

**SYNTACTIC AND SEMANTIC ASPECTS  
OF SOME VERBS OF  
MOTION AND LOCATION IN ÄIWO**

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*Til Mommo*



# Abstract

This thesis studies verbs used in locative sentences in Äiwoo. When describing the location of inanimate entities, speakers of Äiwoo must choose either the existential verb or a proper posture verb. Judging from data collected through elicitation tests, posture verbs are used to describe objects with a spatial configuration, orientation, and elongation which resembles the postures of human beings and animals described by the same verbs. This conforms to data from several other languages, and supports the view that the use of posture verbs to describe inanimate entities is a metaphorical extension of the use of the same verbs to describe human and animal posture. The existential verb is used when a posture verb is not applicable. There are also verbs encoding motion and the path of the movement. Morphological causative transitive verb forms can be derived from some of the posture and motion and path verbs. The causative meaning of verbs that do not form morphological causatives are described by lexical causatives. Posture verbs, causative verbs, and motion and path verbs combine in serial verb constructions on the nuclear and core layer of the clause structure. The distribution and function of the different types of verbs combined in a nuclear layer serial verb construction can be described in terms of positional slots. Two or three verbs can combine in nuclear layer serial verb constructions, where the initial verb carries the main meaning, modified by the second and third verb. Verbs combined in core layer serial verb constructions can either share one or both arguments.



# Foreword

This thesis is part of my Master of Arts studies at the Department of Linguistics and Scandinavian Studies, Faculty of Humanities, University of Norway. The study consists of two semesters with courses, and two semesters to conduct individual scientific research and work this into a thesis. This thesis presents the results of my scientific research.

The thesis is also a contribution to ongoing work in the description of the Äiwoo language as part of the research project Identity Matters. The linguistic part of the project is carried out at the University of Oslo by Næss and Hovdhaugen. Hovdhaugen has been working with various languages in the area since 1997, and Næss has been working with Äiwoo since 2004 and the neighbouring language Vaeakau-Taumako, in the period of 1997-99, and I have had the privilege to benefit from their previous work and experience.

Due to practical issues, I was unaware of whether I could carry out the research trip to the Solomon Islands until a couple of weeks before departure. I had discussed several possible topics of study with my supervisor Åshild Næss, but a choice could not be made until I knew whether or not I would be able to collect new data in the field. Knowing that I would probably be working with consultants with no or very limited knowledge of English and Solomon Islands Pijin, the video clip stimulus kits developed by the Max Planck Institute of Psycholinguistics seemed an ideal method for collecting data through elicitation tasks. Furthermore, similar tests has been conducted on various other languages, which made results from these tests attractive as material for a comparative analysis. If obtaining electricity for the computer should prove difficult, or the computer itself should fail, data could also be collected through demonstrations of objects being put into different locations. Furthermore, the study of locative verbs in Äiwoo gave the possibility to cover a field in semantics in which little work has been done until now.

There are many people who contributed to the writing of this thesis, and I am very happy to acknowledge their support.

First of all, I would like to thank my grandparents, Gunvor and Arne Haraldstad for all their love, support and encouragement through many years.

A big thank is due to my family away from home, Louis and Geoffrey Vili (Paramount Chief of Nenubo village, Reef Islands, Solomon Islands), and their children David Bokap, Doreen Lekula, David Langona, Willy Pricks Itoa, Martin Abraham Numolilu, Barnabas Moai, Commens Veio and little Jessie Emma Sibile, who literally adopted me as a family member and took me into their household in Nenubo village. I would also like to thank all my friends and neighbours in Nenubo village for making my stay in the field such a wonderful experience.

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# Abbreviations and typographical conventions

