1.2 Continuous {-ki} and Different-subject {-bi:}

A second type of clause chaining utilizes the morphemes {-ki} and {-bi:}. These suffixes may co-occur freely with one another, but are limited in their co-occurrence with {-nεε:} and {-si}. The suffix {-ki} is used for ongoing or persisting events, as in (71)a below, and is used for ongoing imperfective events which continue up until the occurrence of the following clause. {-ki} rarely occurs with the suffix {-si}, but does not occur with the suffix {-nεε:} or the auxiliary {bεda:}.

- (71) a. [sεnε-**ki:**]<sub>med</sub>  
 stay-CONT  
 ‘We were living there and...’
- b. [[a:mi:]<sub>x</sub> [maki:so:-wa:]<sub>s</sub> [ε-sa:-bi:]<sub>pred</sub>]<sub>fin</sub>  
 PRO:ASS visitor-ABS do-3:DR-D.S  
 ‘A visitor came there.’

This suffix differs in usage from the imperfective suffix {-nɛɛ:} primarily in that {-ki:} represents stative, repetitive, or unchanging event structures, whereas {-nɛɛ:} is often used for processes or telic events which are incomplete or repetitive. The suffix {-bi:} is used to specify that the medial clause subject differs from that of the matrix clause. No overt same-subject marking is utilized in non-main clauses, though the same-subject marker {-lɛ} may be used in desubordinated clauses such as (80) in §9.4.1.3.

(72) [tilɛ            hɛnɛ la:-bi:]<sub>MED</sub> [mɛnɛ:na:]<sub>FIN</sub>  
 descend go COP-D.S go:FUT:1

‘The (rain) will fall for a while and then we will go.’

In cases where an argument in the medial clause is coreferential with an argument of the matrix clause, these medial clauses formed with {la:} may be functionally equivalent to a relative clause, as discussed in §9.3.2.3. This coreferential argument may be the subject of the medial clause, and the object of the matrix clause, as in (72), or this coreferential argument may be the object of both the medial clause and the matrix clause, as in (51). The suffix {-bi:} is used in both of these instances to specify that the subject of the medial clause differs from that of the matrix clause.

#### 9.4.1.1.3 Associated Event {-lo:lu}

The third type of clause chaining is formed with the associated event suffix {-lo:lu}, which is often shortened to *-lo:* when in word-final position, as in (73). This suffix may form constructions resembling complementation, but is more syntactically and semantically versatile than a true complementizing morpheme. Associated event constructions may be similar to the clauses functioning as an argument described in §9.3.1 in that a clause is coreferential with the core argument of a clause predicate; however, the morphosyntax of this construction differs significantly from the constructions described in §9.3.1, in which a clause functions as a syntactically dependent argument of a clause. In many constructions formed with {-lo:lu}, the medial clause (or topic clause if the medial clause is topicalized as described in §9.3.4) is marked with this associated event suffix, and the syntactic matrix clause is coreferential with an argument of the clause suffixed by {-lo:lu}. As an example, the clause in (73)a is a non-main

clause describing a perception event, and the subsequent main clause in (73)b refers to the object of the clause in (73)a. By far, the most frequent use of the suffix {-lo:lu} is to describe an act of perception as the medial clause with a predicate marked by {-lo:lu} and a clause describing the event perceived as the subsequent matrix clause, as in (73). Like many other clause types which do not show concatenative tense, suppletive tense form may still occur in clauses suffixed by {-lo:lu}, as in the past tense form *bɛda*: ‘see:PST’ in (73).

- (73) a. [[bɛda:-lo:]<sub>PRED</sub>]<sub>MED</sub>  
 see-ASS.EV
- b. [[lɛ dɛnɛ kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 do PROG ASSER
- ‘I was watching’  
 (More literally, ‘I was watching, and that was happening.’)

A construction in which a main clause describes the result or consequence of a subordinate clause has parallels in speech constructions as well. Speech-act constructions may be formed with a topic clause or medial clause describing the speech-act functioning as a dependent clause, and the reported speech that results from this action functioning as a main matrix clause (See §9.5 for discussion of this and other clause-linking constructions used to describe speech events).

This semantic relationship is similar to that formed with the clause-linking auxiliary {bɛda:} in that it may describe a result or outcome of an event, but clauses linked by {-lo:lu} are more closely integrated as a single event rather than two discreet sequential events with a causal link, as is the case with clauses linked with {bɛda:}. For instance, compare (70) with the above construction formed with {-lo:lu} in (73). In constructions formed with {-lo:lu} the subsequent matrix clause is not merely a following event that was caused by the clause suffixed by {-lo:lu}, but is an integral part of the same overall event, whereas in and (70) two sequential events are described as having a causal relationship. The suffix {-lo:lu} may be used to represent a clarification of the outcome of an event rather than being coreferential with the object argument of the {-lo:lu}. In (74)a, the clause describes the act of striking a pig with an ax in a

clause marked by {-lo:lu}. The subsequent clause then goes on to describe the quality of the strike, and refers to the same event.

(74) a. [[sobo:o:no:-kɛi]<sub>x</sub> [sɛda:-lo:lu]<sub>PRED</sub>]<sub>MED</sub>

ax-INST                      hit:N.SG.A-ASS.EV

'In hitting it with the ax...'

b. [[moga:gɛ-li        sɛdɛ-si]<sub>PRED</sub>]<sub>MED</sub>

bad-SIM                      hit:N.SG.A-MED:PFV

'We hit it badly and then...'

c. [[φo:sɛ:        ki:-jɛ:]<sub>PRED</sub>]<sub>FIN</sub>

back:LOC        bone-LOC

'(It was) on the backbone (that we hit it).'                      (A.3.24-26)

The semantics of this clause-linking construction are therefore not causal in the sense of one event causing another, but rather the subsequent matrix clause describes a byproduct or aspect of the event that is inherent to the event itself. This differs considerably from the clause linking described in 9.4.1.1.1 with the auxiliary {bɛda:}. Two clauses linked with {bɛda:} are two sequential events in which the medial clause causes the occurrence of the event described in the subsequent clause. In constructions formed with {-lo:lu}, the matrix clause following the predicate suffixed by {-lo:lu} may also be a pro-verb, as in (75).

(75) a. [[ola:        la:-lo:lu]<sub>PRED</sub>]<sub>MED</sub>

step        COP-ASS.EV

b. [[lɛ dɛnɛ    ba:lɛ]<sub>x</sub> [[dɛmu:gu]<sub>s</sub> [a:ka:]<sub>s</sub> [φoφa: golo di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [hɛnɛ-si]<sub>PRED</sub>]<sub>MED</sub>

do PROG COORD firewood PRO:FOC roll    push PFV=TOP    DUR-MED:PFV

'I was stepping, during which that firewood rolled and went, then...'

In this case, a speaker describes a situation where she stepped onto a log, which rolled beneath her foot, causing her to fall. The example in (75)b refers to the events and general circumstances that accompanied the event of stepping described by the clause in (75)a.

### 9.4.1.2 Topic and Medial Clauses

A medial clause with clause chaining morphology may appear as a topic clause when the medial clause is particularly topical to the events described by subsequent clause or clauses in a clause chain. For example, the events referred to be the topic clause *elo:luwa:* in (76)c describes a prominent activity in the narrative that persists throughout the discourse episode. In this mythical narrative, a dog is covertly listening to various other animals joking about dogs while the dogs are away, and this affront motivates the eventual murder of all of the animals by the dogs in the climax of the story.

(76) a. [[i:                    φuɣa:nɛ-mo:]<sub>X</sub> [kɛɣɛɛ-si-jɛ:-mi:]<sub>PREL</sub>                    ka:]<sub>X</sub>  
           3:N.SG:MOD    penis-DAT            scratch-MED:PFV-LOC-ASS    FOC

b. [bɛ:sɛ:]<sub>O</sub> [bulu    dijɛ:-li-sɛnɛ-jo:gu:    kɛi]<sub>PREL</sub>]<sub>FIN</sub>  
           tooth    cut            do-SIM-HAB-IMM    ASSERT

“They sit there scratching around their penis and nearly biting it off!”

c. [[ɛ-lo:lu=wa:]<sub>TOP</sub> [ɛimɛ]<sub>X</sub> [ka:    a:gɛɛ:]<sub>PREL</sub>]<sub>FIN</sub>  
           do-comp=TOP    already    FOC    laugh:PRS

‘In doing that, they were already laughing.’

Because of the prominent role that these event play in the overall discourse, the clause appears as a topic clause, as well as bearing the clause chaining morphology {-lo:lu} which shows the more immediate semantic relationship between the topic clause *elo:luwa:* ‘In doing so...’ which refers to the animals telling insulting stories and the following matrix clause *ɛimɛ ka: a:gɛɛ:* ‘they were already laughing.’, namely that the laughter occurred during the storytelling and was a prominent byproduct of it. This topicalization is also a prominent feature of discourse organization, as discussed in §10.2.

### 9.4.1.3 Desubordination

Desubordination describes a context in which a medial dependent clauses with clause chaining morphology are used without any matrix clause, which in many ways allows the dependent clause to function as a main clause. For a thorough description of this phenomenon in another Papuan language, see Sarvasy’s examination of Nungon (2015), and for a general

example of desubordination, see Aikhenvald (2015, pp.239-241). These clauses still present dependent clause morphology, and there is often an implication of an ensuing elided clause from the pragmatic context, and in this way, they are similar to typical medial clauses that appear with a main clause functioning as a matrix clause.

The most common type of desubordinated clause is a clause with a verb of position or existence and the second type of medial clause discuss above, which features the different-subject marker {-bi:}, and the optional inclusion of the morpheme {-ki:}. A desubordinated clause with the different-subject marker {-bi:} is characterized by the falling intonation of a main clause and may not have a clearly identifiable matrix clause with a different-subject to justify the different-subject marking. For instance, in (77), the first four clauses all have medial clause morphology, and no tense-marking.

- (77) a. [[nɛ:]<sub>A</sub> [mo:]<sub>X</sub> [odɛ:-si]<sub>PRED</sub>]<sub>MED</sub>  
 1:SG just beat-MED:PFV  
 'I was beating the sago and then...'
- b. [[odɛ: hɛna: ta:lɛ-ta: di-si]<sub>PRED</sub>]<sub>MED</sub>  
 beat DUR finish-TEL PFV-MED:PFV  
 'I finished beating it and then...'
- c. [[ɛ: la:]<sub>A</sub> [da:-ja:]<sub>o</sub> [dɛ hɛnɛ ta:lɛtɛ la:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 3:SG DEF sago-ABS make.sago DUR finish COP-D.S  
 'She finished squishing the sago...'
- d. [[ma:si-jɛ:]<sub>X</sub> [wɛtɛ hɛna:-nɛɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 sago.bag-LOC fill DUR-MED:IPFV  
 'She filled a sago bag (with the sago) and then...'
- e. [[dija: φili:-nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 take ascend-PST  
 'She took it and went up.'

Only the predicate of clause (77)e has the morphological form of a final, independent clause in that it bears tense-marking. If clauses (77)a to (77)e were analyzed as a single clause chain, the different-subject marking in clause (77)c would signify that the following clause has a different-subject, but in this instance that is not the meaning of the construction. The clause in (77)c shows the falling intonation of a main clause, and specifies that the subject is not coreferential with a *preceding* discourse topic. There are additional rare examples of desubordinated clauses with other suffixes which are generally limited to verbal predicates in a main clause, such as the irrealis suffix *-no:* in (78).

(78) [[kosu:wa: ɛna:]<sub>o</sub> [jo:lo: la:-bi:-no:]<sub>PRED</sub>]<sub>FIN</sub>  
 cassowary that:ABS to.butcher COP-D.S-IRR

‘We needed to butcher that cassowary.’

In this construction, a clause with main clause intonation and different-subject marking specifies an unexpected or non-topical subject, and is often used to introduce a new referent into the discourse.

In the clauses following the desubordinate clause in (77)c, the introduced subject has become topical, and is the assumed subject of the two clauses in (77)d and (77)e with no additional switch-reference marking. In this discourse environment, the desubordinate clause signifies a reference to the discontinuity of the subject of the desubordinate clause and that of the *previous* clause. In the example given in (77), the desubordinate clause highlights the discontinuity in the subject between the initial cause in (77)a and the desubordinate clause in (77)c. In (77)c, this introduced subject becomes the topic of the following discourse episode and the assumed subject, but this is not always the case. That is to say that the desubordinate clause with different-subject marking is not necessarily a topic setting device, and the newly introduced subject of the clause does not necessarily persist as the subject of following clauses. In the following example (79) for instance, the clause in (79)b has a main clause intonation, and is followed by a clear pause. In this clause, the subject of the clause has not been mentioned previously as a character in the narrative, and subsequent clauses do not feature this referent

as a subject. In this instance, the construction specifies that the subject is a new referent in the discourse without the additional specification that the following clause will share this subject.

- (79) a. [[ne            ε:ja:    u:gei    molu:wa:]<sub>o</sub> [a:ka:    la:]<sub>o</sub> [wa:lε-mε:na:]<sub>pred</sub>]<sub>fin</sub>  
 1:SG:MOD    father    NAME    old                    PRO:FOC    DEF    tell-FUT:1

‘I will tell an old story about my father, U:gei.’

- b. [[ne            εja:-ja:]<sub>cs</sub> [mumu:ne εlε:bε]<sub>cc</sub> [la:-bi:]<sub>pred</sub>]<sub>fin</sub>  
 1:SG:MOD    father-ABS    NAME    river.head    COP-D.S

‘My father was at the head of Mumu:ne creek.’

- c. [[sa:goi εja:lε:            motu:wε:    εja:lε:]<sub>A</sub>  
 NAME    COORD:DU    NAME            COORD:DU

- d. [[gεda:]<sub>pred</sub> [jo:φa:]<sub>o</sub>            [sεdε    hεna:    mi-ja:]<sub>pred</sub>]<sub>fin</sub>  
 beat            tree.trunk:ABS    hit:N.SG.A    DUR    come-PST

‘Sa:goi and Motu:wε: came beating tree trunks (so their approach would be heard).’ (A.1.3-5)

The different-subject marking suggests that these desubordinate constructions may be subordinate to another clause, but in the absence of a clearly identifiable matrix clause, the function of the different-subject marker becomes more abstract. Additionally, phonological cues correspond to this differing pragmatic role, and support the notion that these clauses are a separate clause type from the medial clauses discussed in §9.3.1 with a distinct form as well as a distinct function.

It is possible that two evidential suffixes historically developed from such constructions. The form of the direct experience evidential {-sa:}, along with the high frequency of different-subject marking hints at an origin in a desubordinate clause with the positional verb {sa:} ‘sit, stay’ as a predicate. Similarly, the quotative predicate {la:} may originate from a desubordinated copula clause, such as those constructions in examples (77)b and (79)b. For detailed discussion of these evidential morphemes, see §7.6. The form -sa:lε is also attested as a same-subject marked main clause, as seen in (80).

- (80) [[wo:ko la: i:ja:]<sub>o</sub> [ka: teɛ di-sa:-lɛ]<sub>PRE</sub>]<sub>FIN</sub>  
 NAME DEF 3:PL:BAS FOC pass.by PFV-3:DR-S.S

‘I went past Wo:ko and them.’

This same-subject marker {-lɛ} is only attested in main clauses with direct evidential constructions, and on main clauses which are formed with the predicates listed in table 1 which allow for clause chaining morphology such as {sa:} ‘sit’ in (81).

- (81) [[ɛ:]<sub>s</sub> [do:ge:]<sub>x</sub> [sa:-lɛ]<sub>PRE</sub>]<sub>FIN</sub>  
 3:SG house:LOC sit-S.S

‘(While) she was sitting in the house.’

The same-subject marker is used to specify that the subject is co-referential with the subject of the previous clause, or more generally is co-referential with the most salient actor in the section of discourse. These same-subject marked clauses do not show any tense, aspect, or modality marking, and have the form of medial clauses, but function as a main clause.

A less common form of clause desubordination may occur with the first type of medial clause, bearing the suffixes {-si}, {-nɛge:}, and {-bɛda:}. Desubordinate clauses formed from these suffixes are used as indirect command strategy, particularly when addressing children. For example, the clause in (82) has the intent of commanding a child to eat, whereas (83) is a command to gather green vegetables.

- (82) [[da:-ja:]<sub>o</sub> [nɛ: di-si]<sub>PRE</sub>]<sub>MED</sub>  
 food-ABS consume PFV-MED:PFV

‘Eat the food (lest something happen/to some purpose)’

(lit. ‘(You) eat the food and then...’)

- (83) [[so:ko: mo: ɛna:]<sub>o</sub> [ti: di-si]<sub>PRE</sub>]<sub>MED</sub>  
 edible.greens top.of plant DEM:ABS pick PFV-MED:PFV

‘Pick the green tops (lest something happen/to some purpose)’

(lit. ‘(You) pick the green tops and then...’)

Some speakers disprefer these constructions, and view them as incomplete, or poorly expressed “baby talk” used by mothers speaking to their children. These constructions imply a subsequent action without overtly expressing the implied event as a matrix clause. This implied event may be alternatively positive or negative, which may in turn cast the indirect command as encouraging, warning, or even threatening.

### 9.5 Speech-acts and Verbs of Perception

This section aims to illustrate clause linking in action by taking examples of various clause linking strategies as used to depict events of perception and verbs of speech. These two types of events lend themselves most easily to these examples, because they are often composed multiple clauses describing a single event. In the case of speech events, there is often a clause describing the mode of speech, and a clause describing the utterance spoken. For instance, in (84), the verb *sɛ:ja:* ‘said’ is the predicate of a matrix clause describing the mode of speech, e.g. whether the utterance was spoken, shouted, told, or asked. The clause functioning as an argument is *ɛ:sa: a:nɛ dimɛ:nio:gu: kɛi* ‘I will take two bags.’ is a verbatim report of the words that were spoken, and occupies the position of the object of the matrix clause.

- (84) a. [[wo:ko-mo:]<sub>x</sub> [sɛ:-ja:]<sub>pred</sub>]<sub>fin</sub>  
 NAME-DAT say-PST
- b. [[ɛ:sa: a:nɛ]<sub>o</sub> [di-mɛ:ni:-jo:gu: kɛi]<sub>pred</sub>]<sub>o</sub> [sɛ:-ja:]<sub>pred</sub>]<sub>fin</sub>  
 bilum:ABS two take-PURP-IMM ASSER say-PST
- ‘I told Wo:ko, I said, “I will take two bags.”’

Verbs of perception similarly often include a clause describing the mode of perception and a clause describing the event which is perceived. For instance, in (85) the medial clause *ɛ: ma:sije: da:li kɛɛ bɛdalo:lu:wa:* ‘He felt around looking through the bag...’ describes the event of searching by means of sight and feeling with one’s hands, whereas the following clause *ba:geja: ma:li* ‘a kina shell was very (good).’ is a clause describing what was perceived by this event of searching.

(85) a. [[[ε ma:si-jε:]<sub>x</sub> [da:li kεε bεda:-lo:lu=wa:]<sub>PRE</sub>]<sub>TOP</sub>  
 3:SG:MOD sago.bag-LOC feel.around search see-ASS.EV=TOP

‘(He) felt around in his sago bag and saw(felt)...’

b. [ba:gε-ja:]<sub>S</sub> [ma:li]<sub>PRE</sub>]<sub>FIN</sub>  
 kina.shell-ABS much

‘...a kina shell that was very (good).’

In this way, both perception events and speech events may be composed of two linked clauses, and a variety of constructions are available in Eibela that represent these events using several different clause types and clause-linking strategies. In §9.5.1, speech-act and perception events with a single clause structure are described, and from this basis, multi-clausal constructions are explored in the following sections. Constructions in which the clause describing the mode of speech or mode of perception is cast as a dependent clause, and the clause describing the reported speech or event perceived is cast as a main clause are described in §9.5.2. In §9.5.3, the opposite dependency relationship is explored in constructions where the reported speech or event perceived is described by a dependent clause, and the mode of speech or perception is realized as a main clause. Although in many Papuan languages speech reports have been attested to serve other semantic functions such as expressing desires, thoughts, or purposive functions, such extensions of speech reports are not attested in Eibela and are therefore not discussed.

### 9.5.1 Single Clause Constructions

It is possible to represent speech events or perception events as a single clause by means of portraying the speech report or entity perceived as a nominal argument of a clause describing the mode of speech or perception, and speech events may also be formed as monoclausal events by means of using the reported speech itself as a non-verbal predicate, or through the use of an evidential suffix rather than a separate clause to describe the mode of speech.

### 9.5.1.1 *Speech-act Predicates*

Non-verbal predicates and the demonstrative predicate {wo:gu:} may also be used to represent a speech-act without an overt clause which describes the mode of speech. For example, in (86), the clause predicate represents the precise wording of the speech-act described, and there is no overt verb of speech. Non-verbal predicates may not otherwise be used in the imperative mood. The future tense is also prone to being interpreted as a speech-act, although certain nouns may be interpreted as an identity relationship on rare occasions, as illustrated in (87) (see also §6.3 on non-verbal predicates).

(86) [kεga:da:=ma:]<sub>FIN</sub>

old.man=IMP

'Say "old man"!'

(87) [kεga:da:-mε:na:]<sub>FIN</sub>

old.man-FUT:1

'I will say "old man"'

OR 'I will become an old man.'

The demonstrative verb {wo:gu:} 'do thus' (see §4.3.3 for a more in-depth discussion of this verb) may also be used to represent a speech-act, and in this usage means 'to say "do thus"', e.g. 'to direct, command, or advise'. In all of these circumstances, the predicate of the clause represents the speech-act itself, and there is no separate clause which describes the mode of speech.

### 9.5.1.2 *Non-Clausal Arguments*

The final way that speech events and events of perception may be represented by a single clause is when the speech-act or perceived event is represented by a nominal argument rather than a descriptive clause. In these cases, the clause is a simple transitive clause as described in §3.3.2.1.2. As in (88), an event of perception may describe the perception of a nominal entity, without any accompanying action which would necessitate a clause.

- (88) a. [[ko:lu=wa:]<sub>TOP</sub> [kɛso]<sub>O</sub> [bɛda:-si]<sub>PRED</sub>]<sub>MED</sub>  
 man=TOP mosquito see-MED:PFV  
 ‘The men saw mosquitos and then...’
- b. [[tunu a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 run:N.SG go:PST  
 ‘(They) ran away.’

Similarly, a speech event may be described with a nominal object, as in (89), which describes a conventional type of speech event rather than an exact quotation.

- (89) [[to:-wa:]<sub>O</sub> [sɛ: jɔ: di-si]<sub>PRED</sub>]<sub>MED</sub>  
 language-ABS say AFF PFV-MED:PFV  
 ‘They planned and then...’  
 (lit. ‘(They) spoke words.’)

In both of these instances, less information is conveyed than a multi-clausal construction, and a simple nominal argument is used to describe the perceived event or speech-act. In the former case, the object of a perception event is a static entity, with no associated action or event, and in the latter speech event, the object may be classified as a generic type of speech, but no information is given as to the actual wording or specific content of the speech. For more detailed information of the speech-act or perceived event, a multiclausal construction is necessary, and these constructions are presented in §9.5.2 and §9.5.3.

### 9.5.2 Speech or Perception Verbs in Dependent Clauses

In multiclausal constructions, two dependency relationships are possible. On one hand, the clause which describes the actual speech expression of the perceived event can be a dependent clause, with the clause describing the mode of speech or perception operating as the matrix clause. This type of construction is discussed in the following section §9.5.3. On the other hand, the clause describing the mode of speech or perception may be a dependent clause, and the clause describing the perceived event or speech-act may be the matrix clause. This latter dependency relationship is the topic of the current section.

### 9.5.2.1 *Speech or Perception Verbs as a Medial Clause in a Clause Chain*

Medial clauses describing a speech or perception event are the basis of all of the constructions described in §9.5.2. This section presents medial clauses with clause chaining morphology, but no other subordinate clause morphology such as oblique adverbial morphology or topicalization (see §9.5.2.2).

A clause describing a mode of speech or perception may be presented as a medial clause which precedes a main clause which describes the speech or event perceived. For example, in (90) the clause *nε:mo: sε/εsiki* ‘He told me...’ in (90) is a medial clause which typically cannot occur independently. The following clause *gε:φε:ni: ka: a:lijε:bi: jo:* ‘You stay alone and sleep!’ is in the form of a final clause, which may occur independently, and describes the words that were spoken in the speech event.

- (90) a. [[nε:-mo:]<sub>X</sub> [sε/ε-si-ki]<sub>PRED</sub>]<sub>MED</sub>  
 1:SG-DAT say-MED:PFV-CONT  
 ‘(He) told me...’
- b. [[gε:-φε:ni:]<sub>S</sub> [ka: a:lijε:-bi jo:]<sub>PRED</sub>]<sub>FIN</sub>  
 2:SG-EXC FOC sleep-DEL.IMP EXCL  
 "You go ahead and sleep alone" (A.4.24)

In (91), the construction is similar, with the clause describing the mode of speech described in a medial clause, and the speech itself described in a main clause, but importantly, the main clause contains a light predicate {ε} that specifies that the clause is a speech-act. The clause in (91)b would be clearly understood as speech-act even in the absence of the medial clause in (91)a (see §7.6.1.1 on other uses of this pro-verb).

- (91) a. [[a:bo to-kei]<sub>X</sub> [sε/ε-si]<sub>PRED</sub>]<sub>MED</sub>  
 bird speech-INST say-MED:PFV  
 ‘He said in bird speech (Tok Pisin)...’

- b. [[o: mu:ruk mu:ruk]<sub>O</sub> [ε-sa:-bi:]<sub>PRE</sub>]<sub>FIN</sub>  
 oh cassowary cassowary do-3:DR-D.S

‘(He said) "Oh! Cassowary, cassowary!"’

The clause linking morphemes {-nεgε:}, {bεda:}, and {-bi:} are not attested in this particular construction. {bεda:}, and {-bi:} both accompany different-subject between clauses, and their absence suggests that the speech-act may syntactically share the subject of the clause describing the mode of speech. Following this interpretation, the clauses in (91)a and (91)b both have a common subject in the child who is speaking, e.g. the predicate *sεlεsi* and the predicate *εsa:bi* have coreferential subjects. Similarly, the clauses in (90)a and (90)b could be considered to share the speaker as a subject. The major consequence of this analysis is that the entire clause in (90)b must be interpreted as a predicate with the speaker as an unstated subject, e.g. the predicate *sεlεsiki:* and the predicate represented by the entire clause in (90)b have a co-referential subject. To clarify this possible analysis, (90) is reprinted below as (92) with alternate bracketing and a zero S argument.

- (92) a. [nε:-mo: sεlε-si-ki]<sub>MED</sub>  
 1:SG-DAT say-MED:PFV-CONT

‘(He) told me...’

- b. [[∅]<sub>S</sub> [gε:-φε:ni: ka: a:lije:-bi jo:]<sub>PRE</sub>]<sub>FIN</sub>  
 3:SG 2:SG-EXC FOC sleep-DEL.IMP EXCL

‘(He said) "You go ahead and sleep alone"’ (A.4.24)

The speech report itself is therefore not sensitive to pivot conditions that condition switch-reference marking between linked clauses. If this were not the case, and the subject of (90)b were interpreted as *gεφε:ni:* ‘you alone’, then the two clauses would not share a subject, and switch-reference marking would be expected.

The morpheme {-lo:lu} is unattested in descriptions of speech, but is extremely common in describing perception events. As in (73), the clause describing the mode of

perception has a predicate suffixed by {-lo:lu}, and is therefore the dependent clause in the sense that it cannot occur independently. The clause describing the perceived event is a following clause that has the form of an independent clause.

### 9.5.2.2 *Speech or Perception Verbs as Adverbial and Topic Clauses*

Medial clauses describing a mode of speech or perception may also bear additional subordinating morphology, including the adverbial marking {-jɛ:mi:} discussed in §9.3.3 and the topic-marking shown in §9.3.4. In (59)b for instance, the mode of speech is presented as two opposed adverbial clauses which precede a main clause depicting the reported speech event. Similarly, in (93) a medial clause describing the mode of speech is topicalized, and is dependent to a subsequent main clause which includes the clause representing the reported speech, as well as the pro-verb {ɛ} marking the clause as a speech event. Topicalization follows the same semantic and pragmatic motivations given in §9.3.4 and portrays the mode of speech as a topic of the matrix clause, which may have causal, conditional, or frame-setting functions.

- (93) a. [[ka:lɛma:bɛ:-ja: sɛlɛ-ki:=ja:]<sub>TOP</sub>  
 NAME-ABS say-CONT=TOP  
 Ka:la:ma:be: said...’
- b. [[wa:φɛ ko:]<sub>S</sub> [[ɛ:bi]o [di-mɛ:]<sub>PRED</sub>]<sub>X</sub> [mi-ja:=jɛi]<sub>PRED</sub>]<sub>O</sub> [ɛ-sa:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
 worm DEM:DIST what get-PURP come-PST=Q:N.PRS do-DR-D.S  
 “‘Why did that worm come?’”  
 (lit. ‘What did this worm come to get?’) (A.1.40)

In (94), a similar construction with a dependent clause describing the mode of speech, and a clause formed without the pro-verb {ɛ} being used to depict the direct speech report.

- (94) a. [[nɛ ɛ:ja:]<sub>A</sub> [sɛlɛ-ki:=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 1:SG father say-CONT=TOP
- b. [[ha:bila: gi:ja:]<sub>A</sub> [to:-wa: kulu-φɛija:-ja:]<sub>O</sub> [nɛ:-mo:]<sub>X</sub> [sɛlɛ=ta:b ma: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME 2:PL language-ABS angry-PERF-ABS 1:SG-DAT say=PROH NEG ASSERT  
 ‘My father said, “You Ha:bila:, don't speak angry words to me.”’ (A.1.63)

In events of perception, topicalization is particularly common. Constructions such as (95) are the most common way of constructing a two-clause representation of a perception event and the perceived event, where the clause describing the mode of perception is a topicalized medial clause, and the subsequent main clause describes the perceived event.

- (95) [[ε-ta: hɛna: bɛda:-lo:lu=wa:]<sub>TOP</sub> [wa:wi-ja: dɛnɛ:=ja]<sub>TOP</sub> [ili:da:ma:=bo:]<sub>PRED</sub>]<sub>FIN</sub>  
do-TEL go see-ASS.EV=TOP NAME-ABS to.flood=TOP be.too.much=INF  
‘Then I saw that the Wa:wi river was flooding too much.’

In contrast, compound clauses describing a speech event are not attested in this construction using the suffix {-lo:lu} as a clause linker.

### 9.5.3 Speech or Perception Verbs as a Matrix Clause

This section will present constructions in which the clause which describes the actual speech or the perceived event is a dependent clause, and the clause describing the mode of speech or perception acts as the matrix clause. In (96) and (97), the dependent clause is realized by a medial clause formed with the copula {la:}. This type of complementation strategy is discussed in §9.3.2.3, and may describe both the speech report in a speech-act as in (96), and a perceived event as in (97).

- (96) a. [[[[nɛ ɛja:]<sub>A</sub> [[nɛ: ka: la:]<sub>O</sub> [dijo-φɛ:na:]<sub>PRED</sub>]<sub>X</sub> [di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ka: la:]<sub>PRED</sub>]<sub>O</sub>  
1:SG:MOD father1:SG FOC DEF give.birth-COMP:PURP marry=TOP FOC COP  
b. [sɛ:la:]<sub>PRED</sub>]<sub>FIN</sub>  
say:PRS  
‘I say that my father married her to have me.’
- (97) [[ε-ta: la:-bi:]<sub>O</sub> [ka: bɛda: do:-si-ki:]<sub>PRED</sub>]<sub>MED</sub>  
do-TEL COP-D.S FOC see STAT-MED:PFV-MED:PFV-CONT  
‘I saw him lying there and then...’

Juxtaposed main clauses may also serve as a complementation strategy without any dependent clause morphology, as discussed previously in §9.3.2.1. In (98)b for instance, the clause *ko:lu keisa:le-ja: to:bo: ɛ:mɛlɛ: mino:* ‘Everyone come back!’ is a verbatim report of the speech that is

being described, and therefore has the morphological form as a main clause. This speech report appears in the object position of the matrix clause formed by the predicate *sɛ:ja:* ‘said’, which is also in the morphological form of a main clause.

- (98) a. [[ili: kɛi]O [sɛla: bɛda:-nɛ:]PRED]MED  
 be.alright ASSER say CONS-MED:IPFV  
 ‘We told them it was alright, so...’
- b. [[ko:lu kɛisa:lɛ=ja:]TOP [to:bo:]S [ɛ:mɛlɛ:]X [mino:]PRED]O [sɛ:-ja:]PRED]FIN  
 man woman=TOP all back come:IMP say-PST  
 ‘We told everyone to come back.’

In addition to clauses with a lexical verb specifying a speech-act or perception event, the pro-verb {ɛ} can also be used as a matrix predicate with a dependent clause representing a speech report. These clauses are the same construction as (91)b shown above, but do not require any clause describing a mode of speech. For instance, in example (99) the clause *waija:=ja: hɛna: kɛi* ‘I’m going to Waija:(Lake Campbell)’ represents a speech report, and the matrix predicate {ɛ} is the only indication of the mode of speech or that this is a description of a speech-act. The pro-verb {ɛ} is also used to describe acts of appearance or arrival in addition to speech-acts, as described in §7.6.1.1.2.

- (99) [[ha:gɛnɛbo:ja=ja:]TOP [ɛ:]A [waija:=ja: hɛna: kɛi]O [ɛ-sa:-bi]PRED]FIN  
 morning=TOP 3:SG NAME=TOP go ASSER do-3.DR-D.S  
 ‘In the morning, he said, “I’m going to Lake Campbell” (A.4.22)

The matrix clause describing a speech event may also be a medial clause in a clause chain as in (98)a, where two speech-acts are presented as two related events in a sequence of related events in a clause chain. The following discussion in chapter 10 details further how related sequences of events may be organized in discourse using clause chains, topicalized clauses, and anaphoric repetitions.

## 9.6 Conclusion

In conclusion, the chapter sought to give an overview of some specialized main clauses, non-main clauses, and clause chaining. Verbal main clauses were largely discussed in chapter 6, but in this chapter verbless clauses with non-verbal predicates or copula predicates were shown to show attributive and identity relationships. Non-main clauses are a general category of dependent clauses which are subordinate to a matrix clause, and include clauses with core argument roles and adverbial functions. Relative clauses may be formed in several ways, including the morpheme {la:}, which may be alternatively be interpreted as a determiner or copula. Adverbial clauses may be constructed with the determiner {ba:lɛ}, which is associated with comitative arguments, or the combination of case-marking suffixes {-jɛ:mi:} association with locative arguments. Topic clauses serve to give context to the matrix clause associated with it, and this relationship may include varied relationships including causation, conditionality, intention, or result. Finally, clause chaining is presented as a specialized method of linking several clauses into a chain of events that for a single syntactic unit associated with a discourse episode. Speech-act events, and events of perception were also presented as a case study of how various clause types may be combined and utilized in a variety of constructions.

## Chapter 10 Discourse and Information Structure

### 10.1 Introduction

In this section the function of various clause linking strategies in discourse organization will be explored and demonstrated. The majority of this chapter stems from research that has been previously published in Aiton (2014), and Aiton (2015), and sections of these publications have been reproduced in this chapter.

### 10.2 Bridging Constructions

Repetition and anaphora play a central role in structuring topicality and event structure within Eibela discourse, and these constructions are discussed in-depth in Aiton (2015) and sections of this paper are reproduced here with permission from the publisher. In Eibela, discourse is structured through the use of subordinate clauses and clause chaining structures which deploy repetition of clauses and anaphoric verbs to reiterate and reestablish events as topics of a section of discourse. This repetitive emphatic device is well attested throughout Papua New Guinea and can be related to discussions of tail-head linkage in de Vries (2005), and bridging linkage in Thompson et al. (2007, pp. 273-274).

Eibela discourse is structured around long chains of clauses with several medial clauses culminating in a fully inflected final clause (see §9.4 for more on clause chaining). Clauses and noun phrases may additionally be morphologically topicalized (see §9.3.4 on topicalized clauses). The occurrence of regular repetition and anaphora in these discourse contexts will be discussed in §10.2.1, and the semantics and function of these bridging constructions will be explored in §10.2.2.

#### 10.2.1 Recapitulative and Summary Linkage

The form of the bridging clause may broadly be described as either recapitulation or summarizing. In both of these types of construction, an event is presented in a discourse, and then is immediately referred to in a dependent clause. The initial description of the event will be referred to as the reference clause, and the repeated allusion to the event is referred to as the bridging clause. Recapitulative linkage refers to a bridging clause with a predicate which is

synonymous or identical to the predicate of the reference clause. Summary linkage refers to a bridging clause with a generic or anaphoric verb which makes reference to the same event as the reference clause. In this section, the formal characteristics of these two types of tail-head linkage will be presented, and in §10.2.2, these two formal strategies will be shown to have distinct discourse functions as well.

### 10.2.1.1 Recapitulative Linkage

In recapitulative linkage, much of the vocabulary and argument structure from the reference clause is repeated in the bridging clause, as illustrated below in example (1).

- (1) a. [kɛ: ɛna: sobo:.o:~no:-kɛi sɛbɛ:na:-ta: ka: hɛnɛ-sa:]<sub>FIN:REF</sub>  
 pig that ax-INST hit:FUT-TEL FOC go-3:DR  
 ‘We went to hit that pig with an ax anyway.’
- b. [[sobo:.ono:-kɛi sɛda:-lo:~lu=wa:]<sub>BRIDGE</sub> moga:gɛ-li sɛ:dɛ-si φo:sɛ: ki:-jɛ:]<sub>MED</sub>  
 ax-INST hit:PST-ASS.EV=TOP bad-ADV hit-MED:PFV back bone-LOC  
 ‘We hit it with the ax such that we hit it badly on the backbone then...’

Elements of the reference clause are routinely omitted in bridging clauses. For example, the argument *kɛ: ɛna:* ‘that pig’ is omitted’ in example (1) above.

### 10.2.1.2 Summary Linkage

Summary linkage constructions are formed by a bridging clause with a generic or anaphoric verb as a predicate which makes reference to the same event as the reference clause. In some cases, the scope of reference may range from one reference clause to an entire narrative. Proverbs have limited morphology, with no tense-marking, limited aspectual morphology, and limited use of auxiliaries. Eibela has two anaphoric verbs: {ɛ} ‘do’, and {hɛnɛ} ‘continued doing’, which are used in summary linkage. There is also a demonstrative verb {wo:gu:} ‘do thus’, which may have anaphoric reference, but is not generally used in summary linkage constructions (see §4.3.3 for more description of {wo:gu:} ‘do thus’, §7.6.1.1 for more on {ɛ} ‘do’, and §6.4.3.5 for more on {hɛnɛ} ‘continue doing’).

10.2.1.2.1 ε ‘do’

The pro-verb {ε} ‘do’ can form a topic clause referring to the previous discourse. The scope of this reference is sometimes unclear or variable. In example (2) below, the topic clause *εbi:ja:* ‘That was happening’ makes reference to the preceding final clause, *εime o:φα: a:νε:* ‘The sun was already setting.’

- (2) a. [[βεδα:-lo:lu=wa:]<sub>TOP</sub> εime o:φα: a:νε:]<sub>FIN:REF</sub>  
 see:PST-ASS.EV=TOP already sun:ABS go-PST

‘I saw that the sun was already setting.’

- b. [[ε-bi:=ja:]<sub>BRIDGE</sub> [owa:lo-wa: so:la: hεε di-si=ja:]<sub>TOP</sub> hεna: togo:le:]<sub>FIN</sub>  
 do-D.S=TOP tree.type-ABS peel DUR PFV-MED:PFV=TOP go road:LOC

‘That was happening and I peeled the owa:lo (bark) and went to the road.’

The scope of reference is particularly clear in this example due to the use of the different-subject marker {-bi:}, but in many contexts the exact scope of reference is ambiguous without such switch-reference marking.