<b>SMALL CAPITALS</b> grammatical category labels	<b>INGR</b> ingressive
<b>?</b> unknown segment	<b>IPFV</b> imperfect aspect
<b>1</b> 1 <sup>st</sup> person	<b>IRR</b> irrealis mood
<b>1+2</b> 1 <sup>st</sup> + 2 <sup>nd</sup> person	<b>LIM</b> limiter
<b>2</b> 2 <sup>nd</sup> person	<b>LOC</b> locative
<b>3</b> 3 <sup>rd</sup> person	<b>MIN</b> minimal number
<b>A; A</b> agent	<b>N</b> noun
<b>AD</b> adnominal	<b>NP</b> noun phrase
<b>AG</b> agentive preposition	<b>NEG</b> negation
<b>ANAPH</b> anaphoric	<b>NOM</b> nominal
<b>AO</b> affected object	<b>NUM</b> numeral
<b>APPL</b> applicative	<b>O; O</b> object
<b>ART</b> article	<b>OBL</b> oblique pronoun
<b>ASP</b> aspect	<b>PAST</b> past tense
<b>ATT</b> attributive	<b>p.c.</b> personal communication
<b>AUG</b> augmented number	<b>PERS</b> personal
<b>CAUS</b> causative	<b>PFV</b> perfect aspect
<b>CL</b> clitic	<b>PH</b> phasal
<b>CONJ</b> conjunction	<b>PL</b> plural number
<b>CONT</b> continuous	<b>POSS</b> possessive
<b>DECL</b> declarative	<b>PP</b> preposition phrase
<b>DEIC</b> deictic clitic	<b>PREP</b> preposition
<b>DEM</b> demonstrative pronoun	<b>PROGR</b> progressive
<b>DET</b> determiner	<b>PRON</b> pronoun
<b>DIR</b> directional	<b>REAL</b> realis mood
<b>FUT</b> future tense	<b>RED</b> reduplication
	<b>Rel</b> relative clause

**S; s** (intransitive) subject  
**SG** singular number  
**SUFF** (unknown) suffix  
**TA** tense-aspect  
**TAM** tense-aspect-mood  
**TOP** topicalizing particle  
**TR** transitive  
**UA** unit-augmented number  
**UT** utensils  
**V** verb

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## Chapter 1

# Introduction and background

This thesis investigates the coding of semantic information in verbs occurring in sentences describing spatial relations in Äiwoo, and the distribution of these verbs. It describes formal and semantic features of locative verbs, motion and path verbs, and causative motion verbs, both used alone and serialized. Moreover, it relates the data to that of previous works in the same field, and to data from other languages (in particular languages in the area). The data presented in the thesis contributes to on-going discussions on spatial semantics, and to the description and classification of the Äiwoo language. The study is based on data collected during well two months of fieldwork in the Reef Islands, Solomon Islands.

The thesis starts with an introduction to the typological characteristics of Äiwoo. Regrettably, the detail of the data available is not sufficient for a grammar sketch, but the information in Chapter 2 is hopefully sufficient for the reader to understand the examples and the argumentation in the rest of the thesis.

Section 1.1 introduces the Äiwoo language and its speakers: Section 1.1.1 gives a brief review of what little has been done in terms of linguistic classification and history of documentation, and Section 1.1.2 gives a short introduction to the (historical and) sociolinguistic background. A description of the fieldwork setting is found in Section 1.2, and Section 1.2.1 explains how the tests were carried out. A little background information is given in Section 1.3: Section 1.3.1 deals with the expression of space and location in language in general; Section 1.3.2 introduces the locative verbs in Äiwoo; Section 1.3.3 explains the layered structure of the clause model; and Section 1.3.4 gives a review of earlier works on locative verb semantics, causative verbs and serial verb constructions. Section 1.4 explains the relevance of the data, and finally, a survey of the structure of the thesis is presented in Section 1.5.

## 1.1 The Äiwoo language and its speakers

Äiwoo is a language spoken in the Reef Islands and St. Cruz Island (Nendö), which is part of the Temotu province in the eastern Solomon Islands. It belongs to the so-called Reefs-St. Cruz language group, which has not been conclusively classified as either Austronesian or Papuan. According to Wurm (1978 and later publications) they are Papuan languages which are strongly influenced by the Austronesian languages in the area. Wurm's proposal is, however, a very controversial one. Lincoln (1978) considers them Austronesian languages. It is hoped that ongoing research will resolve this question. Äiwoo is the largest of the Reefs-St. Cruz languages with approximately 8000 native speakers, mainly in islands belonging to the Ngawa district and the island Ngäsinue in the Reef Islands, but also in some villages of St. Cruz, like Kala Bay, and some recently established communities in the capital of the Solomon Islands, Honiara, like White River. Äiwoo speakers have also established several settlements in Vanikoro. The other languages belonging to this family are Nagu (locals claim that this language is in the process of being replaced by Äiwoo through extensive intermarriage) and Santa Cruz, with 210 and 5 899 native speakers respectively (ethnologue.com). The Santa Cruz language has two subgroups, namely Natügu and South-Western St. Cruz. It is unclear whether the many different variants in the Natügu area should be characterized as dialects of the same language or different languages.