10.2.1.2.2 Durative

The durative-marking auxiliary {hεε} is also able to form topic clauses and medial clauses in clause chain constructions. As an auxiliary, {hεε} most often appears in a complex predicate with another verb as described in §6.4.3.5, but in bridging constructions, {hεε} may appear independently with no other verbs in the bridging clause. This syntactic functionality allows {hεε} to serve a summary linkage discourse function. All auxiliaries, including {hεε}, require the chaining suffix {-si} when forming a topic clause with the enclitic {=ja:} (cf. §9.3.4). This may be seen in example (3).

- (3) a. [o:gu:-bi:=ja: nε: nε-φε:ni: εna ja: di]<sub>FIN:REF</sub>  
 do.thus-D.S=TOP 1:SG 1:SG-EXC still here do:PFV

‘That happened, I was still alone here.’

- b. [[**hɛna**:-**si=ja**:]<sub>BRIDGE</sub> si-ja:]<sub>FIN</sub>  
 DUR-MED:PFV=TOP move.around-PST  
 ‘That went on and I was hanging around.’

In the above example, the bridging topic clause *hɛna:sija*: references the continuing duration on the immediately preceding reference clause. In a clause chain, the pro-verb *lɛ* may be combined with the non-final form of the durative auxiliary, *hɛnɛ*, to form a dependent medial bridging clause in a clause chain, as in (4).

- (4) a. [itɛ:]<sub>MED:REF</sub>  
 cook:N.FIN  
 ‘We cooked it, then...’
- b. [**lɛ hɛnɛ**]<sub>MED:BRIDGE</sub>  
 be DUR  
 ‘...having done that (cooking) for some time...’
- c. [na:-sa:      φa:-ja:]<sub>FIN</sub>  
 consume-N.SG sleep:N.SG-PST  
 ‘...we ate, and then slept.’

In contrast to the pro-verb, {ɛ} ‘do’, the durative auxiliary is much more consistent and unambiguous in its scope of reference. As seen in (4) above, the summary bridging clause refers only to the immediately preceding clause, in this case a description of cooking, and ascribes the durative aspect to this event.

### 10.2.2 Semantics and Functions of Bridging Linkage in Structuring Discourse

Bridging linkage reiterates and summarizes events at the conclusion of a discourse episode, and highlights the relationship of these events to the following discourse. In particular, recapitulative bridging linkage serves to mark a transition between discourse episodes which together form a larger discourse paragraph, while summary linkage occur at the end of these larger discourse paragraphs to provide closure and commentary to the paragraph as a whole.

Bridging linkage may serve to mark a shift in temporal reference, and highlights the semantic relationship between discourse episodes (see de Vries' discussion of thematic continuity [2005]). In example (5), the bridging clause occurs at a temporal boundary between discourse episodes.

(5) a. [dɛ: ɛna: ka: gɛ-φɛija:]<sub>FIN:REF</sub>

fire that FOC burn-PERF

'It had been burned on that fire.'

b. [[ɛ-φɛija:]<sub>MED:BRIDGE</sub> u:mu:ko wɛ da ko:]<sub>FIN</sub>

do-PERF scar this be.at DEM:DIST

'That happened and this is the scar.'

The sentence in (5) ends a discourse episode which describes a series of events which led to the speaker burning his knee on a fire many years before the time of the utterance. In (5), the speaker is commenting on the present day, and the lasting effects of these events. This temporal shift creates a discourse boundary which is marked by a bridging clause, and indicates the beginning of a new discourse episode.

In a larger example, a long series of events is broken into four discourse episodes. Examples (6)-(8) are all a single stretch of discourse from the same narrative as example (1) above. The first three episodes describe different events which form a section of a narrative, and a final episode offers commentary on the entire sequence of events. In the first episode, the protagonists decide to attack a pig that was unexpectedly encountered.

(6) [kɛ: ɛna: sobo:.o:no:-kɛi sɛbɛ:na:=ta: ka: hɛnɛ-sa:]<sub>FIN:REF</sub>

pig that ax-INST hit:FUT=TEL FOC go-3:DR

'We went to hit that pig with an ax anyway.'

In the second episode in example (7), the protagonists are attacking the pig without successfully killing it, and the previous events are referenced by recapitulative linkage.

(7) **[[sobo: .ono: -kei      sɛda: -lo: lu=wa: ]**<sub>TOP:BRIDGE</sub> moga: gɛ-li sɛ: dɛ-si      φo: sɛ: ki: -jɛ: ]<sub>MED:REF</sub>  
 ax-INST                      hit: PST-ASS.EV=TOP              bad-ADV    hit-MED:PFV    back    bone-LOC

‘We hit it with the ax such that we hit it badly on the backbone then...’

Then in (8) an instance of summary linkage introduces a clause chain where the speaker steps into the assault and successfully kills the pig.

(8) a. **[ɛ    bɛda: ]**<sub>MED:BRIDGE</sub>      [[nɛ:    mi-ja: =ja: ]<sub>TOP</sub>      sobo: -kei    ja: -si ]<sub>MED</sub>  
 do CONS                      1:SG    come-PST=TOP      knife-INST    DIR:VEN-MED:PFV

‘That happened so then I came, I approached with a knife and then...’

b. [kɛ:    ɛna:                      ka:    o: la: ]<sub>FIN</sub>  
 pig DEM:ABS    FOC    stab:PST

‘I stabbed the pig.’

Finally, in (9) another instance of summary linkage references the entire series of events and is followed by a finale of sorts which describes the final result of the entire narrative.

(9) **[lɛ    hɛna: ]**<sub>MED:BRIDGE</sub> [kɛ: -ja:      ka:    gu: du: -sa: -bi: ]<sub>FIN</sub>  
 do    DUR                      pig-ABS      FOC    die-3:DR-D.S

‘After all this happened, the pig died.’

In this analysis, two levels of discourse organization become apparent. A larger series of related events is broken into episodes, or scenes. The entire series of related events forms a cohesive discourse unit (corresponding to the idea of a paragraph in Thompson et al.[2007]). Episodes within a paragraph are typically made up of one or more clause chains forming episodes, or scenes, of tightly inter-related events. A final episode, like (8) and (9), may provide a summary, result, or commentary regarding the entire paragraph.

This episode structure can also be seen in the following paragraph in (10), where the final episode in (10)e brings the paragraph to a conclusion, and ends the series of scenes describing activities that the speaker was undertaking in the bush.

- (10) a. [ha:na: mu:lu:-wε: hεna: di-si]<sub>MED</sub>  
 water:ABS bathe-LOC DUR PFV-MED:PFV  
 ‘I finished bathing then...’
- b. [φili:-nε:=ja: owa:lo-wa: so:la: di]<sub>FIN:REF</sub>  
 ascend-PST=TOP tree.type-ABS peel PFV  
 ‘I went up and peeled (bark strips from) an owa:lo tree.’
- c. [**owa:lo so:la:-li:-si**]<sub>MED:BRIDGE</sub>  
 tree.type peel-SIM-MED:PFV  
 ‘While I was peeling (bark from) an owa:lo tree...’
- d. [bεda:-lo:lu=wa: εimε o:φa: a:nε:]<sub>FIN:REF</sub>  
 see:PST-ASS.EV=TOP already sun:ABS go-PST  
 ‘I saw that the sun was already setting.’
- e. [**[ε-bi:=ja:]**]<sub>BRIDGE</sub> owa:lo-wa: so:la: hεna: di-si=ja: hεna: togo:lε:]<sub>FIN</sub>  
 do-D.S=TOP tree.type-ABS peel DUR PFV-MED:PFV=TOP go road:LOC  
 ‘That happened and I finished peeling the owa:lo (bark) and went to the road.’

The boundary between the first episode in example (10)a and (10)b and the second episode in example (10)c and (10)d is accompanied by an instance of recapitulative bridging linkage. The summary linkage clause in (10)e references the entire narrative and introduces a concluding remark to end the entire series of episodes.

One final example shows that a large stretch of discourse, may have several concluding remarks, with each remark being introduced by an instance of summary linkage which references a large stretch of preceding discourse. The stretch of discourse in (11) concludes an entire narrative describing how the speaker received a burn on his knee.

- (11) a. [gulu tila:-nεgε:]<sub>MED</sub>  
 knee descend-MED:IPFV  
 ‘This knee was down and then...’

- b. [dɛ: ɛna: ka: gɛ-φɛija:]<sub>FIN:REF</sub>  
 fire that FOC burn-PERF  
 'It was burned on that fire.'
- c. [[ɛ-φɛija:]<sub>MED:BRIDGE</sub> u:mu:ko wɛ da ko:]<sub>FIN</sub>  
 do-PERF scar this be.at DEM:DIST  
 'That happened and this is the scar.'
- d. [[ɛ-φɛija:]<sub>MED:BRIDGE</sub> na:na: la: ba:ba:lɛ do:-wa:]<sub>FIN</sub>  
 do-PERF 1:SG:PAT TOP not.know STAT-PST  
 'That happened and I didn't know (what happened).'
- e. [[ɛ-φɛija:]<sub>MED:BRIDGE</sub> ka: nɛ ɛja: ɛ: wa:lɛ bɛda:]<sub>MED</sub>  
 do-PERF FOC 1:SG:MOD father 3:SG tell CONS  
 'That happened, and my father, he told (what happened) so...'
- f. [nɛ: ɛ:na: dɛda:]<sub>FIN</sub>  
 1:SG DEM understand:PST  
 'I know about that (story).'

At the end of this narrative, a series of clauses introduced by summary linkage give commentary regarding how the speaker knows this story, and how he was told about these events by his father.

Both recapitulative and summary linkage reiterate and summarize previous events at the conclusion of a discourse episode, and highlight the relationship of these events to the following utterance, but summary linkage often occurs at the boundaries of much larger discourse units which in turn are composed of smaller episodes which are bounded by instances of recapitulative linkage. These smaller discourse episodes may be formed by a single clause or clause chain, and recapitulative bridging linkage serves to mark a transition between these smaller units of discourse. Summary linkage then serves as a strategy of introducing commentary or conclusion relevant to a series of these smaller discourse units.

In this analysis of Eibela, two levels of discourse organization are described. Scenes are formed by one or more independent clauses or clause chains, and paragraphs are formed by multiple scenes. This distinction between the two levels of discourse is realized in tail-head linkage strategies. Recapitulative linkage serves to bridge scenes within a paragraph, while summary linkage references the events of an entire paragraph, or even an entire narrative, and signifies the end of a sequence of related scenes at the conclusion of a paragraph.

### 10.3 Case and Information Structure

The optionality of case in core arguments raises the question of what conditions the use of these case suffixes. This was briefly mentioned in §5.4, and is discussed in greater detail in this section. In various other languages in Papua New Guinea and Australia, studies have found optional case forms to be conditioned by various semantic and pragmatic conditions (see Dixon [2002], McGregor [2010], Rumsey [2010], and Verstraete [2010]). In Eibela, core case-marking is primarily determined by discriminative and pragmatic factors in discourse. Research in this section has been previously discussed in Aiton (2014), and sections of this publication are reproduced here with permission from the publisher.

#### 10.3.1 Asymmetrical Case-marking

McGregor (2010) presents a typology of four different asymmetrical case-marking systems based on conditioning factors and formal representation: Syncretism split case-marking, differential case-marking, and optional case-marking. Syncretism and split case-marking are defined as types of grammatically conditioned variations of a case-marking system within a language. Syncretism is defined by McGregor as “...*(a) circumstance in which the marking of two separate cases that are normally accorded different markings in a language is the same, and when this is not grammatically conditioned.*” This is essentially a lexically determined neutralization of two or more cases. Split case-marking is defined as when “*grammatical roles in a language are marked according to different case systems in different lexico-grammatical environments*” (McGregor, 2010, pp. 1613-1614). This is when the factors determining the case-marking of arguments are conditioned by grammatical categories such as

tense, aspect, negation, etc. One common example seen in many languages is the different types of split-ergative case-marking systems described in various languages.

Figure 1

A typology of asymmetries in case marking systems.

	Lexically or grammatically conditioned	Not lexically or grammatically conditioned: “free” variation
Accidental identity	Syncretism	
Different case systems	Split Case Marking (SCM)	
Different marking of same grammatical relation		Differential Case Marking (DCM)
		Optional Case Marking (OCM)

(McGregor 2010, pp. 1613-1614)

In contrast to syncretism and split case-marking, which are grammatically or lexically conditioned, differential case-marking and optional case-marking are both characterized by different formal representations of a single grammatical relation. That is to say that a single grammatical relation may be represented by more than one form, and this choice is “free”, or not grammatically determined by syntactic or phonological criteria. In the case of differential case-marking this takes place through the use of two or more overt case-marking morphemes, while in optional case-marking this is represented by the use or non-use of a case-marking morpheme. For some examples of differential case-marking, see discussions of differential case-marking in Dimmendaal (2010). Optional case-marking is also described in languages in Australia, Papua New Guinea, and the Himalayas (McGregor, 2010; Rumsey, 2010; Verstraete, 2010). In this typology of asymmetrical case-marking systems, McGregor (2010) offers several possible motivations for determining which forms are used in differential and optional case-marking systems. Three of these functions will be described here as having relevance to case-marking in Eibela: Discriminative, pragmatic, and semantic functions.

Case-marking patterns can be called discriminative when the function determining the case-marking is the cross-referencing of grammatical relations and semantic roles. If a differential/optional case-marking system serves a discriminative function, then the presence of one case-form over another will be determined by the necessity of disambiguating the grammatical relations of the arguments of the clause. For example, if grammatical relations are clear due to other semantic or syntactic criteria, grammatical relations might not be overtly marked by case, but in a context where the grammatical relations might be ambiguous, case-marking may be utilized for disambiguation. Pragmatically conditioned case-marking is motivated by information structure, such as the definiteness, topicality, or focus of an argument. For example, in a pragmatically motivated case-marking system, an argument in a certain syntactic role might only be case-marked if it is topical or definite. The basic meaning of the case-marking itself is to mark the grammatical relation of the argument, but the specific *form* of the case-marking (or the presence versus absence of a case-marker) is conditioned by pragmatic factors. Lastly, semantic factors may condition case-marking. The case form used provides additional information about the argument such as whether it is animate, how affected or volitional the argument is, or how individuated an argument is. Similarly to pragmatically conditioned case-marking, the basic meaning of the case-marking itself is to mark the grammatical relation of the argument, but the specific form of the case-marking (or the presence versus absence of a case-marker) conveys some additional semantic feature of the argument. In Eibela, optional case-marking is conditioned primarily by discriminative factors, although in several instances, this may be difficult to distinguish from pragmatic and semantic factors.

### 10.3.2 Differential and Optional Case-marking in Eibela

In Eibela, the two core cases, ergative and absolutive, are optionally expressed, and conditioned by the ambiguity of grammatical roles in a clause. The ambiguity of the grammatical roles of a clause is in turn conditioned in large part by the pragmatic and semantic features of an argument. Pragmatically motivated fronting or elision of an argument, along with questions of animacy and agency all serve to affect the clarity of grammatical roles within a clause.

### 10.3.2.1 Ergative Case-marking

Ergative case-marking in particular is conditioned by discriminative and pragmatic functions. In clauses with a non-canonical constituent order or disambiguating contrastive focus ergative case is overtly marked in order to clearly identify the A argument of the clause.

#### 10.3.2.1.1 Non-canonical Constituent Order

In pragmatically-marked clauses, an argument may be presented as particularly given, new, or topical through fronting or right dislocation (see §10.4). These pragmatically-marked clauses do not effectively encode grammatical relations through constituent order, and case-marking may then be used to eliminate any possible ambiguity which may result.

In (12) a given and topical O argument is fronted in the clause, and appears in the initial location which is more typically the position of the A argument. The A argument is in the second position, and appears with the ergative case-marker {-jɛ:}, which removes any ambiguity regarding which argument is functioning in which grammatical relation.

- (12) [ba:gɛ    ɛna:]<sub>O</sub> [ko:lu-**wɛ:**]<sub>A</sub> ka:    dijo:    la:-bi:  
kina.shell that man-ERG FOC put QUOT-D.S  
‘It is said that the man took that kina shell.’

#### 10.3.2.1.2 Contrastive Focus

Contrastive focus occurs when one argument is presented in opposition to another actor in the narrative. When multiple actors are present in a discourse, contrastive focus is a means to show contrast and disambiguate different referents within a discourse. This is related to the discriminative functions of case-marking in that the status on a particular argument in a grammatical role must be made more explicit due to the alternative possible actors in the pragmatic context.

For example, in (13) the identity of the argument as the subject of the clause is contrastively focalized. Since this is a negative clause, the proposition presented is that the argument is *not* the A argument of the clause, though the event did occur, and another a referent in the discourse is the appropriate agent for this event.

- (13) a: sɛgai-jɛ: sɛna: ma: kɛi  
 Ah! NAME-ERG attack:PST NEG ASSER  
 'Oh! It wasn't *Sigai* who hit (me).'

Additional ambiguity results from the elision of the O argument of the clause. Elision is very common, but elided arguments are much more often discourse topics functioning as the A argument of a clause, and the elision of an O argument is therefore a less expected situation which warrants more overt specification.

### 10.3.2.2 *Absolutive Case-marking*

Like the ergative case, absolutive case-marking is conditioned by semantic and pragmatic functions; however, additional considerations of animacy and topicality must be mentioned with regard to absolutive case-marking. In intransitive clauses, animate arguments are less likely to be overtly marked by the absolutive case-marker {-ja}. Additionally, the form of the absolutive case-marker is homophonous with the topic-marking enclitic {=ja}, but has different syntactic and semantic properties. This means that in intransitive clauses the discriminative function of case-marking is less likely to arise from non-canonical word order, and is more likely to arise from a semantic feature of the S argument itself.

#### 10.3.2.2.1 Absolutive Case and Topicality

At first glance, the absolutive case suffix appears to be tied to topical arguments; however, morphosyntactic and semantic criteria show two distinct sets of properties which differentiate a topic-marking enclitic from a homophonous case-marking suffix.

Topics form a distinct syntactic role apart from verbal arguments. Topics always precede the main clause, and may or may not be coreferential with one of the core arguments of the verb. Additionally, topics generally do not show case distinctions. For example, in (14) the topic *do:ɸa:ja:* is not a core argument of the predicate, and serves as the location of the event. This contrasts with the absolutive O argument *kosu:wa:ja:* which serves as the patient of the predicate and occurs in the position immediately preceding any oblique arguments and the predicate.

- (14) [do:φa:=ja:]<sub>TOP</sub> [kosu:wa:-ja:]<sub>O</sub> [a:mi:]<sub>X</sub> [sa:nε dija:-gεnε:]<sub>PRED</sub>  
 snare=TOP cassowary-ABS ASS kill take-PST-MED  
 'At the snare, (I) killed the cassowary there.'

Semantic criteria may also be used to differentiate topics and absolutive-marked O arguments. Topics are considered topical because they represent definite, given referents within a discourse which are presented as being a prominent focus of attention. For example, in (15) the common element between two clauses is a common location which is the center of the events described. This location is presented in the first clause (15)a and once it has been introduced as a given argument in the discourse, this referent may be used as a topical reference to situate the events of the discourse, as in the following clause (15)b.

- (15) a. [wa:wija-jε:]<sub>A</sub> [o:ga:]<sub>O</sub> la: gεla: εna: mi-jε:ni:-ki:  
 NAME-ERG pandanus DEF plant:PST DEM:ABS come-1:FUT-CONT  
 'I was coming near where Wa:wija had planted pandanus.'
- b. [u:su=wa:]<sub>TOP</sub> [ε:sa:]<sub>O</sub> wa: di hε:-ja:  
 middle=TOP bilum:ABS thither take hang-PST  
 'I hung that bag in the middle there.'

In contrast, absolutive-suffixed objects are not tied to this discourse function, and often denote new information and may or may not be a prominent discourse element. Absolutive S or O arguments which refer to given referents are often elided, and overt, absolutive-marked are pragmatically unmarked. For example, in (16) the S argument *sugu:lu: wi:ja:* is a new introduction to the discourse and is not treated as a prominent discourse element to situate other events.

- (16) [gi:ja:]<sub>TOP</sub> ka: [sugu:lu: wi:-ja:]<sub>S</sub> da kei  
 2:PL FOC school name-ABS be.at ASSER  
 'The name of YOUR school is there.'  
 (lit. 'Regarding you in particular, the school name is there.')

This illustrates that absolutive case-marking is not related to topicality, and along with the morphosyntactic differences between absolutive and topic arguments, shows that there are two distinct syntactic roles at issue. Although it may be plausible that the homophonous forms of the two morphemes originate from some common historical origin, they are clearly distinct in their current functions.

#### 10.3.2.2.2 Animacy of Intransitive Subjects

The case-marking of subjects in intransitive clauses is often conditioned by the animacy of the referent of the argument, with inanimate subjects being more often suffixed with the absolutive case suffix {-ja:}. This may be attributed to the overall discriminative function of argument-marking. Since intransitive clauses have only one core argument, fronting and other issues of constituent order which create ambiguity in transitive clauses do not play a role in discriminative case-marking of intransitive subjects. Instead, the animacy of the S argument is the primary determinant of case-marking due to the expectedness of an animate or inanimate argument functioning within a particular role. Animacy has often been shown to be relevant to morphosyntactic properties, and Dixon (1994) in particular discusses the relationship between a nominal hierarchy and prototypical syntactic functions. In Figure 2, reproduced from Dixon (1994, p. 85), the left-most elements are more animate and more likely to be in agentive roles.

Figure 2: Nominal Hierarchy

Pronouns < Demonstratives < Proper Nouns < Human < Animate < Inanimate

As in examples (17) to (19), S arguments are prototypically agents or experiencers, which are semantic roles associated with animate referents. An inanimate referent is therefore a less prototypical subject argument. Prototypical animate subjects often appear with no case-marking, even in clauses where they are non-volitional experiencers, as in (17) and (18).

- (17) tu:wε gu:du:  
NAME die:PST  
'Tuwe died.'

(18) ko:lu na:gla:  
man sick:PST

'The men were sick.'

In contrast, an inanimate referent appearing as an active agent is non-prototypical, and more likely to be suffixed by the absolutive case to strengthen the representation of the argument as a subject, as in (19).

(19) φυφε:si:-ja: ja: kei  
Wind/storm-ABS come ASSER

'A windstorm is coming.'

However, the case-marking of intransitive subjects which do not refer to living beings is also prevalent in equative clauses like (20) with no pragmatic expectation of animacy or volitionality.

(20) ne wi:-ja: u:gei  
1:SG:MOD name-ABS NAME

'My name is U:gei.'

As shown with ergative case-marking, the role of animacy in the case-marking of intransitive subjects may therefore be predominantly explained by discriminative motivations. It is only in equative clauses that no particular expectation of animacy is expected, and case-marking might be oriented around animacy through an analogy to active clauses with an agentive subject.

## 10.4 Constituent Order and Information Structure

Constituent order may also be indicative of the discourse status of a given argument. While the *basic* constituent order of a clause is S(X)V or AO(X)S, variations of this order are attested, and signify such properties as givenness, contrast, and emphasis.

### 10.4.1 Fronting

The fronting of arguments is associated with givenness or topicality, whereas arguments occurring closer to the predicate or on the right edge of a clause are more likely to be

emphasized as new or unexpected information. In (21) the O argument *na: ɛna:* occurs at the beginning of the clause, but is not topicalized with the topic enclitic {=ja:}.

- (21) [na: ɛna:]<sub>o</sub> [ko:lu ka:]<sub>A</sub> ka: ka:-li: do:-wa:  
 meat that:ABS man FOC FOC share-SIM PERF-PST  
 ‘Those animals, the men shared them.’

This occurs in a textual context where the O argument, the meat, is known and definite from the preceding discourse, but is non-animate and therefore less inclined to be topical. Fronting therefore associates with definite arguments, but not necessarily topics. Additionally, the A argument *ko:lu ka:* occurs with the focus-marker *ka:* which accompanies an unknown, unexpected, or contrastive argument. Similarly, in (12) the argument *ba:ge ɛna:* is definite and fronted. Fronted arguments do not have a clearly defined prosodic contour, and may be prosodically separate from the ensuing clause, and followed by a clear pause, or may be part of the same intonational phrase as the clause as a whole.

#### 10.4.2 Right Dislocation

In contrast to fronted arguments, those found on the rightmost edge are characterized as unknown or uncertain arguments. An argument occurring after the predicate of a clause is generally additional clarifying information which is added to the clause, perhaps as an afterthought, rather than a known or topical argument. For example, the clause in (22) is functional and grammatical without the final argument *φo:sɛ: ki:jɛ:* ‘back bone, spine’, but the addition of the oblique argument offers new and more explicit information.

- (22) moga:ge-li: sɛdɛ-si [φo:sɛ: ki:-jɛ:]<sub>x</sub>  
 bad-ADV hit-MED:PFV back:LOC bone-LOC  
 ‘(We) hit (it) badly on the backbone then...’
- (23) [ha:nɛ sa:gu: ba:dɛ]<sub>x</sub> hɛnɛ-sa:-bi: [kosu:wa: ɛna:]<sub>s</sub>  
 [water waterfall side:LOC go-3.DR-D.S [cassowary that:ABS]  
 ‘It went to that side of the waterfall, that cassowary.’

Similarly, in (23) the constituent *kosu:wa: ena:* is not syntactically required, but serves to clarify an otherwise ambiguous S argument.

## 10.5 Conclusion

In this analysis of Eibela, two levels of discourse organization are differentiated through the use of bridging linkage, and constituent order and case-marking are shown to be sensitive to pragmatic considerations. Scenes are formed by one or more independent clauses or clause chains, and paragraphs are formed by multiple scenes. Recapitulative linkage serves to bridge scenes within a paragraph, while summary linkage references the events of an entire paragraph, or even an entire narrative, and signifies the end of a sequence of related scenes at the conclusion of a paragraph. The expression of core cases is most common in certain pragmatic contexts which create more ambiguity regarding the grammatical relations through the presence of alternate constituent orders or the presence of an argument with atypical semantic features. In transitive clauses when an argument is fronted to express the givenness or topicality of an argument, case-marking may serve a discriminative role that is not necessary in pragmatically neutral clauses. In intransitive clauses, or transitive clauses with a pragmatically neutral constituent order, the expectedness or prototypicality of a referent within a specific argument role will condition case-marking. For example, a pragmatic context with many possible agents for an event results in any single actor being a possible choice for the agent of a clause. This results in case-marking as a type of contrastive focus to strengthen the identification of a referent as bearing a particular grammatical relation. Similarly, an argument which is semantically non-prototypical in a particular grammatical relation may require more overt specification to avoid ambiguity. Finally, the arguments appearing on the left periphery of a clause are associated with givenness or topicality, whereas arguments appearing after the predicate or on the right edge of a clause are associated with new or unexpected information.

## Appendix 1: Transcribed Texts

In this section, several recorded and transcribed narratives are provided in order to illustrate the Eibela language in context. Texts are divided into numbered lines corresponding to the syntactic unit described as a medial clause or final clause in §9.4, and other types of embedded clauses are therefore not numbered separately. Clauses and clause constituents are labeled with brackets and subscripted labels. Intransitive subjects are marked as S; transitive subjects are marked as A, direct objects are marked as O, topics are marked as TOP, and predicates are marked as PRED. In copula clauses, the subject is marked as CS, and the copula complement is labeled as CC. Other constituents such as indirect objects, oblique objects, and adverbials are labeled as X. Clauses are labeled as either MED for a medial clause, or FIN for a final clause. In instances where a clause extends to multiple lines, each line of a numbered extract is noted by a letter as well (as in number (5) on this page, which is divided into two lines). The constituents of complex embedded clauses are not always extensively annotated where it is felt this would lead to extensive clutter and confusion.

### A.1 U:gei Saves Sa:goi

(1) [[nε wi:-ja:]<sub>S</sub> [jO:]<sub>PRED</sub>]<sub>FIN</sub>

1:SG:MOD name-ABS NAME

‘My name is Joe.’

(2) [[nε ε:ja: wi:-ja:]<sub>S</sub> [u:gei]<sub>PRED</sub>]<sub>FIN</sub>

1:SG:MOD father name-ABS NAME

‘My father’s name is U:gei.’

(3) [[nε ε:ja: u:gei molu:wa:]<sub>O</sub> [a:ka: la:]<sub>O</sub> [wa:lε-mε:na:]<sub>PRED</sub>]<sub>FIN</sub>

1:SG:MOD father NAME old PRO:FOC DEF tell-FUT:1

‘I will tell an old story about my father, U:gei.’

(4) [[nε εja:-ja:]<sub>CS</sub> [mumu:nε εlε:bε]<sub>CC</sub> [la:-bi:]<sub>PRED</sub>]<sub>FIN</sub>

1:SG:MOD father-ABS NAME river.head COP-D.S

‘My father was at the head of Mumu:ne creek.’

- (5) a. [[sa:goi εja:lε:      motu:wε:    εja:lε:]<sub>A</sub>  
 NAME COORD:DU NAME COORD:DU
- b. [[gɛda:]<sub>PRED</sub> [jo:φa:]<sub>O</sub>      [sɛdɛ    hɛna:    mi-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 beat      tree.trunk:ABS hit:N.SG.A DUR    come-PST
- ‘Sa:goi and Motu:wε: came beating tree trunks (so their approach would be heard).’
- (6) [[bo:bo:]<sub>PRED</sub> [ɛ:na:]<sub>O</sub>]<sub>FIN</sub>  
 see:PST      that:ABS
- ‘He (U:gei) saw that.’
- (7) [[εja:lε:]<sub>S</sub>      [hɛna:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 COORD:DU    go-MED:IPFV
- ‘Those two were walking and...’
- (8) [[da:-ja:]<sub>O</sub> [mi:-jɛi] <sub>PRED</sub>]<sub>FIN</sub>  
 food-ABS    give-HYPO
- ‘(U:gei) would give them food.’
- (9) [[lɛ:    hɛna:-nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 do      DUR-MED:IPFV
- ‘That being the case...’
- (10) [[ha:nɛ    mi:=ja:]<sub>TOP</sub> [hɛnɛ] <sub>PRED</sub>]<sub>MED</sub>  
 water    give=TOP    DUR
- ‘He(U:gei) gave them water.’
- (11) [[sa:-bi:]<sub>PRED</sub>]<sub>MED</sub>  
 sit-D.S:DUR
- ‘They sat and...’
- (12) [[ga:lɔ]<sub>X</sub>    [o:φa:]<sub>S</sub>    [hɛna:-bi:]<sub>PRED</sub>      [bɛdɛ    hɛna: ba:lɛ]<sub>X</sub>]<sub>MED</sub>  
 afternoon    sun:ABS    go-D.S    see    DUR    COORD
- ‘The sun was setting while they were watching and...’

(13) [[jɛ: jo:ɸa:]<sub>o</sub> a:mi:]<sub>x</sub> [ɛna]<sub>x</sub> [sa:da: bɛda:]<sub>pred</sub>]<sub>med</sub>  
 tree tree.trunk:ABS PRO:ASS still hit:N.SG.A CONS

‘(Some others) were beating tree trunks (to signal their approach) so...’

(14) a. [[bɛda:-lo:lu=wa:]<sub>top</sub> [a:mi:]<sub>x</sub> [ka:lɛmabɛ:]<sub>s</sub> [ha:bila: ko:lu]<sub>s</sub>  
 see-ASS.EV=TOP DEM:ASS NAME NAME man

b. [[ka:la:ma:bɛ: la: do:sa:]<sub>s</sub> [a:mi:]<sub>x</sub> [mi-ja:]<sub>pred</sub>]<sub>fin</sub>  
 NAME DEF ASS.PL PRO:ASS come-PST

‘(They) saw then that Ka:la:ma:bɛ:, a Ha:bila: clan man, Ka:la:ma:bɛ: and some others had come.’

(15) [[a:mi:]<sub>x</sub> [ja: bɛda: do:-si]<sub>pred</sub>]<sub>med</sub>  
 PRO:ASS DIR:VEN CONS STAT-MED:PFV

‘They had come so...’

(16) [[da:-ja:]<sub>o</sub> [mɛna:]<sub>pred</sub>]<sub>fin</sub>  
 sago-ABS eat:PST

‘They ate sago.’

(17) [[mi:jɛ: hɛna:-nɛ:]<sub>pred</sub>]<sub>med</sub>  
 give:MED DUR-MED:IPFV

‘He was giving (food to them), then...’

(18) [[ka: ɸa:-ja:]<sub>pred</sub> [jɛ: la:-bi:]<sub>x</sub>]<sub>fin</sub>  
 FOC sleep:PL-PST DIR:VEN COP-D.S

‘Having come, they slept.’

(19) [[ɸa:lɛ di-si]<sub>pred</sub>]<sub>med</sub>  
 sleep:PL PFV-MED:PFV

‘(They) slept and then...’

(20) [[ha:ɡɛnɛbo:ja]<sub>pred</sub>]<sub>fin</sub>  
 morning

‘It was morning.’

- (21) a. [[toko-si di=ja:]<sub>TOP</sub> [sɛ:-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>X</sub>  
stand.up-PL PFV=TOP stay-CONT-LOC-ASS  
‘They got up and were sitting.’
- b. [[kalɛma:bi-jɛ:]<sub>A</sub> [sɛɛ-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>X</sub>  
NAME-ERG say-CONT-LOC-ASS  
‘Ka:la:ma:be: said (something)...’
- c. [[nɛ ɛja: u:gei-mo:]<sub>X</sub> [sɛɛ-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>X</sub>  
1:SG:MOD father NAME-DAT say-CONT-LOC-ASS  
‘(He) said to my father U:gei...’
- d. [[nɛ:]<sub>A</sub> [so:ko ha:do]<sub>O</sub> [mɛ:na: do: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG tobacco green consume:FUT STAT ASSERT  
‘“I feel like smoking green tobacco.”’
- (22) [[o:gu:-bi:]<sub>PRED</sub>]<sub>MED</sub>  
do.thus-D.S  
‘(He) did that and...’
- (23) [[nɛ ɛja: u:gei=ja:]<sub>TOP</sub> [gɛfa:]<sub>O</sub> [ma: dɛ:ga:lɛ-φɛija:]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG:MOD father NAME=TOP neck:ABS NEG straighten-PERF  
‘My father, U:gei, hadn't straightened his neck.’
- (24) [[wɛjo:gu: kulu: sa:-ta: do:-wa: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
do.like.this with.head.bent sit-TEL STAT-PST ASSERT  
‘He was sitting like this, with his head down.’
- (25) [[kulu: sa: sɛ:-ki:-jɛ:-mi:]<sub>X</sub> [so:kolo-wa:]<sub>O</sub>[di hɛna:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
with.head.bent sit stay-CONT-LOC-ASS pipe take DUR-MED:IPFV  
‘Sitting with his head down, He took the pipe and...’
- (26) [[mala:]<sub>S</sub> [la:]<sub>PRED</sub>]<sub>FIN</sub>  
go:IMP QUOT  
‘(He) said “Go!”’

- (27) [[bo:]<sub>X</sub> [mo:]<sub>X</sub> [so:kolo-wa:]<sub>O</sub> [ko:lu kɛ:-φɛija:]<sub>PRED</sub>]<sub>FIN</sub>  
 just only pipe-ABS push close-PERF  
 ‘...but just pushed the pipe to him.’
- (28) [[sa:goi]<sub>S</sub> [hɛna: bɛda:-bi:]<sub>PRED</sub>]<sub>MED</sub>  
 NAME go CONS-D.S  
 ‘Sagoi went and...’
- (29) [[dɛdɛ hɛnɛ]<sub>PRED</sub> ba:lɛ]<sub>X</sub> [ka:la:ma:bɛ: la: do:sa:]<sub>S</sub> [hɛnɛ-ki:]<sub>PRED</sub>]<sub>MED</sub>  
 watch DUR COORD NAME DEF ASS.PL go-CONT  
 ‘While he (Sagoi) was watching, Ka:la:ma:bɛ: and the others were leaving and...’
- (30) [[ni:jɛ: la:]<sub>S</sub> [mɛnɛ:na: kɛi di-si]<sub>PRED</sub>]<sub>MED</sub>  
 1:PART DEF go:1:FUT ASSER PFV-MED:PFV  
 ‘(U:gei said) "Some of us will also go." and then...’
- (31) a. [[a:mi:]<sub>X</sub> [hɛna:-bi:-ki:=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 DEM:ASS go-D.S-CONT=TOP  
 ‘Then they went, and...’
- b. [[nɛ ɛ:ja: wɛbɛ:na:]<sub>S</sub> [ɛ:]<sub>S</sub> [[sa:goi la:]<sub>S</sub> [a:nɛ:]<sub>PRED</sub>]<sub>X</sub> [ma: a:nɛ: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG father PROX:DEM:ANA 3:SG NAME DEF go:PST NEG go:PST ASSER  
 ‘My father here, he didn't go where Sagoi went.’
- (32) [[ɛ:]<sub>S</sub> [ɛ:mɛlɛ:]<sub>X</sub>[ti:φɛ:]<sub>X</sub> [a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 3:SG back afterwards go:PST  
 ‘He went back after him (Ka:la:ma:bɛ:).’
- (33) [[ka:la:ma:bɛ: do:sa:]<sub>S</sub> [a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME ASS.PL go:PST  
 ‘He went after Ka:la:ma:bɛ: and the others.’
- (34) [[ti:φɛ:]<sub>X</sub> [ja:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 afterwards DIR:VEN-MED:IPFV  
 ‘Coming after (them)...’

(35) [[a:nɛ: jo:]<sub>S</sub> [la:-bi]<sub>PRED</sub>]<sub>FIN</sub>  
 go:PST EXCL QUOT-D.S

‘It’s said “he went (like that).”’

(36) [[nɛ ε:ja:-ja:]<sub>S</sub> [ɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 1:SG:MOD father-ABS do-MED:PFV

‘My father did that and then...’

(37) a. [[bɛda:-lo:lu=wa:]<sub>TOP</sub> [ka:]<sub>X</sub>]<sub>TOP</sub>  
 see-ASS.EV=TOP FOC

b. [[ka:lama:bɛ:-ja:]<sub>S</sub> [ɛimɛ:]<sub>X</sub> [ga:li-ta:]<sub>X</sub> [ɛ:mɛɛ:]<sub>X</sub> [a:nɛ:]<sub>PRED</sub>]  
 NAME-ABS already leave-TEL back go:PST

c. [[[mumu:nu:]<sub>O</sub> [ta:-mɛ:]<sub>PRED</sub>]<sub>X</sub> [tilɛ: dɛ:nɛ:]<sub>PRED</sub> ba:lɛ:]<sub>X</sub>]<sub>FIN</sub>  
 NAME cross-PURP descend PROG COORD

‘When my father was doing that, he saw that Ka:la:ma:be: had already left (the path) while going down to cross Mumu:nu creek.’

(38) [[o: bɛda:-gɛnɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 do.thus CONS-MED:IPFV

‘That was happening so...’

(39) a. [[[nɛ da:jo-wɛ:]<sub>A</sub> [sɛɛ-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>X</sub>  
 1:SG:MOD namesake-ERG say-CONT-LOC-ASS

b. [nɛ no:su ɛna:]<sub>S</sub> [ja: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG:MOD KIN that:ABS DIR:VEN ASSER

‘And then my namesake said “That man who is my no:su (bride price contributor), he is coming.”’

(40) a. [[ka:lɛma:bɛ:-ja: sɛɛ-ki:=ja:]<sub>TOP</sub>  
 NAME-ABS say-CONT=TOP

Ka:la:ma:be: said...’