### 1.1.1 Linguistic classification and history of documentation

Stephen A. Wurm produced a number of studies on the languages belonging to the Reef-St. Cruz group in the second half of the 20<sup>th</sup> century. In co-operation with Patrick Bwakolo, Martin Mo<sup>^</sup>iyiyâ, John Mwaamuli, John Temowâ, and Levy Lakâ, he produced a word list entitled *Work in Progress Towards a Dictionary of the Reef Islands Äyiwo Language* in 1985. Wurm also contributed to Patrick Bwakolo and Martin Mo<sup>^</sup>iyiyâ's *Teacher's Handbook* (1985). This is meant to be a handbook for teachers teaching Äiwoo in Secondary School. John Rentz is working on an Äiwoo version of the New Testament, and has published *The Gospel of Mark, Äi Päko iie Mak* (2003). Åshild Næss has been working with the language since 2004 and is currently

working on an Äiwoo grammar and a collection of traditional stories intended for school children.

Much is still unclear regarding morpheme segmentation and identification. There has not been any agreement upon the written form of the language until now, but Næss and Rentz are in the process of establishing a fixed system. Wurm and Bwakolo (1985) used a complicated alphabet, in which the occurrence of so-called ‘silent vowels’ has been particularly controversial. Neither Rentz nor Næss indicate ‘silent vowels’ in their orthography. Another difficult task is to determine word boundaries. According to linguistic morphosyntactic criteria Äiwoo words can be extremely long, and many native speakers are not in favour of such an analysis. Then again, opinions on where one word ends and the next word begins vary enormously from speaker to speaker.

Spelling conventions used in this thesis is introduced in Section 2.2.

### 1.1.2 (Historical and) Sociolinguistic background

Little is known about the history of the native speakers of Äiwoo. When asked, members of the Äiwoo speaking communities claim not to have records of any ancestors prior to their grandparents. The earliest known settlement in the area is that of the Lapita Culture more than 3000 years ago. Amongst others, a big Lapita site was dug out by Roger Green in 1972 and 1976-7, in what is now the village of Nenubo (the home of most of the contributors to the tests on which this thesis is based). The Lapita culture is associated with Austronesian. According to Spriggs (1997), non-Austronesian languages were introduced to the outer islands of the Solomons in a late population movement from inside the main Solomon chain within the last 2000 years, and Austronesian and Papuan language societies have been living in close contact ever since.

Äiwoo speaking societies and the native speakers of the neighbouring Polynesian Outlier language, Vaeakau-Taumako<sup>1</sup> have been in close contact for at least 500 years in the far eastern part of the Temotu Province. People in the area move frequently about on the neighboring islands, as well as between the outer islands and the capital, Honiara. Thus, spending one’s childhood in several different speech

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<sup>1</sup> Also known as Pileni. A Polynesian outlier language spoken in the Vaeakau district and Taumako, which consist of small outlier islands in the Reef Islands, Solomon Islands.

communities is common, resulting in much bilingualism, and many native speakers feeling that they have limited knowledge of their own mother tongue.

Many native speakers of Äiwoo understand or speak the neighbouring language, Vaeakau-Taumako, and some speak, and many understand the local lingua franca, Solomon Islands Pijin. Most speakers of Äiwoo are not able to read or write their own language, although some of them write and many read English or Solomon Islands Pijin quite well. This is probably due to the lack of written material in Äiwoo and no fixed system of writing.

## 1.2 The fieldwork setting

This thesis is based primarily on my own data, collected in the spring of 2005, during well two months of fieldwork in the Ngawa district in the Reef islands, supported by data collected by Åshild Næss on 3 consecutive trips to the region in the period of 2004-6. Due to limited time in the field, my own data was only checked with one of the consultants.

The eight consultants were all native speakers of Äiwoo, seven from the village of Nenubo and one from the neighbouring village of Ngadeli, both part of the Ngawa district. All speak the local lingua franca, Solomon Islands Pijin, and some speak English. The research was carried out in either Solomon Islands Pijin or English. Five consultants were women, four of them about forty years of age, and one in her late twenties. The other three were men, two in their thirties and one in his sixties.

The data is stimulus based. Two sets of video clips were used, both developed by the Max Planck Institute of Psycholinguistics in Nijmegen, the Netherlands. The responses to the stimuli are collected in two databases, one for each video set. The elicitation tests are described below in Section 1.2.1.

The sentences which constitute the data basis for this thesis are considered to be true grammatical sentences in Äiwoo, as they are recorded instances of spontaneous speech by native speakers of Äiwoo. Furthermore, the recorded sentences were judged grammatical by native speakers who contributed to the transcription process.

### 1.2.1 The elicitation tests

In the elicitation tests, each consultant was shown two sets of video clips, and asked to explain what it was that s/he saw after each video clip, first in Äiwoo, then in English or Solomon Islands Pijin.

The first set *Caused Positions* contains 46 very short video clips (a description of what is shown in each video clip is found in the Appendix) which show one or more inanimate object(s) coming into a state of location, either through active interference by a human being, or appearing spontaneously. The latter clips were edited to change from a state in which the entity/ies is/are absent to a state in which it/they is/are present. The entities are of different shapes and the same entity/ies appear(s) in different configurations. The *Caused Positions* video clip set is developed to investigate whether the language in question has posture verbs which are used in locative descriptions, and if so, whether posture verbs are also used in causative locative descriptions.

The *Put Project* video clip set is developed to explore the semantic categorization of placement events across languages. It contains 63 video clips (a description of each of the video clips is found in the Appendix) which show different items being put into different locations by human beings.

The video clip sets were shown on a portable computer using Winamp from Nullsoft Inc. Recording and transcription was done in PRAAT developed by Paul Boersma and David Weenink. The data was collected in two databases, one for each video clip set, and analyzed using the Linguist's Shoebox 5.0 from SIL.

The first test using the *Caused Positions* video clip set was quite successful. The contributors readily produced spontaneous descriptions of what they had seen. Every film clip was described in a full sentence by all contributors. The second test, in which the *Put Project* set was used, proved far more problematic. All contributors complained that the items and environments shown on the video clips were so alien to them that they found them hard to describe. Several did not even agree to try, and those few who answered the test left several video clips undescribed. Due to these issues, the data from the last test is more limited than that of the first. Data from both sets are used in the thesis, nonetheless.

## 1.3 Background material

### 1.3.1 Expression of space and location in language

This thesis treats a selection of verbs that are used in sentences with a locative function in Äiwoo. An expression is considered to have a locative function if it is a description of the spatial relation between two entities, where one is located or moving relative to the other. The relationship between the entities ( $x$ ,  $y$ ) is either of the kind ‘ $x$  is located relative to  $y$ ’ or ‘ $x$  is moving relative to  $y$ ’. The first relationship is a state, the second an event.

In the terminology of Jackendoff (1983)  $x$  and  $y$  are called ‘theme’ and ‘location’ in a state, and ‘theme’ and ‘goal’ in an event, respectively. Talmy (1985), treating the maintenance of stationary location as a kind of motion event, refers to  $x$  as the ‘figure’ and  $y$  as the ‘ground’. The course followed by the theme is referred to as the ‘path’. Jackendoff (1983) distinguishes between different kinds of paths: ‘source’, the origin point from where the theme is moving; and ‘goal’, the endpoint; ‘route’, when the reference object is related to some point in the interior of the path (such as *by the fire* or *along the coast*); and ‘direction’, either spatial, temporal or deictic direction.

Path and location may either be coded in adjuncts, like adverbs (1) and adpositions (2) or by the verb itself (3).

(1) *He stepped **back**.*

(2) *She walked **into the room**.*

(3) *He **entered**.*

A verb may even lexicalize the theme as in the following sentence:

(4) *Sam **dusted** the furniture.*

(Jackendoff (1983): 184)

The verb *to dust* does not only lexicalize the path-function, but the theme (*dust*) as well.

In this thesis, the entity moving or being located will be referred to as the theme, and the entity that the theme is moving or being located relative to, a location or a goal. Descriptions of maintenance of stationary location will be considered to describe states, and descriptions of motion will be considered to describe events.

### 1.3.2 Locational verbs in Äiwoo

Chapter 3-5 will treat some verbs occurring in sentences describing spatial relations in Äiwoo. I differentiate between three main types of verbs on the basis of their formal properties, semantic content, and distribution.

Chapter 3 treats verbs describing states in which an inanimate entity (theme) is located relative to that of another (location). Either the existential verb *to* or one of several posture verbs are used to describe the location of inanimate items in Äiwoo. As will be seen, the overall shape and spatial orientation of the the theme referent as well as its configuration relative to the location is coded in the posture verbs, but not in the existential. Furthermore, these features determine which posture verbs is used. For example, the posture verb *ko* ‘lie’ is used to describe a cassava fruit in a position of horizontal orientation and elongation, whereas the posture verb *so* ‘stand’ is considered appropriate to describe a cassava which is stood upright (in a position of vertical orientation and elongation), forked between two branches of a tree:

- (5) *Nyike manioki ko-li-mä ngä tebol nyigi.*<sup>2</sup>  
 root cassava lie-go.down-DIR PREP table one

‘A/the cassava root is lying on a/the table.’