- b. [[wa:φε ko:]<sub>S</sub> [[ε:bi]<sub>O</sub> [di-mε:]<sub>PRED</sub>]<sub>X</sub> [mi-ja:=jεi]<sub>PRED</sub><sub>O</sub> [ε-sa:-bi:]<sub>PRED</sub><sub>FIN</sub>  
 worm DEM:DIST what get-PURP come-PST=Q:N.PRS do-DR-D.S  
 “‘Why did that worm come?’”  
 (lit. ‘What did this worm come to get?’)
- (41) [[mi-jε:=ja:]<sub>TOP</sub> [wo:gu: sε:-ja: kεi]<sub>PRED</sub>]<sub>FIN</sub>  
 come-PST=TOP do.thus say-PST ASSERT  
 ‘When he (Ka:la:ma:be:) came, he said that.’
- (42) a. [[[ka:la:ma:be:=ja:]<sub>TOP</sub> [a:ka: la:]<sub>O</sub> [sεlε-si=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 NAME=TOP PRO:FOC DEF say-MED:PFV=TOP  
 b. [nε ε:ja: wεbε:na:=ja:]<sub>TOP</sub> [da:no-ka:]<sub>X</sub> [bo:la: kεi]<sub>PRED</sub><sub>FIN</sub>  
 1:SG:MOD father this=TOP bow-INST hit:PST ASSERT  
 ‘Ka:la:ma:be: said that, and he hit my father with his bow.’
- (43) a. [[[nε ε:ja: wεbε:na:]<sub>X</sub> [o:mani:-ja:]<sub>S</sub> [ma:li: do:-bi:=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 1:SG father PROX:DEM:ANA blood-ABS much STAT-D.S=TOP  
 ‘My father was bleeding a lot and...’  
 (lit. ‘My father, there was much blood.’)  
 b. [[nε da:jo jo:-wε:]<sub>A</sub> εlε-ki:=ja:]<sub>PRED</sub><sub>TOP</sub> [da:no-ka:]<sub>X</sub>  
 1:SG:MOD namesake NAM-ERG do-CONT=TOP bow-INST  
 ‘My namesake Joe was there, and with a bow...’  
 c. [no:su]<sub>A</sub> [da:no-wa:]<sub>O</sub> [wε]<sub>X</sub> [dija: dimi]<sub>PRED</sub><sub>FIN</sub>  
 KIN bow-ABS DEM:PROX take give:PST  
 ‘My no:su (bride wealth contributor) took this bow, and gave it (to U:gei).’
- (44) a. [[o:-bi:=ja:]<sub>TOP</sub>  
 do.thus-D.S=TOP  
 ‘Having done that...’

- b. [nɛ            ɛ:ja:    wɛbɛ:na:]<sub>A</sub>        [da:no: ɛna:]<sub>o</sub>        [ka: di=ja:]<sub>TOP</sub> [dodo]<sub>PRED</sub>FIN  
 1:SG:MOD father PROX:DEM:ANA bow DEM:ABS FOC take=TOP stand  
 ‘...my father stood there having taken the bow.’
- (45) [[ka:la:ma:bɛ:-ja:]<sub>o</sub> [ka:    bo:la:]<sub>PRED</sub>FIN  
 NAME-ABS            FOC    hit:PST  
 ‘He hit Ka:la:ma:bɛ:.’
- (46) [[o:-bi:=ja:]<sub>TOP</sub>        [ka:la:ma:bɛ:-jɛ:]<sub>A</sub>    [ɛ::] <sub>PRED</sub>FIN  
 do.thus-D.S=TOP    NAME-ERG            ah!  
 ‘When that happened, Ka:la:ma:bɛ: (said) “Argh,”
- (47) [[wa:φɛ o:mani:]<sub>x</sub>    [wo:gu:-no:    kɛi]<sub>PRED</sub>FIN  
 worm    blood            do.thus-CAUT    ASSER  
 ‘and (U:gei said) “Worm’s blood! That’s what will happen!”’
- (48) [[sa:goi wa:]<sub>A</sub>    [ho:no:bɛ:na:]<sub>x</sub>    [nɛ:]<sub>o</sub> [bɛda:-nɛ:]<sub>PRED</sub>MED  
 NAME    DIR:AND DEM:LVL:ANA    1:SG    see:PST-MED:IPFV  
 “‘Sa:goi saw me (U:gei) there and...”’
- (49) [[mi-ja:]<sub>PRED</sub>FIN  
 come-PST  
 “‘He came.’”
- (50) [[gɛ:    la:]<sub>A</sub>    [nɛ:]<sub>o</sub> [bɛda:-gɛnɛ:]<sub>PRED</sub>MED  
 2:SG    DEF    1:SG    see:PST-MED:IPFV  
 “‘(then) *You* saw me and...”’
- (51) [[mi-ja:]<sub>PRED</sub>FIN  
 come-PST  
 “‘(You) came.’”
- (52) [[ɛ:na:]<sub>x</sub> [φa:lɛ    hɛnɛ dɛnɛ    kɛi]<sub>PRED</sub>FIN  
 DEM    sleep:PL DUR    PROG    ASSER  
 “‘Then (you) stayed and slept a while.’”

- (53) [[hɛnɛ:=bi: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 go=DEL.IMP ASSER  
 “Go!”
- (54) [[nɛ: la:]<sub>A</sub> [hɛna: kɛi]<sub>O</sub> [ɛ wo:gu: sɛ-mɛ:na:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG DEF go ASSER do do.thus say-1:FUT  
 “I said go like that.”
- (55) [[ili: ɛ-φɛija: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 suffice do-PERF ASSER  
 ‘It happened like that.’
- (56) [[wo:gu: sɛ:-ja: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 do.thus say-PST ASSER  
 “I said it like that”
- (57) [[nɛ ɛ:ja:-ja:] [ka:la:ma:bɛ: la: a:nɛ: φo:sɛ:]<sub>X</sub> [ma:a:nɛ:-jo:-ba:bɛ kɛi]<sub>FIN</sub>  
 1:SG:MOD father-ABSNAME DEF go:PST back:LOCNEG go:PST-COMP-CF ASSER  
 ‘If my father hadn't followed Ka:la:ma:bɛ: then...’
- (58) [[sa:goi=ja:]<sub>TOP</sub> [ka:la:ma:bɛ:=ja:]<sub>TOP</sub> [sɛdɛ hɛna:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 NAME=TOP NAME=TOP kill:N.SG.A DUR-MED:IPFV  
 ‘And Sa:goi, that Ka:la:ma:bɛ:, he would have killed (him)...’
- (59) [[mɛ:-ba:bɛ]<sub>PRED</sub>]<sub>FIN</sub>  
 consume:PL:PST-CF  
 ‘And (he) would have eaten him.’
- (60) [[ka:la:ma:bɛ:]<sub>A</sub> [ɛ:na:]<sub>O</sub> [sɛna:-ba:bɛ]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME DEM kill:PST-CF  
 ‘Ka:la:ma:bɛ: would have killed that one.’
- (61) [[diki:no: do:sa:]<sub>S</sub> [ma: ɛga:lima: do:-ba:bɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 NAME ASS.PL NEG nothing STAT-CF  
 ‘Dikino and the others would not be alive.’

(62) [[i: ha:bila:]<sub>S</sub> [ɛga:lɛma: do:-ba:bɛ]<sub>PREDFIN</sub>]  
 3:N.SG:MOD NAME nothing STAT-CF

‘Those Ha:bila: people wouldn't be here.’

(63) a. [[nɛ ɛ:ja:]<sub>A</sub> [sɛlɛ-ki:=ja:]<sub>PREDFIN</sub>]  
 1:SG father say-CONT=TOP

b. [[ha:bila: gi:ja:]<sub>A</sub> [to:-wa: kulu-φɛija:-ja:]<sub>O</sub> [nɛ:-mo:]<sub>X</sub> [sɛlɛ=ta:b ma: kɛi]<sub>PREDFIN</sub>]  
 NAME 2:PL language-ABS angry-PERF-ABS 1:SG-DAT say=PROH NEG ASSERT

‘My father said, "You Ha:bila:, don't speak angry words to me."’

(64) [[gɛ: ka: la:]<sub>O</sub> [kɛdɛ:si-jɛ:-mi:]<sub>PREDX</sub> [o:ja:-ja:]<sub>O</sub> [nɛ:]<sub>A</sub> [di kɛi]<sub>PREDFIN</sub>]  
 2:SG FOC DEF save-LOC-ASS injury-ABS 1:SG get ASSERT

‘While I saved you, I received pain.’

(65) [[nɛ: la: wa:-ja: ja:]<sub>S</sub> [wa:]<sub>X</sub> [ka: hɛna: ɛlɛ-ta:]<sub>PREDFIN</sub>]  
 1:SG DEF story-ABS DIR:VEN DIR:AND FOC DUR finish-TEL

‘My story here has come to a stop there.’

(66) [ka:m]<sub>PREDFIN</sub>  
 that's.all

‘That's all.’

## A.2 How to Build a House

(1) [[nɛ wi:-ja:]<sub>S</sub> [sa:pai]<sub>PREDFIN</sub>]  
 1:SG:MOD name-ABS NAME

‘My name is Sa:pai’

(2) [[nɛ ɛ:ja: wi:-ja:]<sub>S</sub> [u:gei]<sub>PREDFIN</sub>]  
 1:SG:MOD father name-ABS NAME

‘My father's name is U:gei.’

(3) [[nɛ:]<sub>A</sub>[do:go di-sɛnɛ ma:nɛ]<sub>O</sub> [a:ka: la:]<sub>O</sub> [wa:lɛ-mɛ:na:]<sub>PREDFIN</sub>]  
 1:SG house build-HAB way PRO:FOC DEF tell-1:FUT

‘I will tell about the method of house building.’

- (4) [[do:ga:]<sub>o</sub> [di-mɛ:ni:-ki:=ja:]<sub>pred</sub>]<sub>top</sub> [ho:no]<sub>x</sub> [dija: ho:de eɛ-ki:]<sub>pred</sub>]<sub>med</sub>  
house:ABS build-PURP-CONT=TOP DEM:LVL take clear do-CONT  
‘Where one is going to build a house, cut clear (a space) there.’
- (5) [[[i:sa:-ja:]<sub>o</sub> [kɛɛ di=ja:]<sub>pred</sub>]<sub>top</sub> [sa: ɛ-φɛi]<sub>pred</sub>]<sub>fin</sub>  
ground-ABS search PFV=TOP discard do-COMP:HYPO  
‘I clear the ground and throw away the rubbish.’
- (6) [[φili: do:-mɛ:na:]<sub>x</sub> [lɛ lɛ:-ki:]<sub>pred</sub>]<sub>med</sub>  
develop STAT-PURP do COP-CONT  
‘(Think about) how it will develop.’  
(lit. ‘It’s still potentially able to develop...’)
- (7) [[jɛ:bɛ]<sub>o</sub> [ɛimɛ]<sub>x</sub> [a:mi:]<sub>x</sub> [dijo:-φo:]<sub>pred</sub>]<sub>fin</sub>  
tree already PRO:ASS put-COMP  
‘The logs have all already been put there.’
- (8) [[a:mi:]<sub>x</sub> [hɛna:-nɛ:]<sub>pred</sub>]<sub>med</sub>  
PRO:ASS DUR-MED:IPFV  
‘Having done that there...’
- (9) [[u:sɛ:]<sub>x</sub> [dijo:-φo:]<sub>pred</sub>]<sub>fin</sub>  
middle:LOC put-COMP  
‘They are put in the middle.’
- (10) [[tɛ:gɛliba:]<sub>o</sub> [wɛjo:gu: dijo:-φɛ:na:]<sub>pred</sub>]<sub>fin</sub>  
walkway:ABS do.like.this put-COMP:1:FUT  
‘I will finish putting the walkway in this way.’
- (11) [[ɛ:na:]<sub>x</sub> [wo:ba:]<sub>o</sub> [wɛjo:gu:-φɛ:na:]<sub>pred</sub>]<sub>fin</sub>  
DEM tree.bark:ABS do.like.this-COMP:1:FUT  
‘Then I will do the sleeping areas.’

- (12) [[a:mi]<sub>x</sub> [dɛ:φɛjɛ-φɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 PRO:ASS measure-HYPO:COMP  
 ‘One should measure there.’
- (13) [ɛ di-si=ja:]<sub>TOP</sub> [hɛna:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 do PFV-MED:PFV=TOP DUR-MED:IPFV  
 ‘That being done, as that continues to be done...’
- (14) [[isi-ja:]<sub>o</sub> [ko:du-mɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 post-ABS cut-HYPO  
 ‘One should go and cut the posts.’
- (15) [[[isi-ja:]<sub>CS</sub> [ko:du]<sub>CC</sub> [la: hɛna:-si-jɛ:-mi:]<sub>PRED</sub>]<sub>x</sub> [hɛ:mu]<sub>o</sub> [dijo:φo:]<sub>PRED</sub>]<sub>FIN</sub>  
 post-ABS cut COP DUR-MED:PFV-LOC-ASS measuring.stick put:PST  
 ‘As the posts are being cut, one should have put the measurement stick straight.’
- (16) a. [[[ɛ:mɛli: ɛna:=mi:]<sub>x</sub> [u:sɛ:]<sub>x</sub> [isi-ja:]<sub>o</sub> [a:mi:]<sub>x</sub> [so:lu:-mɛ:na:-mi:=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 straight DEM=ASS middle:LOC post-ABS PRO:ASS align-PURP-ASS=TOP  
 ‘Where the posts will be aligned there in the middle...’
- b. [[isi-ja:]<sub>o</sub> [dɛlɛ:-li: a:nɛ:=ja:]<sub>PRED</sub>]<sub>TOP</sub> [hɛnɛ ta:lɛ-ta:]<sub>PRED</sub>]<sub>FIN</sub>  
 post-ABS dig-SIM go:PST=TOP DUR finish-TEL  
 ‘Dig (holes) for the posts and continue until it is finished.’
- (17) [[hɛ:lɛnɛ-mi:]<sub>x</sub> [dɛlɛ:-li: ta:lɛ-ta:]<sub>PRED</sub>]<sub>FIN</sub>  
 side-ASS dig-SIM finish-TEL  
 ‘Finish digging along the sides.’
- (18) [[ɛimɛ]<sub>x</sub> [dɛlɛ-gɛ: hɛna: ta:lɛ-ta:-si]<sub>PRED</sub>]<sub>MED</sub>  
 already dig-ITER DUR finish-TEL-MED:PFV  
 ‘Continue and finish digging all the holes’
- (19) [[isi-ja: gɛlɛ]<sub>o</sub> [ka: a:nɛ:=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ta:lɛtɛ-mɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 post-ABS plant FOC go:PST=TOP finish-HYPO  
 ‘The planted posts should all be finished.’

- (20) a. [[[ε di-si-jε:-mi:]<sub>X</sub> [isi-ja:]<sub>O</sub> [dija:-si-jε:-mi:]<sub>PRED</sub>]<sub>X</sub>  
do PFV-MED:PFV post-ABS take-MED:PFV-LOC-ASS  
'That being done, while holding the posts...'
- b. [isi=ja:]<sub>TOP</sub> [i:sa:-ja:]<sub>O</sub> [kugε:-li: taletε-mεi]<sub>PRED</sub>]<sub>FIN</sub>  
post=TOP ground-ABS compress-SIM finish-HYPO  
'pack down the earth around the posts.'
- (21) [[ε di-si]<sub>PRED</sub>]<sub>MED</sub>  
do PFV  
'That has happened, and then...'
- (22) [[ba:nεta=ja:]<sub>TOP</sub> [isi gaga]<sub>X</sub> [a:gεlε]<sub>O</sub> [ko:du-mεi]<sub>PRED</sub>]<sub>FIN</sub>  
floor.beam=TOP wooden post each one cut-HYPO  
'Concerning the floor beams, for each post cut one.'
- (23) [[a:gεlε ko:du lε hεna:-si-jε:-mi:]<sub>X</sub> [a:mi:=ja:]<sub>TOP</sub> [di telε hεna:-si]<sub>PRED</sub>]<sub>MED</sub>  
one cut do DUR-MED:PFV-LOC-ASS PRO:ASS=TOP take descend DUR-MED:PFV  
'Continue cutting (each) one, and then put them down there and then...'
- (24) [[[a:]<sub>X</sub> [mε:-ja:]<sub>O</sub> [ti:-mε:]<sub>PRED</sub>]<sub>X</sub> [mεnεi]<sub>PRED</sub>]<sub>FIN</sub>  
um rope-ABS pick.plant-PURP go:HYPO  
'Then one should go to cut rope(vine).'
- (25) a. [[[mε:-ja:]<sub>O</sub> [tilε hεna: do:-si-jε:-mi:]<sub>PRED</sub>]<sub>X</sub>  
rope-ABS descend DUR STAT-MED:PFV-LOC-ASS  
'When you have taken down the rope (vine)...'
- b. [mε:-jε:-mi:]<sub>X</sub> [ta:lε hεna:-si]<sub>PRED</sub>]<sub>MED</sub>  
rope-LOC-ASS finish DUR-MED:PFV  
'Then work on finishing the rope (vine), and then...'
- (26) [[a:mi:]<sub>X</sub> [ba:nεta-ja:]<sub>O</sub> [mε:-mεi]<sub>PRED</sub>]  
PRO:ASS floor.beam-ABS tie-HYPO  
'Then tie on the banta logs.'

- (27) a. [[[ba:neta mɛmɛ=ja:]<sub>TOP</sub> di=ja]<sub>TOP</sub> [tila: lɛ:-ki:-jɛ:-mi:]<sub>X</sub>  
 floor.beam tie:MULT=TOP PFV=TOP descend do-CONT-LOC-ASS
- b. [a:mi:]<sub>X</sub> [sɛgaφa:]<sub>O</sub> [a:mi:]<sub>X</sub> [gɛ-mɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 PRO:ASS short.post:ABS PRO:ASS plant-HYPO
- ‘When the banta are tied on, plant the short posts there.’
- (28) [[sɛgaφa:]<sub>O</sub> [a:mi:]<sub>X</sub> [gɛlɛ:-li: ta:lɛ-ta: ɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 short.post:ABS PRO:ASS plant-SIM finish-TEL do-MED:PFV
- ‘Finish planting the short posts and then...’
- (29) [[debi:-ja:]<sub>O</sub> [a:mi:]<sub>X</sub> [di-mɛib]<sub>PRED</sub>]<sub>FIN</sub>  
 floorboards-ABS PRO:ASS get-HYPO
- ‘One should get the floorboards.’
- (30) [[debi:-ja:]<sub>O</sub> [a:mi:]<sub>X</sub> [dijɛ:-li: ta:lɛ-ta: ɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 floorboards-ABS PRO:ASS take-SIM finish-TEL do-MED:PFV
- ‘Finish taking the floorboards there and then...’
- (31) [[[a:mi:]<sub>X</sub> [ta:lɛ-ta: ɛ-si=ja:]<sub>PRED</sub>]<sub>TOP</sub> [jolosɑ:-ja:]<sub>O</sub> [a:mi:]<sub>X</sub> [mɛ:-mɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 PRO:ASS finish-TEL do-MED:PFV=TOP scaffolding-ABS PRO:ASS tie-HYPO
- ‘When that's finished, one should tie the scaffolding on there (on the floorboards).’
- (32) [[jolosɑ:-ja:]<sub>O</sub> [mɛlɛ lɛ:-ki:]<sub>PRED</sub> [jolosɑ: φo:gono ba:lɛ φo:gono ba:lɛ]<sub>O</sub>]<sub>FIN</sub>  
 scaffolding-ABS tie do-CONT scaffolding other.side COORD other.side COORD
- ‘Tie the scaffolding, the scaffolding on one side and the (other) side.’
- (33) [[[ɛ:jobɑ:]<sub>O</sub> [dijɛ: ɛ sɛ:-li: a:nɛ:=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ta:lɛ-ta: ɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 rafter get do put-SIM go:PST=TOP finish-TEL do-MED:PFV
- ‘Put the rafters on until that's finished and then...’
- (34) [[a:mi:]<sub>X</sub> [jo:losɑ:]<sub>O</sub> [mɛ:lɛ ta:lɛ-ta: ɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 PRO:ASS rafter tie finish-TEL do-MED:PFV
- ‘Finish tying the rafters there and...’