- (6) *Manioc nyigi ki-so-li-mä ngä nyenaa.*  
 cassava one IPFV-stand-go.down-DIR PREP tree

‘A/the cassava is standing in a/the tree.’

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<sup>2</sup> Tables are not common in the Ngawa district, and none of the consultants knew a word for it in Äiwoo. Some have used the word *nämââ* ‘platform’, others have used the word for ‘table’ in Solomon Islands Pijin, *tebol*.

The lexemes I have called *motion and path* verbs seem to code solely motion and path, but neither theme, source, goal or manner of motion. For example the verb *ee* seem to simply translate ‘move upwards’.

- (7) *Ki-e-kä*  
 IPFV-go.up-DIR  
 ‘go up’

Unfortunately, there is not much data on these verbs available at present. A brief description of motion and path verbs is found in Chapter 4.

The causative verbs described in Chapter 5 describe the movement of a theme, caused by an agent. There are both lexical causative verbs, and morphological causative verbs derived from some of the verbs described in Chapters 3 and 4. Morphological causative verbs derived from motion and path verbs encode information on path and morphological causative verbs derived from posture verbs encodes the configuration of the theme at the endpoint of the movement.

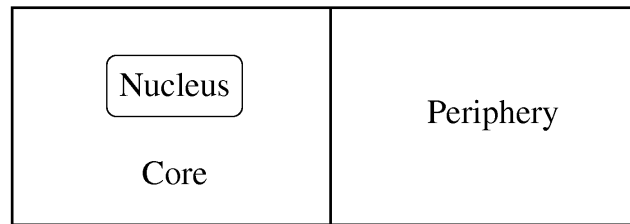
Location or goal is generally coded in adjuncts, most often in PPs headed by *ngä* or (in a few instances) *go*, both described in Section 2.5. *Ngä* can be used to describe a range of meanings (‘to’, ‘at’, ‘on’, ‘from’, ‘in’) and PPs headed by *ngä* can code either goal, source, route or location. Coding of both source and goal in one and the same clause is not attested.

### 1.3.3 The layered structure of the clause

Regardless of language-specific features, all languages distinguish between a predicate and its argument(s), and between the argument(s) of the predicate and adjuncts. Thus the structural makeup of clauses in all languages can be described in terms of three layers, as described in Foley and Van Valin (1984), and Van Valin and LaPolla (1997). The predicating element of the clause constitutes the inner layer of the clause, the nucleus. It may be a verb, an adjective or a nominal predicate of some sort. The predicate and its arguments is the core layer of the clause, and adjuncts, that is, NPs and PPs which are not arguments of the predicate, is the periphery of the clause structure.

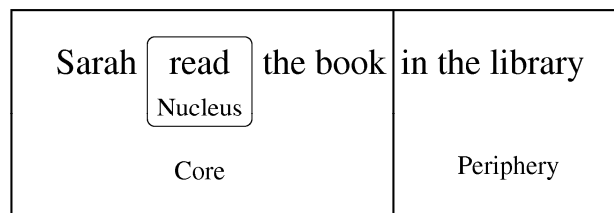


Figure 1.3.3. The layered structure of the clause



Adapted from Van Valin and LaPolla (1997:25).

For example:



Foley and Van Valin's analysis will not be explained in depth here, see Foley and Van Valin (1984) for a thorough account. The three layer model proves particularly useful to explain the differences between the different types of serial verb constructions in Chapter 6.

#### 1.3.4 Literature Review

The amount of literature on verbs used in locative descriptions is relatively small. Jackendoff (1983) and Talmy (1985) have each a semantic description model for expressions of space and location, the terminology of which are briefly described above in Section 1.3.1. Newman (Ed.) (2002) contains essays describing the use of posture verbs in various languages, some of which also describe the use of posture verbs with inanimate theme referents. The most thorough description of the semantics of locative verbs to this date, is Birgit Hellwig's (2003) description of the existential-postural system in Goemai. Expressions of space and direction are described in Oceanic languages in Ross (2003), and in Papuan languages in various grammars, amongst others in Foley (1986).

Most work on causative verb deals with the various degrees of intent expressed. A thorough account of the grammar of the various types of causative verbs, however, is found in Shibatani (1976).

Crowley (2002) gives a detailed typological description of the various forms of serial verb constructions attested in the Oceanic languages. Isabelle Bril and Françoise Ozanne-Rivierre (Ed.) (2002) contains essays with language-specific descriptions of serial verb constructions, amongst others a description of serial verb constructions in Vaeakau-Taumako by Næss (2002), from which data has been compared to junctures in Äiwoo in Chapter 6. Comparisons with data from Crowley (2002), Næss (2002) and Margetts (1999) made classification of the different types of serial verb constructions in Äiwoo possible. Margetts' (2005) description of the distribution and function of the different types of verbs combined in nuclear layer serial verb constructions in terms of positional slots, proved appropriate for, and is applied to describe verbs combined in nuclear layer serial verb constructions in Äiwoo in Chapter 6.

## 1.4 Relevance of the data

Various data on the coding of spatial information in Äiwoo is described in this thesis:

1. Äiwoo has verbs coding location and overall shape, spatial configuration and orientation of the theme referent.
2. There are verbs coding motion and direction or route.
3. Both types of verbs can form causative correlates, which codes motion of the theme caused by an actor and specifies the configuration and orientation of the theme at the endpoint of the movement or the path, respectively.
4. Whereas spatial direction is coded in verbs, deictic direction is marked on the verb by suffixation.
5. Location or goal seems always to be expressed by an adjunct. Often a PP.

The data described in this thesis contributes to the on-going discussion of the coding of spatial information across different word classes. It also provides linguistic information

about the little described language Äiwoo, and thus contributes to the work being done on analyzing and describing the language.

Earlier works on posture verbs (Newman (2002) and Lemmens (2002), amongst others) suggests that the use of posture verbs to describe the location (and sometimes spatial configuration) of inanimate items is a metaphorical extension of the use of the same verb forms to describe animate posture. The data presented in Chapter 3 support this view. It thereby supports Newman's (2002: 7) view that we use posture verbs to conceptualize the positions of entities surrounding us, and the view that many concepts are oriented in our conceptual system with respect to whether or not they are similar to properties of a prototypical person (Lakoff & Johnson 1980:132).

As can be seen from the brief survey of earlier works on locative verbs presented above, this thesis deals with a field of semantics in which little has been described.

Comparisons of the Äiwoo data with data from other languages (particularly languages in the area) are made throughout the thesis in the hope that it might be of some help in classifying Äiwoo, as well as in studying the effects of language contact.

## 1.5 Structure of the thesis

Chapter 2 gives an introduction to some grammatical features of the Äiwoo language; Chapter 3 treats stative verbs used to describe the location of inanimate entities; motion and path verbs (which frequently combine with the verbs described in Chapters 3 and 5) are described in Chapter 4; causative verbs used in locative sentences in Äiwoo are described in Chapter 5; Chapter 6 describes how the verbs described in the earlier chapters serialize on the nuclear and core level of the clause structure; and Chapter 7 presents some conclusive remarks.

All translations given in this paper are tentative and based on the translations of my consultants as well as earlier analyses by Næss. All examples are from the tests described in Section 1.2.1 above, unless another reference is given.



## Chapter 2

# Äiwoo grammar

### 2.1 Introduction

This chapter introduces some basic grammatical features of the Äiwoo language. Grammatical work on the language is ongoing, but has not yet matured to a level where a complete sketch of the grammatical structure of this language can be presented. Hopefully, though, this chapter will provide the information needed to understand the argumentation and examples in the subsequent chapters. The information is based on the data collected and analyzed by Åshild Næss, from 2004 until present. Section 2.2 introduces spelling conventions used in the thesis; Section 2.3 describes nominals; Section 2.4 describes verbs and the verb phrase. Short descriptions of prepositions, adjectives, directional markers, and possessive classifiers are presented in Sections 2.5-8.

### 2.2 Spelling conventions

As mentioned in Section 1.1.1, one has not yet reached an agreement upon how to spell the Äiwoo language. The spelling used in this thesis is devised by Næss in co-operation with Patrick Bwakolo and John Rentz.