- (35) [[ε di-si-jε:-mi:]<sub>X</sub> [a:mi:]<sub>X</sub> [duφε:-ja:]<sub>o</sub> [a:mi:]<sub>X</sub> [ko:du-mei]<sub>PRED</sub>]<sub>FIN</sub>  
do PFV-MED:PFV-LOC-ASS PRO:ASS roof.ridge-ABS PRO:ASS chop-HYPO  
‘That being done, then one would cut the stick for the spine of the roof.’
- (36) [[duφε:-ja:]<sub>o</sub> [ko:du lε hεna:-si]<sub>PRED</sub>]<sub>MED</sub>  
roof.ridge-ABS cut do DUR-MED:PFV  
‘One should cut the top roof stick, and then...’
- (37) [[a:mi:]<sub>X</sub> [ε:joba:-ja:]<sub>o</sub> [ko:du lε-si]<sub>PRED</sub>]<sub>MED</sub>  
PRO:ASS rafter-ABS cut do-MED:PFV  
‘Cut the rafters and then...’
- (38) [[ε:joba:]<sub>o</sub> [dε:φε mεmε dijε:-li: ta:lε-ta:]<sub>PRED</sub>]<sub>FIN</sub>  
rafter measure tie:MULT take-SIM finish-TEL  
‘Tie the rafters on in order to measure it.’
- (39) a. [[[ε:na:]<sub>X</sub> [duφε:-ja:]<sub>o</sub> [di:teλε-lo:lu=wa:]<sub>PRED</sub>]<sub>TOP</sub>  
DEM roof.ridge-ABS get:PL.O-ASS.EV=TOP  
b. [duφε:=ja:]<sub>TOP</sub> [ka:]<sub>X</sub> [εbo:bo:]<sub>X</sub> [duφε:]<sub>o</sub> [ta:lε-ta:-si]<sub>PRED</sub>]<sub>MED</sub>  
roof.ridge=TOP FOC not.really roof.ridge finish-TEL-MED:PFV  
‘Having gotten the sticks for the ridge of the roof, one should finish (putting) the fake/temporary top roof stick, then...’
- (40) [[[sa:-ja:]<sub>o</sub> [dε:φε bεda:-lo:lu=wa:]<sub>PRED</sub>]<sub>TOP</sub> [ili: da-ta: bεda:-si]<sub>PRED</sub>]<sub>MED</sub>  
vertical.rafter-ABS measure see-ASS.EV=TOP suffice be.at CONS-MED:PFV  
‘Measure the roof sticks and see if it would be alright and then...’
- (41) [[a:mi:]<sub>X</sub> [ε:mεlε:]<sub>X</sub>[tilε: dija: sa:]<sub>PRED</sub>]<sub>FIN</sub>  
PRO:ASS back descend take put  
‘Take them and put them back down.’
- (42) [ε di-si]<sub>PRED</sub>]<sub>MED</sub>  
do PFV-MED:PFV  
‘That being done, then...’

- (43) [[a:mi:]<sub>X</sub> [isi to-wa:]<sub>O</sub> [ko:du lɛ-li: ta:lɛtɛ-mɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 PRO:ASS post stump-ABS cut do-SIM finish-HYPO  
 ‘One should cut off the top part of the posts.’
- (44) [[ɛ di-si]<sub>PRED</sub>]<sub>MED</sub>  
 do PFV-MED:PFV  
 ‘That being done, then...’
- (45) [[a:mi:]<sub>X</sub> [ɛ:joba:-ja:]<sub>O</sub> [a:mi:]<sub>X</sub> [dɛjɛ]<sub>PRED</sub> [sɛ:li]<sub>X</sub> [ta:lɛ-ta: ɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 PRO:ASS rafter-ABS PRO:ASS hang properly finish-TEL do-MED:PFV  
 ‘After that's done, lay on the rafters.’
- (46) [[a:mi:]<sub>X</sub> [duφɛ:-ja:]<sub>O</sub> [a:mi:]<sub>X</sub> [di:tɛ-mɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 PRO:ASS roof.ridge-ABS PRO:ASS get:PL.O-HYPO  
 ‘Then one should put the top roof ridge there.’
- (47) [[duφɛ:-ja:]<sub>O</sub> [di:tɛlɛ hɛna: ta:lɛ-ta:]<sub>PRED</sub>]<sub>FIN</sub>  
 roof.ridge-ABS get:PL.O DUR finish-TEL  
 ‘Getting (the sticks for) the roof ridge is finished.’
- (48) [[sa:-jɛ:-mi:]<sub>X</sub> [hɛ-mɛib]<sub>PRED</sub>]<sub>FIN</sub>  
 vertical.rafter-LOC-ASS lean.against-HYPO  
 ‘Then one should lay the small vertical roof sticks onto it (the roof ridge).’
- (49) [[sa:-ja:]<sub>O</sub> [hɛjɛ-li: a:nɛ:=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ta:lɛtɛ-mɛib]<sub>PRED</sub>]<sub>FIN</sub>  
 vertical.rafter-ABS lean.against-SIM go:PST=TOP finish-HYPO  
 ‘Finish putting the roof sticks on top.’
- (50) [[[ɛ di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [bubɛ:-ja:]<sub>O</sub> [a:mi:]<sub>X</sub> [ti:-mɛib]<sub>PRED</sub>]<sub>FIN</sub>  
 do PFV=TOP pandanus.vine-ABS PRO:ASS pick.plant-HYPO  
 ‘After that's done, take the pandanus cord there.’
- (51) [[[bubɛ:=ja:]<sub>TOP</sub> [bubɛ:]<sub>S</sub> [lɛ-ki]<sub>PRED</sub>]<sub>MED</sub>  
 pandanus.vine=TOP pandanus.vine EXIST-CONT  
 ‘The pandanus vine, the pandanus vine is there now, so...’

- (52) a. [[ [tila: ta:lɛ-ta: ɛ-si=ja:]<sub>PRED</sub> ]<sub>TOP</sub>  
 descend finish-TEL do-MED:PFV=TOP  
 ‘Once the pandanus vine has been (brought) down, then...’
- b. [da: φa:]<sub>O</sub> [di-mɛi]<sub>PRED</sub> ]<sub>FIN</sub>  
 sago leaf take-HYPO  
 ‘One should get sago leaves.’
- (53) [[da: φa:-ja:]<sub>O</sub> [dijɛ: hɛna:-nɛ:]<sub>PRED</sub> ]<sub>MED</sub>  
 sago leaf-ABS take DUR-MED:IPFV  
 ‘Continue getting sago leaves and...’
- (54) [[ha:gɛ:=ja:]<sub>TOP</sub> [a:nɛ]<sub>X</sub> [ɛ:mɛli:-φɛija:]<sub>O</sub> [di-mɛi]<sub>PRED</sub> ]<sub>FIN</sub>  
 day=TOP two one-QUANT take-HYPO  
 ‘(Continue) getting (sago leaves) for three days.’
- (55) [[lɛ hɛna: da: φa:-ja: di=ja:]<sub>TOP</sub> [hɛnɛ]<sub>PRED</sub> [do:gɛ:]<sub>X</sub> [dogulu]<sub>PRED</sub> ]<sub>FIN</sub>  
 do DUR sago leaf-ABS take=TOP DUR house:LOC cover  
 ‘Then taking the sago leaves, they are the cover for the house.’
- (56) [[lɛ di-si-jɛ:-mi:]<sub>X</sub> [a:mi:]<sub>X</sub> [jolosɑ:]<sub>O</sub> [tɛka: lɛ hɛna:]<sub>PRED</sub> ]<sub>MED</sub>  
 do PFV-MED:PFV-LOC-ASS PRO:ASS scaffolding take.down do DUR  
 ‘When that’s been done, there where the scaffolding has been brought down...’
- (57) [[hɛ dogɛ:-li: φili:-nɛ:]<sub>PRED</sub> ]<sub>MED</sub>  
 lean.against cover-SIM ascend-MED:IPFV  
 ‘One should go up there hanging (the sago leaves) to cover (the scaffolding).’
- (58) a. [[lɛ di-si=ja:]<sub>TOP</sub> [ta:lɛ-ta: di-si-jɛ:-mi:]<sub>X</sub>  
 do PFV-MED:PFV=TOP finish-TEL PFV-MED:PFV-LOC-ASS
- b. [mo:go-wa:]<sub>O</sub> [a:mi:]<sub>X</sub> [sɛbɛi]<sub>PRED</sub> ]<sub>FIN</sub>  
 top.of.house-ABS PRO:ASS put:HYPO  
 ‘That being done, once that is finished, one should put them on the top of the roof.’

- (59) [[mo:go-wa:]<sub>o</sub> [sɛdɛ:-gɛ: hɛna: ta:lɛ-ta: di-si]<sub>PRE</sub>]<sub>MED</sub>  
top.of.house-ABS put-ITER DUR finish-TEL PFV-MED:PFV  
‘Finish putting them on the top of the roof and then...’
- (60) [[ɛ di-si=ja]<sub>TOP</sub> [ɛ:mɛlɛ:]<sub>x</sub>[tila: di-si]<sub>PRE</sub>]<sub>MED</sub>  
do PFV-MED:PFV=TOP back descend PFV-MED:PFV  
‘Having done that, then go back down (to the ground) and then...’
- (61) [[[jolosɑ:-ja:]<sub>o</sub> [bɛdɛ di=ja:]<sub>PRE</sub>]<sub>TOP</sub> [sa:dɛ-φɛi]<sub>PRE</sub>]<sub>FIN</sub>  
scaffolding-ABS dismantle PFV=TOP discard-HYPO:COMP  
‘Dismantle the scaffolding and discard them.’
- (62) [[ɛ di-si=ja:]<sub>TOP</sub> [tɛ:gɛliba: φoφo-wa:]<sub>o</sub> [a:mi:]<sub>x</sub> [ɛ:na:]<sub>x</sub> [gubɛi]<sub>PRE</sub>]<sub>FIN</sub>  
do PFV-MED:PFV=TOP walkway:ABS floorboards-ABS PRO:ASS DEM cut:HYPO  
‘Having done that, then one should cut the boards for the walkway.’
- (63) [[dobolɛ: ki:]<sub>o</sub> [a:mi:]<sub>x</sub> [ko:bɛi]<sub>PRE</sub>]<sub>FIN</sub>  
black.palm:LOC bone PRO:ASS chop:HYPO  
‘Then one should cut the black palm boards.’
- (64) [[hɛna:-nɛ:]<sub>PRE</sub>]<sub>MED</sub>  
DUR-MED:IPFV  
‘One should continue doing that then...’
- (65) [[tɛ:gɛliba:]<sub>o</sub> [dobolɛ: ki:]<sub>o</sub> [φɛlɛ-gɛ: hɛna: ta:lɛtɛ la:-li]<sub>PRE</sub>]<sub>MED</sub>  
walkway:ABS black.palm:LOC bone lay.out-ITER DUR finish COP-SIM  
‘Continue laying out the black palm boards on the walkway until it’s finished.’
- (66) [[a:mi:]<sub>x</sub> [jɛ: ka:φa:]<sub>o</sub> [a:mi:]<sub>x</sub> [ko:bɛi]<sub>PRE</sub>]<sub>FIN</sub>  
PRO:ASS tree skin:ABS PRO:ASS chop:HYPO  
‘Then one should cut the tree bark.’
- (67) [[ɛlɛ hɛnɛ]<sub>PRE</sub> [tɛ:gɛlibi]<sub>o</sub> [φɛlɛ-gɛ: a:nɛ:]<sub>PRE</sub>]<sub>MED</sub>  
do DUR treebark lay.out-ITER go:PST:DUR  
‘The walkway is all layed out and then...’

- (68) [[hɛna:]<sub>PRED</sub> [jɛ: ka:φɛ ɛna:]<sub>o</sub> [ta:lɛ-ta: di-si:]<sub>PRED</sub>]<sub>MED</sub>  
 DUR tree skin that:ABS finish-TEL PFV-MED:PFV  
 ‘The tree bark is all finished, and then...’
- (69) [[[a:mi:]<sub>x</sub> [ta:lɛtɛ la:]<sub>x</sub> [lɛ:-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>x</sub> [a:mi:]<sub>x</sub> [hɛ:lɛna:]<sub>o</sub> [ga:li-mɛi:]<sub>PRED</sub>]<sub>FIN</sub>  
 PRO:ASS finish COP EXIST-CONT-LOC-ASS PRO:ASS side:ABS cover-HYPO  
 ‘While it is finished there, then one should cover the sides.’
- (70) [[a:mi:]<sub>x</sub> [ka:lɛφu mɛmɛ di-ge: φili:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 PRO:ASS put.across tie:MULT build-ITER descend-PST:DUR  
 ‘Then tie a log across the wall.’
- (71) [ɛ-ta: bɛda:]<sub>PRED</sub>]<sub>MED</sub>  
 do-TEL CONS  
 ‘That’s been done so...’
- (72) a. [[[a:mi:]<sub>x</sub> [soga]<sub>o</sub> [dɛlɛ boja gɛ-ta:-mi:]<sub>PRED</sub>]<sub>x</sub>  
 PRO:ASS stud dig stand plant-TEL-ASS  
 ‘Then while digging holes and standing the wall studs...’
- b. [soga]<sub>o</sub> [dɛlɛ boja a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 pillar dig stand go:PST  
 ‘One has gone along digging holes and planting the wall studs.’
- (73) [[hɛna: ta:lɛ-ta: la:-li:]<sub>PRED</sub> [a:mi:]<sub>x</sub> [dɛla:na]<sub>o</sub> [a:dɛ-mɛi:]<sub>PRED</sub>]<sub>FIN</sub>  
 DUR finish-TEL COP-SIM PRO:ASS wall.stick tie.onto-HYPO  
 ‘While that’s being finished, one should tie on the dela:na: support sticks.’
- (74) a. [[[dɛla:na]<sub>o</sub> [a:mi:]<sub>x</sub> [adɛ hɛnɛ ta:lɛ-ta: la:]<sub>x</sub> [lɛ:-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>x</sub>  
 wall.stick PRO:ASS tie.onto DUR finish-TEL COP EXIST-CONT-LOC-ASS  
 ‘When the dila:na have been tied onto there...’
- b. [a:mi:]<sub>x</sub> [mɛ:ga:]<sub>o</sub> [ko:bɛi:]<sub>PRED</sub>]<sub>FIN</sub>  
 PRO:ASS wall.bark:ABS cut-HYPO  
 ‘Then cut the tree bark for the wall.’

- (75) [[mɛ:ga:]<sub>o</sub> [a:mi:]<sub>x</sub> [ko:de hɛnɛ bɛlegɛ tɛnɛ:]<sub>pred</sub>]<sub>med</sub>  
 wall.bark:ABS PRO:ASS chop DUR lean.against put.down:DUR  
 ‘When the bark for the wall has been cut and placed down against (the dɛla:na sticks)...’
- (76) [[ta:lɛ-ta: di-si]<sub>pred</sub>]<sub>med</sub>  
 finish-TEL PFV-MED:PFV  
 ‘Then that’s finished and then...’
- (77) [[mɛ:ga: la:]<sub>o</sub> [sɛ:li]<sub>x</sub> [bu:tɛ-mɛi]<sub>pred</sub>]<sub>fin</sub>  
 wall.bark:ABS DEF properly cut-HYPO  
 ‘One should cut the tree bark properly.’
- (78) [[sɛ:li]<sub>x</sub> [bu:ta:bu:ta:]<sub>pred</sub>]<sub>fin</sub>  
 properly chop:MULT  
 ‘They are cut properly.’
- (79) [[φo:gona:]<sub>o</sub> [bu:ta:]<sub>pred</sub>]<sub>fin</sub>  
 other.side:ABS chop:PST  
 ‘One side is cut.’
- (80) [[φo:gona:]<sub>o</sub> [bu:ta:]<sub>pred</sub>]<sub>fin</sub>  
 other.side:ABS chop:PST  
 ‘The other side is cut.’
- (81) [[hɛ:ba: la:]<sub>o</sub> [wo:gu: bu:ta:]<sub>pred</sub>]<sub>fin</sub>  
 half:ABS DEF do.thus chop:PST  
 ‘The other end is cut the same way.’
- (82) a. [[[ta:lɛ-ta: la:]<sub>x</sub> [di-si=ja:]<sub>pred</sub>]<sub>top</sub>  
 finish-TEL COP PFV-MED:PFV=TOP  
 ‘That is finished, and then...’
- b. [a:mi:]<sub>x</sub> [ja:]<sub>x</sub> [wa:]<sub>x</sub> [hɛ:lɛna: wa:]<sub>o</sub> [ka:m]<sub>pred</sub>]<sub>fin</sub>  
 PRO:ASS DIR:VEN DIR:AND outside:ABS DIR:VEN that’s.all  
 ‘There on this side and that side, the sides there are finished.’

- (83) [[a::]X [bɛda:-si]PRED]MED  
um CONS-MED:PFV  
'Um, so then...'
- (84) [[a:mi:]X [koso]X [wo:ba:]O [a:mi:]X [mɛ:-mɛi]PRED]FIN  
DEM:ASS afterward sleeping.surface:ABS DEM:ASS tie-HYPO  
'Then after that tie/make the sleeping area.'
- (85) a. [[[wo:ba:-jɛ:-mi:]X [mɛ:lɛ-li: a:nɛ:=ja:]PRED]TOP  
sleeping.surface-LOC-ASS tie-SIM go:PST=TOP  
b. [[keisa:lɛ-na:]O [mɛ:lɛ-li: a:nɛ:=ja:]PRED]TOP [ta:lɛ-ta:]PRED]FIN  
woman-POSS tie-SIM go:PST=TOP finish-TEL  
'Continuing to tie on the sleeping surface, continue to tie on the women's (sleeping area) and finish it.'
- (86) [[[ko:lu-wɛ:-ɛla:]O [mɛ:lɛ-li: a:nɛ:=ja:]PRED]TOP [ta:lɛ-ta:]PRED]FIN  
man-LOC-ADD tie-SIM go:PST=TOP finish-TEL  
'Then the men's side too is tied and finished.'
- (87) [[ɛ di-si=ja:]TOP [a:mi:]X [jɛkalɛ-ja:]O [a:mi:]X [ko:bɛi]PRED]FIN  
do PFV-MED:PFV=TOP PRO:ASS tree.type-ABS PRO:ASS cut:HYPO  
'Then one should cut a jekale tree.'
- (88) [[[doble: ki:-ja:]O [φɛlɛ-li: a:nɛ:=ja:]PRED]TOP [ta:lɛ-ta: di-si]PRED]MED  
black.palm:LOC bone-ABS lay.out-SIM go:PST=TOP finish-TEL PFV-MED:PFV  
'Laying out the boards is finished, and then...'
- (89) [[ɛ di-si]PRED]MED  
do PFV-MED:PFV  
'That's done and then...'
- (90) [[jɛkalɛ-ja:]O [a:mi:]X [ko:dɛ hɛnɛ di-si]PRED]MED  
tree.type-ABS PRO:ASS chop DUR PFV-MED:PFV  
'Cutting the jekale tree is finished.'

- (91) [[φελε-li: a:nε:=ja:]<sub>TOP</sub> [ta:lε-ta:]<sub>PRED</sub>]<sub>FIN</sub>  
 lay.out-SIM go:PST=TOP finish-TEL  
 ‘Laying out (the bark) is finished.’
- (92) [[ε-ta:-nε:]<sub>PRED</sub>]<sub>MED</sub>  
 do-TEL-MED:IPFV  
 ‘That being done...’
- (93) [[mu:-wε:-mi:]<sub>X</sub> [dελε]<sub>PRED</sub>]<sub>MED</sub>  
 fireplace-LOC-ASS dig  
 ‘Then digging for the fireplace...’
- (94) [[keisa:lε-gi la: mu:-wa:]<sub>O</sub> [dελε]<sub>PRED</sub>]<sub>MED</sub>  
 woman-PL DEF fireplace-ABS dig  
 ‘Digging for the women's side...’
- (95) [[ko:luwa la: mu:-wa:]<sub>O</sub> [dελε]<sub>PRED</sub>]<sub>MED</sub>  
 man:PL DEF fireplace-ABS dig  
 ‘Digging for the men's side...’
- (96) [[le hεna: ta:lε-ta: la:]<sub>X</sub> [lε:-ki:]<sub>PRED</sub>]<sub>MED</sub>  
 do DUR finish-TEL COP EXIST-CONT  
 ‘When doing that has been completed, then...’
- (97) a. [[[togo:lo]<sub>O</sub> [kε:-mε:na:=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 doorway close-PURP=TOP  
 ‘To close the doorway...’
- b. [[φοφα]<sub>O</sub> [tolu di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [dεbo-mεi]<sub>PRED</sub>]<sub>FIN</sub>  
 sago.stalk stack PFV=TOP put.against-HYPO  
 ‘One should stack together sago stalks and put it against (the doorway).’
- (98) [[[φοφα]<sub>O</sub> [tolu di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [togo:la:]<sub>O</sub> [kεφει jo:]<sub>PRED</sub>]<sub>FIN</sub>  
 sago.stalk stack PFV=TOP doorway:ABS close:COMP:HYPO EXCL  
 ‘Stacking together the sago stalks, one should completely close the doorway!’

- (99) [[togo:la:]<sub>o</sub> [kεφει jo:]<sub>PRED</sub>]<sub>FIN</sub>  
doorway:ABS close:COMP:HYPO EXCL  
‘One should completely close the doorway!’
- (100) [[ε di-si]<sub>PRED</sub>]<sub>MED</sub>  
do PFV-MED:PFV  
‘When that has been done then...’
- (101) [[wa:la: la:]<sub>o</sub> [solo-mei]<sub>PRED</sub>]<sub>FIN</sub>  
steps:ABS DEF carve-HYPO  
‘One should carve the steps (into a log).’
- (102) [[[wa:la: la:]<sub>o</sub> [solo di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [dε hε-φo:]<sub>PRED</sub>]<sub>FIN</sub>  
steps:ABS DEF carve PFV=TOP lean hang-COMP  
‘When the steps are cut, lean it (against the house).’
- (103) [[ε di-si]<sub>PRED</sub>]<sub>MED</sub>  
do PFV-MED:PFV  
‘That’s done and then...’
- (104) [[bεε:]<sub>x</sub> [do:γε: su:-wε:]<sub>x</sub> [mεε:]<sub>PRED</sub>]<sub>FIN</sub>  
afterward house:LOC inside-LOC appearance  
‘And then it looks like the inside the inside.’
- (105) [[ili:]<sub>x</sub> [ka:]<sub>PRED</sub>]<sub>FIN</sub>  
suffice FOC  
‘It’s good enough.’
- (106) [[do:go mεε:-ja:]<sub>s</sub> [ka: do:-ta: bεda:-nε:]<sub>PRED</sub>]<sub>MED</sub>  
house appearance-ABS FOC STAT-TEL CONS-MED:IPFV  
‘It’s standing there looking like a house so...’
- (107) [[wa:]<sub>x</sub> [ka: kei]<sub>PRED</sub>]<sub>FIN</sub>  
DIR:AND that’s.all ASSER  
‘That it.’

- (108) [[ε-φειja: hεna:-si]<sub>PRED</sub>]<sub>MED</sub>  
do-PERF DUR-MED:PFV  
'That has all been done and...'
- (109) [[nε: la: do:go di-sεnε wa:-ja: ja:]<sub>s</sub> [wa:]<sub>x</sub> [ka:m]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG DEF house build-HAB story-ABS DIR:VEN DIR:AND that's.all  
'That's all there is of this house making story of mine.'

### A.3 Edijo:bi's Bush Walk

- (1) [[nε:]<sub>A</sub> [wa:lε-mε:na:]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG tell-1:FUT  
'I will tell (a story).'
- (2) [[[nε:]<sub>s</sub> [a:nε:=ja:]<sub>PRED</sub>]<sub>TOP</sub> [hεna: wo:wi sε:]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG go:PST=TOP go NAME shore  
'I was going, going to the shore of the Wo:wi river.'
- (3) [[u:ludi:ja togo:lo εna:]<sub>x</sub> [dodo-si]<sub>PRED</sub>]<sub>MED</sub>  
NAME road DEM stand-MED:PFV  
'I was at the road going to U:ludi:ja and then...'
- (4) [[momo di-ta: φili:-nε:]<sub>PRED</sub>]<sub>FIN</sub>  
begin PFV-TEL ascend-PST  
'I began to go up.'
- (5) [[kowa:bo sa:gε εna:]<sub>x</sub> [φili:-jo:φειja:]<sub>PRED</sub>]<sub>FIN</sub>  
NAME river.mouth DEM:ABS ascend-PERF  
'I had gone up to the mouth of Kowa:bo creek.'
- (6) [[φili:-jo: di-si]<sub>PRED</sub>]<sub>MED</sub>  
ascend-COMP PFV-MED:PFV  
'I went up and then...'

- (7) [[ja:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 come-MED:IPFV  
 ‘(I) came and...’
- (8) [[ba:kɛɛ du:na]<sub>O</sub> [dɛla:]<sub>PRED</sub>]<sub>FIN</sub>  
 bush.turkey nest:ABS dig:PST  
 ‘(I) dug into a bush turkey nest.’
- (9) [[ba:kɛɛ]<sub>O</sub> [dɛla:]<sub>PRED</sub>]<sub>FIN</sub>  
 bush.turkey dig:PST  
 ‘(I) dug into the bush turkey (nest).’
- (10) [[hɛna: di-si]<sub>PRED</sub>]<sub>MED</sub>  
 DUR PFV-MED:PFV  
 ‘I continued doing that and then...’
- (11) [[tila:]<sub>PRED</sub> [ha:na:]<sub>O</sub> [mu:du:]<sub>PRED</sub>]<sub>FIN</sub>  
 descend water:ABS wash:PST  
 ‘(I) went down and washed.’
- (12) [[[ha:na:]<sub>O</sub> [mu:lu:-wɛ:]<sub>PRED</sub>]<sub>X</sub> [hɛna: di-si]<sub>PRED</sub>]<sub>MED</sub>  
 water:ABS wash-LOC DUR PFV-MED:PFV  
 ‘(I) finished washing and then...’
- (13) [[φili:-nɛ:=ja:]<sub>TOP</sub> [owa:lo-wa:]<sub>O</sub> [sola: di]<sub>PRED</sub>]<sub>FIN</sub>  
 ascend-PST=TOP tree.type-ABS peel.bark PFV  
 ‘Went up and peeled bark strips from an owa:lo tree.’
- (14) [[owa:lo]<sub>O</sub> [sola:-li:-si]<sub>PRED</sub>]<sub>MED</sub>  
 tree.type peel.bark-SIM-MED:PFV  
 ‘While was peeling bark off a owa:lo tree...’
- (15) [[bɛda:-lo:lu=wa:]<sub>TOP</sub> [ɛimɛ]<sub>X</sub> [o:φa:]<sub>S</sub> [a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 see-ASS.EV=TOP already sun:ABS go:PST  
 ‘I saw that the sun was already setting.’

- (16) a. [ɛ-bi:=ja:]<sub>TOP</sub> [[owa:lo-wa:]<sub>O</sub> [sola: hɛnɛ di-si=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
do-D.S=TOP tree.type-ABS peel.bark DUR PFV-MED:PFV=TOP  
‘That was happening so (I) finished peeling the owoolo bark and then...’
- b. [[hɛna:]<sub>PRED</sub> [to:goɛ:]<sub>X</sub> [ɛ:sa: ka:]<sub>O</sub> [o:gɛ: di:]<sub>PRED</sub>]<sub>FIN</sub>  
go road:LOC bilum:ABS FOC carry.bilum PFV  
‘(I) went to the road and picked up my bilum (string bag).’
- (17) [[[o:kɛ]x[dija: ti-nɛ:=ja:]<sub>PRED</sub>]<sub>TOP</sub> [ja:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
okay hold descend:PST=TOP DIR:VEN-MED:IPFV  
‘(I) was coming down carrying (the bilum) and...’
- (18) [[o:lona:]<sub>O</sub> [ta:-nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
NAME cross-PST  
‘I crossed the O:lona:.’
- (19) [[[o:lona:]<sub>O</sub> [ta: do:-ta:]<sub>PRED</sub>]<sub>X</sub> [no:lo: ho:no:]<sub>PRED</sub>]<sub>FIN</sub>  
NAME cross-TEL STAT-TEL other.side DEM:LVL  
‘I was on that other side having crossed the O:lona:.’
- (20) [[hɛna::] <sub>PRED</sub>]<sub>MED</sub>  
go:DUR  
‘We were going and...’
- (21) [[jɛ:-si dɛnɛ ba:lɛ]x [kɛ:-ja: ka:]<sub>O</sub> [ho:dɛ-si] <sub>PRED</sub>]<sub>MED</sub>  
come-PL PROG COORD pig-ABS FOC bark-MED:PFV  
‘While we were coming, (the dogs) were barking at a pig and then...’
- (22) [[[kɛ:-ja:]<sub>O</sub> [ho:dɛ-bi=ja:] <sub>PRED</sub>]<sub>TOP</sub> [kali:ja:]<sub>S</sub> [ɛ-ta:] <sub>PRED</sub>]<sub>FIN</sub>  
pig-ABS bark-D.S=TOP TOP wallaby do-TEL  
‘We thought the dogs barking at a pig was (actually) a wallaby.’
- (23) [[hɛnɛ-si dɛnɛ ba:lɛ]x [kɛ: ka:]<sub>O</sub> [ho:dɛ=ja: la:-bi:=ja:] <sub>PRED</sub>]<sub>TOP</sub> [ka:] <sub>PRED</sub>  
go-PL PROG COORD pig FOC to.bark=TOP exist-D.S=TOP FOC  
‘While we were going the dogs were there barking at a pig.’

- (24) [[kɛ: ɛna:]<sub>O</sub> [sobo:.o:no:-kɛi]<sub>X</sub> [sɛbɛ:na:-ta:]<sub>PRED</sub><sub>X</sub> [ka: hɛnɛ-sa:]<sub>PRED</sub><sub>FIN</sub>  
 pig that:ABS ax-INST hit:N.SG.A:PURP-TEL FOC go-PL:PST  
 ‘We went to hit that pig with an ax anyway.’
- (25) [[sobo:.o:no:-kɛi]<sub>X</sub> [sɛda:-lo:lu]<sub>PRED</sub><sub>MED</sub>  
 ax-INST hit:N.SG.A-ASS.EV  
 ‘In hitting it with the ax...’
- (26) [[moga:gɛ-li sɛdɛ-si]<sub>PRED</sub><sub>MED</sub>  
 bad-SIM hit:N.SG.A-MED:PFV  
 ‘We hit it badly and then...’
- (27) [[φo:sɛ: ki:-jɛ:]<sub>PRED</sub><sub>FIN</sub>  
 back:LOC bone-LOC  
 ‘(It was) on the backbone (that we hit it).’
- (28) [[ɛ=bɛda:-nɛ:]<sub>PRED</sub><sub>MED</sub>  
 do=CONS-MED:IPFV  
 ‘That happened so
- (29) [[mi-jɛ:=ja:]<sub>TOP</sub> [so:bo:-kɛi]<sub>X</sub> [ja: do:-si]<sub>PRED</sub><sub>MED</sub>  
 come-PST=TOP knife-INST DIR:VEN STAT-MED:PFV  
 I came there with the knife, and then
- (30) [[kɛ: ɛna:]<sub>O</sub> [ka: o:la:]<sub>PRED</sub><sub>FIN</sub>  
 pig DEM:ABS FOC shoot:PST  
 I stabbed the pig.’
- (31) [[lɛ hɛna:]<sub>PRED</sub><sub>MED</sub>  
 do DUR  
 ‘I did that then...’
- (32) [[kɛ:-ja:]<sub>S</sub> [ka: gu:du:-sa:-bi]<sub>PRED</sub><sub>FIN</sub>  
 pig-ABS FOC die-3:DR-D.S  
 ‘that pig died.’

- (33) [[kɛ:-ja:]<sub>S</sub> [gu:du: hɛna: do:-si]<sub>PRED</sub>]<sub>MED</sub>  
 pig-ABS die go STAT-MED:PFV  
 ‘The pig had died, and then...’
- (34) [[jo:la:]<sub>PRED</sub>]<sub>FIN</sub>  
 butcher:PST  
 ‘(We) butchered (it).’
- (35) [[hɛna:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 go-MED:IPFV  
 ‘We went and...’
- (36) [[ha:nɛ sɛ:=ja:]<sub>TOP</sub> [ka: so:lo: di]<sub>PRED</sub>]<sub>FIN</sub>  
 river beach=TOP FOC darken PFV  
 ‘It got dark, at the riverside.’
- (37) [[[so:lo di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [bɛda:-nɛɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 become.dark PFV=TOP CONS-MED:IPFV  
 ‘It had gotten dark, so...’
- (38) [[ka: ta:-nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 FOC cross-PST  
 ‘We still crossed
- (39) [[ha:nɛ wa:wi-ja:]<sub>O</sub> [ka: ta:lɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 river NAME-ABS FOC cross-MED:PFV  
 ‘We crossed the Wa:wi river and then...’
- (40) [[a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 go:PST  
 ‘We went (on).’
- (41) [[hɛna: no:lɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 go other.side:LOC  
 ‘(We) went to the other side.’

- (42) [[o:]<sub>x</sub> [a:mi:ja]<sub>x</sub> [ka: ta:li kɛɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 oh too.late! FOC hold search-MED:PFV  
 ‘Oh no, it was too late so we felt our way along and...’
- (43) [[hɛɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 go-MED:PFV  
 ‘(We) went on.’
- (44) a. [[[na:nɛsɛ:]<sub>S</sub> [ta:li kɛɛ-si-jɛ:-mi=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 1:DU hold search-MED:PFV-LOC-ASS=TOP  
 ‘...we two were feeling our way and...’
- b. [to:gola:]<sub>S</sub> [ɛga:lɛ:ma:]<sub>PRED</sub>]<sub>FIN</sub>  
 road:ABS nothing  
 ‘...there was no path.’
- (45) [[mo:nɛka:-wa:]<sub>S</sub> [wo:ko]<sub>S</sub> [ta:li kɛɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 NAME-ABS NAME hold search-MED:PFV  
 ‘While Mo:neka: and Wo:ko were feeling around and...’
- (46) [[a:nɛ:=ja:]<sub>TOP</sub> [wo:ko=wa:]<sub>TOP</sub> [mo:nɛka:=ja:]<sub>TOP</sub> [da:bɛ]<sub>O</sub> [ta:li-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 go:PST=TOP NAME=TOP NAME=TOP hand hold-PST  
 ‘Wo:ko and Mo:neka: were going along holding hands.’
- (47) [[nɛ:]<sub>A</sub> [ta:lijɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 1:SG hold-MED:PFV  
 ‘(I) held onto them and then...’
- (48) [[hɛna:-si]<sub>PRED</sub>]<sub>MED</sub>  
 go-MED:PFV  
 ‘(We) were walking and then...’
- (49) [[mi-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 come-PST  
 ‘(We) came.’

- (50) [[ja:-nɛ: kɛi]PRED]FIN  
DIR:VEN-PST ASSER  
‘We arrived.’
- (51) [[a:gɛ:-jɛ:]A [u:sɛ:]X [ka: ho:dɛ-si]PRED]MED  
dog-ERG middle:LOC FOC bark-MED:PFV  
‘The dogs started barking in the middle, and then...’
- (52) [[kosu:wa: ka:]S [ha::]PRED]FIN  
cassowary FOC cassowary.noise  
‘A cassowary went “Haah”’
- (53) [[gwa:lɛ]S [aiɛ::]PRED [aiɛ::]PRED]FIN  
NAME come:IMP come:IMP  
‘“Gwa:le, come! Come!”’
- (54) [[ha:nesa:gu]S [aijɛ::]PRED]FIN  
NAME come:IMP  
‘“Ha:nesa:gu, come!”’
- (55) [[lɛ-gɛ: ɛ-si]PRED]MED  
do-ITER do-MED:PFV  
‘We continued on and then...’
- (56) [[ka: mi-jɛ:]PRED]MED  
FOC come:PST:MED  
‘We came and...’
- (57) [[mi-jɛ:=ja:]TOP [ja: dodo-si]PRED]MED  
come-PST=TOP DIR:VEN stand-MED:PFV  
‘(We) were coming and were standing and then...’
- (58) [[to:ja]PRED]FIN  
hill.top  
‘(We) were at the hilltop.’

- (59) [[o:]<sub>x</sub> [togo:la: ka:]<sub>o</sub> [babale do:-wa:]<sub>pred</sub>]<sub>fin</sub>  
 oh road:ABS FOC not.know STAT-PST  
 ‘Oh! We don’t/didn’t know the path.’
- (60) [[[togo:la: ka:]<sub>o</sub> [ba:ba:le do:-bi=ja:]<sub>pred</sub>]<sub>top</sub> [ka:]<sub>pred</sub>]<sub>fin</sub>  
 road:ABS FOC not.know STAT-D.S=TOP FOC  
 ‘We didn’t know the road.’
- (61) [[wa:ge-mε:na:=ja:]<sub>pred</sub>]<sub>fin</sub>  
 do.how-FUT=Q:N.PRS  
 “What will we do?”
- (62) [[wa:ge mεnε:na:=εdei]<sub>pred</sub>]<sub>fin</sub>  
 do.what go:FUT=Q:N.PRS:EMPH  
 ‘How do I go there?’
- (63) [[ja:]<sub>x</sub> [ka: φα:le-mε:na: kei]<sub>pred</sub>]<sub>fin</sub>  
 DIR:VEN FOC sleep:PL-FUT:1 ASSERT  
 ““We will sleep here.””
- (64) [[ε:sε ka:]<sub>o</sub> [ka: tεga:-si-jo:φo:]<sub>pred</sub>]<sub>fin</sub>  
 bilum FOC FOC take.off-PL-COMP  
 ‘We put down/took off our bilums (string bags).’
- (65) [[ε:sa: ka:]<sub>o</sub> [tεga:-si-jo: do:-si]<sub>pred</sub>]<sub>med</sub>  
 bilum:ABS FOC take.off-PL-COMP STAT-MED:PFV  
 ‘We had taken off our bilums (string bags) and then...’
- (66) [[ka: sεnε=ja:]<sub>top</sub> [ka: ha:geνε di=ja:]<sub>top</sub> [dijo do:-si]<sub>pred</sub>]<sub>med</sub>  
 FOC stay:PST=TOP:DUR FOC become.light PFV=TOP put STAT-MED:PFV  
 ‘We stayed there until it got light.’
- (67) [[ha:geνεbo:ja=ja:]<sub>top</sub> [nε:na:]<sub>s</sub> [mi-ja:]<sub>pred</sub>]<sub>fin</sub>  
 morning=TOP 1:DU come-PST  
 ‘In the morning, we two came.’

- (68) [[nɛ:na:]<sub>s</sub> [mi-ja:=ja:]<sub>PRED</sub>TOP [do:gɛ:]<sub>PRED</sub>FIN  
 1:DU come-PST=TOP house:LOC  
 ‘We two having come, (we two) were at the house.’
- (69) [[ja: do:gɛ: di-si]<sub>PRED</sub>MED  
 DIR:VEN house:LOC PFV-MED:PFV  
 ‘We arrived at the house and then...’
- (70) a. [[diki:no: ɛja:lɛ: ho:mi:jo: ɛja:lɛ:]<sub>s</sub> [ɛ:mɛlɛ:]<sub>x</sub> [nɛ:nɛ: keɛ-mɛ:na:-ta:]<sub>x</sub>  
 NAME COORD:DU NAME COORD:DU back 1:DU search-PURP-TEL
- b. [ɛna]<sub>x</sub> [a:nɛ:=jo:bo:]<sub>PRED</sub>FIN  
 still go:PST=INF  
 ‘Dikino and Homijo were evidently still gone looking for us.’
- (71) [[wa:]<sub>x</sub> [ka:]<sub>PRED</sub>FIN  
 DIR:AND that’s.all  
 ‘That (story) is finished.’

#### A.4 Diki:no:’s Stay at Ketiyo:lo

- (1) [[nɛ:]<sub>s</sub> [ko:sɛ: do:gɛ:]<sub>x</sub> [a:nɛ:]<sub>PRED</sub>O [wa:lɛ-mɛ:na:]<sub>PRED</sub>FIN  
 1:SG bush.camp:LOC house:LOC go:PST tell-1:FUT  
 ‘(I) will tell about when I went to a bush camp.’
- (2) [[nɛ:]<sub>s</sub> a:nɛ:=ja:]<sub>PRED</sub>TOP [hɛna:-nɛgɛ:]<sub>PRED</sub>MED  
 1:SG go:PST=TOP go-MED:IPFV  
 ‘Having gone, I was going, and...’
- (3) [[ketijo:lo]<sub>x</sub> [ɛ-φɛija:]<sub>PRED</sub>FIN  
 NAME do-PERF  
 ‘(I) had arrived at Ketiyo:lo.’
- (4) [[ɛ di-si]<sub>PRED</sub>MED  
 do PFV-MED:PFV  
 ‘(I) had done that and then...’