Äiwoo distinguishes between three a-sounds: an open / open-mid front *ä*; an open back *a*; and an open-mid back *â* (previously written *ä*). The symbol *j* is used for the alveolar / palatal affricate (previously written *dy*). The palatal nasal is written *ny* (some write it *nyi* and *ni*). A phonetical vowel occurring in certain vowel sequences is included in the spelling (although there is no phonological reason for this). Thus *u+e* > *uwe*; *u+a* > *uwa*; *u+â* > *uwâ*; *u+o* > *uwo*; *o+e* > *owe*; *o+a* > *owa*; *o+â* > *owâ*. After the 3augS prefix *lu*, *w* > *pw* / *p* and *v* > *p*. Labialization (the appearance of a /w/ after *p*, *b* and *m*) is marked on some verbs where there are minimal pairs, such as *bwää* ‘sea’ (as

opposed to *bää* ‘lean’), or the signification of the labialization is unknown. Clitics are written as suffixes if directly attached to verbs, but separately if a NP intervenes between the verb and the clitic. Clitics on pronouns are written as suffixes.

## 2.3 Nominals

Nominals are divided into nouns, pronouns, and nominals derived from verbs. Derived nominals have a function similar to that of nouns, and consequently derived nouns can head noun phrases.

A noun in Äiwoo can be defined as a word that can be an argument to a verb (or other predicate) without the addition of a nominalizing prefix. Äiwoo nouns have no case, no articles, and no number marking morphology, with the exceptions of a few kinship terms. The head noun precedes possessive markers, relative clauses, and numerals in Äiwoo nominal phrases. Demonstrative determiners follow the noun which it modifies: *Singedâ eâ* ‘this girl’, *sime eângâ* ‘that person’.

The pronouns and person-marking system in the St. Cruz languages follows the minimal-augmented pattern, in which the category “you and I” (1+2) is a basic person category. The term ‘minimal’ is used for the number category involving the minimal number of persons required to instantiate the category – one in the case of the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> persons, but two in the 1+2<sup>nd</sup> person. The number category referring to more than the minimal number of persons is called ‘augmented’. To these two categories, Äiwoo adds a third category we call ‘unit-augmented’. The ‘unit-augmented’ category involves the minimal number of persons plus one. This category does not correspond to dual number, as the 1+2 unit-augmented form refers to three people: you, I, and one other person.

Table 2.3: The Äiwoo independent personal pronouns:

	Minimal:	Unit-augmented:	Augmented:
1	<i>iu</i> ‘I’	<i>iungo-le</i> ‘I plus one’	<i>iungo(pu)</i> ‘we (more than two)’
1+2	<i>iuji</i> ‘you and I’	<i>iude-le</i> ‘you, I, and one other’	<i>iude</i> ‘you, I, and more than one other’
2	<i>iumu</i> ‘you’	<i>imi-le</i> ‘you plus one’	<i>imi</i> ‘you and several others’

3	<i>inâ</i> ‘s/he’	<i>ijii-le</i> ‘s/he plus one’	<i>ijii</i> ‘they’
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Nominals can be derived from verbs by the addition of a nominalizing prefix. There are at least seven nominalizing prefixes: *gi-* ‘male; *si-* ‘female’; *me-* ‘person’; *de-* ‘thing’; *nye-* ‘place’; *nyi-* ‘way, manner’; and *mi-* ‘general’. Derived nominals with the prefix *mi* can often be translated into English as attributive adjectives or relative clauses, as demonstrated in Example 10:

- (8) *go nelo kele ki-elo=to=we*  
 CONJ sea here IPFV-be.big-PH=DEIC

‘because the tide is getting higher’

- (9) *Nuwopa elo.*  
 house be.big

‘The house is big.’

- (10) *Nuwopa mi-elo.*  
 house NOM-be.big

‘A/the big house.’

(Næss, in prep 2)

Nominals may occur as predicates and take both TAM- and person-marking, as illustrated in the Example 12 where the noun *sime* takes imperfective aspect marking:

- (11) *Sime nyigi ku-mo mo gino Nyibängä Nede*  
 person one IPFV-live CONJ son.3MIN N. N.

‘There was a man who lived with his son at Nyibängä Nede.’

- (12) *ki-sime=to*  
 IPFV-person=PH

‘It was starting to become human.’

The ability to be negated by the negation circumfix *ba-* *-gu* applies to both nominal predicates (13) and verbs (14) in Äiwoo:

- (13) **Ba** *upoji mi-une=gu* *mo* *teväivä.*  
 NEG yam NOM-true=NEG but stone

‘It was not a real yam, but a stone.’

- (14) (..) **ba** *i-ki-giââ=gu* *go* *nedu* *laki.*  
 NEG 1MIN.S-IPFV-be.happy=NEG because mouth.1MIN be.small

‘(..) I am not happy because my mouth is small.’