- (5) [[nɛ:-φɛ:ni:]<sub>s</sub> [sɛnɛ-ki:]<sub>PRE</sub>]<sub>MED</sub>  
 1:SG-EXC stay-CONT  
 ‘I was staying (there) alone until...’
- (6) [[wo:ko ε-na:]<sub>s</sub> [a:mi:]<sub>x</sub> [ɛ-sa:-bi:]<sub>PRE</sub>]<sub>FIN</sub>  
 NAME 3:SG-POSS PRO:ASS do-DR-D.S  
 ‘Woko’s (husband) came there.’
- (7) [[ɛ: la:]<sub>s</sub> [ko:so kɛ-mɛ:na:-ta:]<sub>x</sub> [a:nɛ:]<sub>PRE</sub>]<sub>FIN</sub>  
 3:SG DEF sago check-PURP-TEL go:PST  
 ‘He went to check the sago (trap for pigs).’
- (8) [[ɛ-ta: bɛda:-nɛɛ:]<sub>PRE</sub>]<sub>MED</sub>  
 do-TEL CONS-MED:IPFV  
 ‘That happened so...’
- (9) [[na:nɛɛ:]<sub>s</sub> [ka: φa:lɛ di-si:]<sub>PRE</sub>]<sub>MED</sub>  
 1:DU FOC sleep:PL PFV-MED:PFV  
 ‘We two slept and then...’
- (10) [[ɛ: nulu a:nɛ:=ja:]<sub>TOP</sub> [kosu:wa: kɛɛ:gi:]<sub>O</sub> [ili:dama:-ja:]<sub>O</sub> [ka: o:la:=jo:bo:]<sub>PRE</sub>]<sub>FIN</sub>  
 3:SG night go:PST=TOP cassowary huge huge-ABS FOC shoot:PST=INF  
 ‘Having gone in the night, he shot a very big vassowary, a huge one.’
- (11) a. [[to:su-ka:]<sub>x</sub> [do:lɛ-gɛ sijɛ-li:]<sub>PRE</sub>]  
 torch-INST hunt.with.torch-ITER roam-SIM  
 b. [kosu:wa: ɛna:]<sub>O</sub> [dija: ja:-nɛɛ:]<sub>PRE</sub>]<sub>MED</sub>  
 cassowary DEM:ABS take DIR:VEN-MED:IPFV  
 ‘(We) took that cassowary while walking around hunting with a torch and...’
- (12) [[na:nɛɛ:]<sub>s</sub> [do:gɛ:]<sub>x</sub> [do:-si:]<sub>PRE</sub>]<sub>MED</sub>  
 1:DU house:LOC stay-MED:PFV  
 ‘We two were at the house and then...’

- (13) [[kosu:wa: ɛna:]<sub>O</sub> [jo:lo: la:-bi-no:]<sub>PRED</sub>]<sub>FIN</sub>  
 cassowary that:ABS to.butcher COP-D.S-IRR  
 ‘We needed to butcher that cassowary.’
- (14) [[lɛ hɛna:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 do DUR-MED:IPFV  
 ‘We did that a while and then...’
- (15) [[nɛ:]<sub>S</sub> [[go:ba: ka:]<sub>O</sub> [ti:-mɛ:ni:]<sub>PRED</sub>]<sub>X</sub> [a:nɛ:]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG leaf.type:ABS FOC pick-PURP go:PST  
 ‘I went to cut gobo leaves.’
- (16) [[go:ba:]<sub>O</sub> [ti:jɛ: hɛnɛ ja:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 leaf.type:ABS pick.leaves DUR DIR:VEN-MED:IPFV  
 ‘(I) cut gobo leaves and came back and...’
- (17) [[itɛ: hɛna:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 bake DUR-MED:IPFV  
 ‘(I) was baking (it) and...’
- (18) a. [[do:-si-ki:-jɛ:-mi:]<sub>X</sub> [[ga:lo]<sub>X</sub> [kosu:wa:]<sub>O</sub> tɛka:=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
 STAT-MED:PFV-CONT-LOC-ASS afternoon cassowary take.off=TOP  
 b. [bɛda:-lo:lu=wa:]<sub>TOP</sub> [do:so]<sub>S</sub> [ili:dama:]<sub>PRED</sub>]<sub>FIN</sub>  
 see-ASS.EV=TOP baked.sago too.much  
 ‘(We) were doing that until we took the cassowary off (the fire) and saw that there was too much baked sago.’
- (19) [[na:nɛ-φɛ:ni: na: di=ja:]<sub>TOP</sub> [hɛnɛ ta:lɛtɛ-mɛ:na:]<sub>X</sub> [moga:glɛ]<sub>X</sub> [do: bɛda:]<sub>PRED</sub>]<sub>MED</sub>  
 1:DU-alone eat PFV=TOP DUR finish-PURP badly STAT CONS  
 ‘We two alone were eating, and that being the case, it was difficult to finish (the sago), so...’

- (20) [[ka: dijo:-ta: φα:-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 FOC put-TEL sleep:PL-PST  
 ‘(We) put it away and slept.’
- (21) [[ha:γενεβο:ja=ja:]<sub>TOP</sub> [ε:]<sub>A</sub> [waija:=ja: hɛna: kei]o [ε-sa:-bi]<sub>PRED</sub>]<sub>FIN</sub>  
 morning=TOP 3:SG NAME=TOP go ASSER do-3.DR-D.S  
 ‘In the morning, he said, "I'm going to Lake Campbell"’
- (22) [[nɛ:-mo:]<sub>X</sub> [sɛlɛ-si-ki:]<sub>PRED</sub>]<sub>MED</sub>  
 1:SG-DAT say-MED:PFV-CONT  
 ‘He was telling me...’
- (23) [[gɛ:-φɛ:ni:]<sub>S</sub> [ka: a:lijɛ:-bi jo:]<sub>PRED</sub>]<sub>FIN</sub>  
 2:SG-EXC FOC sleep-DEL.IMP EXCL  
 “You go ahead and sleep alone”
- (24) [[o:gu: bɛda:-nɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 do.thus CONS-MED:IPFV  
 ‘That happened, so...’
- (25) [[ga:li kei]<sub>PRED</sub>]<sub>FIN</sub>  
 be.good ASSER  
 ‘(I said) “That's alright.”’
- (26) [[nɛ:]<sub>S</sub> [nɛ:-φɛ:ni:]<sub>S</sub> [a:li-mɛ:na: kei]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG 1:SG-EXC sleep-1:FUT ASSER  
 “I will sleep alone.”
- (27) [[ga:lo]<sub>X</sub> [do:gɛ: mo:go=wa:]<sub>TOP</sub> [sa: di la:-bi-no::]<sub>PRED</sub>]<sub>MED</sub>  
 afternoon house:LOC top.of.house=TOP put.in PFV COP-D.S-IRR:DUR  
 ‘In the afternoon I planned to put in (thatching) on the roof, and...’
- (28) [[do:gɛ: mo:ga:]o [di hɛnɛ ta:lɛtɛ la:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
 house:LOC top.of.house:ABS take DUR finish COP-MED:IPFV  
 ‘I was finishing putting (leaves) on top of the house, and then...’

- (29) [[o:φɛ:si:=ja:]<sub>TOP</sub> [wɑ:nokla:ko] [dimi hɛna: bɛda:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
time=TOP one.o'clock happen DUR CONS-MED:IPFV  
‘It was about one o’ clock so...’
- (30) [[kosu:wa:]<sub>O</sub> [tila: i:φo:]<sub>PRED</sub>]<sub>FIN</sub>  
cassowary descend cook:PST  
‘(I) went down and cooked the cassowary (and sago).’
- (31) [[kosu:wa: do:so-wa:]<sub>O</sub> [itɛ: hɛna:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
cassowary baked.sago-ABS cook DUR-MED:IPFV  
‘I cooked the cassowary sago a while and then...’
- (32) [[ɛ di-si]<sub>PRED</sub>]<sub>MED</sub>  
do PFV-MED:PFV  
‘(I) had done that and then...’
- (33) [[ga:lo]<sub>X</sub> [sa:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
afternoon sit-MED:IPFV  
‘(I) sat (there) in the afternoon and...’
- (34) [[do-si]<sub>PRED</sub>]<sub>MED</sub>  
STAT-MED:PFV  
‘(I) was there and then...’
- (35) a. [[[[kosu:wa: do:so-wa:]<sub>O</sub> [tɛka: di=ja:]<sub>PRED</sub>]<sub>TOP</sub>  
cassowary baked.sago-ABS take.off PFV=TOP  
b. [hɛna: wa:sa=ja:]<sub>PRED</sub>]<sub>TOP</sub> [sɛ:-ki:]<sub>PRED</sub>]<sub>MED</sub>  
DUR veranda=TOP stay-CONT  
‘Having taken the cassowary sago from the fire, (I) was sitting on the veranda and...’
- (36) [[nɛ: dɛnɛ ba:lɛ]<sub>X</sub> [kunu:bulu-wɛ:]<sub>X</sub> [jɛ:ba:]<sub>S</sub> [gulo:]<sub>PRED</sub>]<sub>FIN</sub>  
eat PROG COORD edge.of.clearing-LOC tree:ABS boom!  
‘As (I) sat eating, at the edge of the clearing a tree went boom!’

- (37) [[o:gu:-bɛda:-nɛgɛ:]<sub>PRED</sub>]<sub>MED</sub>  
do.thus-CONS-MED:IPFV  
'It happened like that so...'
- (38) [[[nɛ:]<sub>S</sub> [go:dɛ ba:lɛ]<sub>X</sub> [sa: kɛi]<sub>PRED</sub>]<sub>S</sub> [la:]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG God COORD stay ASSERT QUOT  
'I said "I am with God"'
- (39) a. [[[go:dɛ-mo:]<sub>X</sub> [to:]<sub>O</sub> [sɛlɛ hɛna: dodo-si-jɛ:-mi:]<sub>PRED</sub>]<sub>X</sub>  
God-DAT speech say DUR stand-MED:PFV-LOC-ASS
- b. [nɛ:-fɛ:ni:]<sub>S</sub> [ka: a:li-fɛija:]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG-alone FOC sleep-PERF  
'I had been praying to god while I was sleeping there.'
- (40) [[a:li di-si-ki:]<sub>PRED</sub>]<sub>MED</sub>  
sleep PFV-MED:PFV-CONT  
'I had slept and then...'
- (41) [[ha:ɡɛnɛbo:ja]<sub>X</sub> [bɛdɛ dɛnɛ kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
morning see PROG ASSERT  
'In the morning while I was watching out.'
- (42) [[ɛdijo:bi-ja:]<sub>S</sub> [a:mi:]<sub>X</sub> [ja: hɛli do:-sa:-bi:]<sub>PRED</sub>]<sub>FIN</sub>  
NAME-ABS PRO:ASS DIR:VEN go.out STAT-3:DR-D.S  
'Edijo:bi came out (of the bush) there.'
- (43) [[[nɛ:]<sub>O</sub> bɛbɛ:ni:]<sub>X</sub> [mi-ja:=bo:]<sub>PRED</sub>]<sub>FIN</sub>  
1:SG see:PURP come-PST=INF  
'She came to see me.'
- (44) [[o:gu: bɛda:]<sub>PRED</sub>]<sub>MED</sub>  
do.thus CONS  
'(She) did that, so...'

- (45) a. [[nɛ:]<sub>A</sub> [sɛlɛ-si-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>X</sub> [kosu:wa: do:so dio:ɸo: ko:]<sub>O</sub>  
 1:SG say-MED:PFV-CONT-LOC-ASS cassowary baked.sago put:PST DEM:DIST
- (46) b. [gɛ: la:]<sub>A</sub> [ma:ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 2:SG DEF eat:IMP  
 'I said, "You eat that cassowary sago that's been put there."'
- (47) [[na:nɛɛ:]<sub>A</sub> [kosu:wa: do:so-wa:]<sub>O</sub> [na: di=ja:]<sub>PRED</sub>]<sub>TOP</sub> [hɛnɛ dodo-si]<sub>PRED</sub>]<sub>MED</sub>  
 1:DU cassowary baked.sago-ABS consume PFV=TOP DUR stand-MED:PFV  
 'We two ate the baked sago and then...'
- (48) [[ɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 do-MED:PFV  
 '(We) did that and then...'
- (49) a. [[nɛ:]<sub>A</sub> [sɛ:lɛ-si-ki:-jɛ:-mi:]<sub>PRED</sub>]<sub>X</sub>  
 1:SG say-MED:PFV-CONT-LOC-ASS
- b. [nɛ: la:]<sub>S</sub> [a:ga:]<sub>X</sub> [mi-jɛ:na: kɛi]<sub>PRED</sub>]<sub>FIN</sub>  
 1:SG DEF today:ABS come-1:FUT ASSER  
 'While I was speaking, (I said) "I will come today."'
- (50) [[ɛ:mɛlɛ:]<sub>X</sub> [waija:]<sub>X</sub> [hɛna: kɛi]<sub>PRED</sub>]<sub>X</sub> [ɛ-si]<sub>PRED</sub>]<sub>MED</sub>  
 back Lake.Campbell go ASSER do-MED:PFV  
 '(I said) "I'm going back to Waija: (Lake Campbell).", and then...'
- (51) [[ɛ:sa:]<sub>O</sub> [sa:-lɛ]<sub>PRED</sub>]<sub>FIN</sub>  
 bilum:ABS put.in-S.S  
 '(We two) filled a bilum (string bag).
- (52) [[hɛnɛ]<sub>PRED</sub> [na:nɛɛ:]<sub>S</sub> [ɛ:mɛlɛ:]<sub>X</sub> [mi-ja:]<sub>PRED</sub>]<sub>FIN</sub>  
 DUR 1:DU back come-PST  
 'We two came back.'

- (53) [[wo:wi-ja:]<sub>o</sub> [ta: dodo-si]<sub>PRE</sub>]<sub>MED</sub>  
 NAME-ABS cross stand-MED:PFV  
 ‘We had crossed the Wowi river and then...’
- (54) [[mi-ja:=ja:]<sub>TOP</sub> [ja: wa:wi]<sub>PRE</sub>]<sub>FIN</sub>  
 come-PST=TOP DIR:VEN NAME  
 ‘Having come, (we) reached the Wawi river.’
- (55) [[wa:wi=ja:]<sub>TOP</sub> [ha:nε]<sub>o</sub> [mu:lu: lε la:-bi-no:]<sub>PRE</sub>]<sub>FIN</sub>  
 NAME=TOP water bathe do COP-D.S-CAUT  
 ‘We bathed at the Wawi river.’
- (56) [[ε di-si]<sub>PRE</sub>]<sub>MED</sub>  
 do PFV-MED:PFV  
 ‘(We) did that and then...’
- (57) [[ja:-nεgε:]<sub>PRE</sub>]<sub>MED</sub>  
 DIR:VEN-MED:IPFV  
 ‘Having come...’
- (58) [[waija: do:go=ja:]<sub>TOP</sub> [ja:-gεnε:]<sub>PRE</sub>]<sub>MED</sub>  
 NAME house=TOP DIR:VEN  
 ‘Having arrived at Waija: village (Lake Campbell)...’
- (59) [[φili: do:-wa:]<sub>PRE</sub>]<sub>FIN</sub>  
 ascend STAT-PST  
 ‘(We) went up (to the house).’
- (60) [[ka:m]<sub>PRE</sub>]<sub>FIN</sub>  
 that’s.all  
 ‘It’s finished.’
- (61) [[wa:-ja:]<sub>s</sub> [ja: ka:m]<sub>PRE</sub>]<sub>FIN</sub>  
 story-ABS DIR:VEN that’s.all  
 ‘The story finishes here.’

## Appendix 2: Co-occurrence of Post-verbal Modifiers

Table 1 below is an expanded version of the table 1 given in chapter 6. This table offers a listing of the co-occurrence of tense, aspect, and modality suffixes, and additionally shows mood, evidentiality and emotive particle morphemes. As stated in chapter 6, tense, aspect and modality morphemes are largely mutually exclusive with the exception of a small number of fused forms, and evidentiality and predicate particles, may combine more freely with tense/aspect morphology, though the direct evidential only occurs in a main clause with past time reference, and does not allow tense/aspect morphology except for perfect or completive categories. Interrogative enclitics also have separate forms depending on whether the predicate is present or non-present.

Table 1: Co-occurrence of Post-verbal Modifiers

	<i>-ja:</i> PST	<i>-mε:na:</i> FUT	<i>-mo:φo:</i> INCOMP	<i>-jo:φo:</i> COMP	<i>-sene</i> HAB	<i>-ta:</i> TEL	<i>-φei:ja:</i> PERF	<i>-ba:be</i> CF	<i>-jo:no:</i> CAUT	<i>-mei</i> HYPO	<i>=ma:</i> IMP	<i>=bi:</i> DEL.IMP	<i>=moko:no:</i> DEO	<i>=ta:bo:</i> PROH	<i>-sa:</i> 3:DR	<i>=o:bo:</i> INF	<i>=o:ne:</i> REP	<i>la:</i> QUOT	<i>=ja:</i> N.PRS.Q	<i>=ede</i> N.PRS.Q	<i>=la:</i> PRS.Q	<i>kei</i> ASSER	<i>ba:</i> DUB	<i>jo:</i> EXCL	<i>lo:</i> AFF	
<i>-ja:</i> PST	NA	NO	NO	NO	NO	NO	YES <sup>1</sup>	YES <sup>1</sup>	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	
<i>-mε:na:</i> FUT	NO	NA	NO	YES <i>-φe:na:</i>	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
<i>-mo:φo:</i> INCOMP	NO	NO	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
<i>-jo:φo:</i> COMP	NO	YES <i>-φe:na:</i>	NO	NA	NO	YES <i>-jo:ta:</i>	YES <i>-jo:φei:ja:</i>	YES <i>-jo:φa:be</i>	NO	YES <i>-φei</i>	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
<i>-sene</i> HAB	NO	NO	NO	NO	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO	YES	YES	YES	YES	
<i>-ta:</i> TEL	NO	YES	YES	YES <i>-jo:ta:</i>	NO	NA	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO	YES	YES	YES	YES	
<i>-φei:ja:</i> PERF	YES	NO	NO	YES <i>-jo:φei:ja:</i>	NO	YES	NA	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	
<i>-ba:be</i> CF	YES	YES	NO	YES <i>-jo:φa:be</i>	NO	NO	NO	NA	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES	YES	YES	
<i>-jo:no:</i> CAUT	NO	NO	NO	NO	NO	NO	NO	NO	NA	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES	YES	YES	
<i>-mei</i> HYPO	NO	NO	NO	YES <i>-φei</i>	NO	NO	NO	YES	NO	NA	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES	YES	YES	
<i>=ma:</i> IMP	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES	YES	YES	
<i>=bi:</i> DEL.IMP	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA	NO	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES	YES	YES	
<i>=moko:no:</i> DEO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA	NO	NO	YES	NO	YES	NO	NO	YES	YES	YES	YES	YES	
<i>=ta:bo:</i> PROH	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA	NO	NO	NO	YES	NO	NO	NO	YES	NO	YES	NO	
<i>-sa:</i> 3:DR	NO	NO	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NA	NO	NO	YES	YES	YES	NO	YES	YES	YES	YES	
<i>=o:bo:</i> INF	YES	YES	YES	YES	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NA	NO	YES	YES	YES	YES	YES	YES	YES	YES	
<i>=o:ne:</i> REP	YES	YES	YES	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA	YES	NO	NO	NO	NO	NO	NO	NO	
<i>la:</i> QUOT	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	YES	YES	NA	YES	YES	YES	YES	YES	YES	YES	
<i>=ja:</i> N.PRS.Q	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	YES	NA	NO	NO	NO	NO	NO	NO	
<i>=ede</i> N.PRS.Q	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	YES	NO	NA	NO	NO	NO	NO	NO	
<i>=la:</i> PRS.Q	NO	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO	NO	YES	NO	YES	NO	NO	NA	NO	NO	NO	NO	
<i>kei</i> ASSER	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO	NO	NO	NA	YES	NO	NO	
<i>ba:</i> DUB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	NO	YES	NO	NO	NO	YES	NA	NO	NO	
<i>jo:</i> EXCL	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO	NO	NO	NO	NO	NA	NO	
<i>lo:</i> AFF	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	NO	NA	

<sup>1</sup>Suppletive Past forms only

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