## 2.4 Verbs

Tense, aspect, mood, and person and number marking indicate what is generally considered “verbal” categories, but, as can be seen from Example 12, these can also be properties of nominal predicates in Äiwoo. Rather the possibility of taking the nominal prefix *mi-* and the causative prefix *wâ* must serve as criterions for verbhood.

Äiwoo has a very complex verb structure. Two or three verb stems can be combined within the same verb complex, as well as various grammatical and lexical affixes and clitics. Subjects are cross-referenced on intransitive verbs by prefixes, while subjects and objects are marked on transitive verbs by suffixes. Generally verb stems in Äiwoo do not have lexically distinct singular and plural forms, though there are exceptions, like *eolo* ‘be big sg.’ and *eolââ* ‘be big pl.’.

Unmarked word order in Äiwoo is SV in sentences with intransitive verb clauses and OVS with transitive clauses. Sentences with semi-transitive verbs and indefinite objects, have SVO order, but as will be seen in the description of semi-transitive verbs in Section 2.4.2, such constructions are formally intransitive as the object is not cross-referenced on the verb. Transitive clauses generally have an OVS word order.



### 2.4.1 Person and number marking

The person and number marking system on verbs follows the unit-augmented pattern described in Section 2.3. Intransitive verbs take the subject marker as a prefix (in the following text it will be demonstrated that this also applies to semi-transitive verbs):

- (15) *Lato me-ku-wa-le me-ki-tei-le.*  
 then 1AUG.S-IPFV-go-UA 1AUG.S-IPFV-fish-UA

‘Then we will go fishing.’

There is no marking of 3minS subjects on intransitive verb stems:

- (16) *Bolo nyigi ki-tokoli-woli-mä ngä tebol.*  
 ball one IPFV-sit-down-DIR PREP table

‘A/the ball is sitting on a/the table.’

- (17) *Ile in-enge ki-savele go bol.*  
 now this.one-DEM IPFV-play PREP ball

‘This one is playing with a ball.’

Transitive verbs take both subject and object markers as suffixes, subject suffixes preceding object suffixes:

- (18) *Ki-amogulo-nee-mu.*  
 IPFV-stare-1MIN.A-2MIN.O

‘I am staring at you.’

The personal markers in Äiwoo are as shown in the tables 2.4.1 i - iii with a few exceptions for transitive verb clauses: in combination with 2<sup>nd</sup> person O, 1minA is *-nee* (otherwise *-no*); and 3minA is *gu*, unless in combination with 3minO, in which case it is zero-marked.

Table 2.4.1 i: Intransitive subject prefixes:

	Minimal:	Augmented:
1	<i>i-</i>	<i>me-</i>
1+2	<i>ji-</i>	<i>de-</i>
2	<i>mu-/mi-</i>	<i>mi-</i>
3	$\emptyset$	<i>li-/lu-</i>

Table 2.4.1 ii: Transitive subject suffixes:

	Minimal:	Augmented:
1	<i>-no/-nee</i>	<i>-ngo</i>
1+2	<i>-ji</i>	<i>-de</i>
2	<i>-mu</i>	<i>-mi</i>
3	$\emptyset$ ( <i>gu</i> )	<i>-i</i>

Table 2.4.1 iii: Transitive object suffixes:

	Minimal:	Augmented:
1	$\emptyset$	<i>-ngo</i>
1+2	<i>-ji</i>	<i>-de</i>
2	<i>-mu</i>	<i>-mi</i>
3	<i>-<math>\emptyset</math></i>	<i>-i</i>

The unit augmented number is expressed by the augmented marker plus the suffix *-le*, as in the following example:

- (19) *Ku-lu-po-lâ-le=to*                      *bwää kâ (..)*  
 IPFV-3AUG.S-go-go.out-UA=PH        sea    DEIC

‘They went out to sea (..)’

- (20) *Mo nyidebo nã-te-kã-gu-i-le=nã*  
 CONJ magic        IRR-see-DIR-3AUG.A-3AUG.O-UA=CL

*i-vaave-e-pu-kã-i-le.*  
 PFV-show-also-DIR-3AUG.A-UA

‘And they also gave him a magic leaf to make him able to see them (Lit. that he would see them with).’

*Le* marks unit-augmented number of either the subject or the object in a sentence. In Example 19, it marks the subject, and in Example 20, it marks the agent in the first sentence and the object in the second.

#### 2.4.2 Transitivity and valence

As demonstrated above, person and number marking is prefixed on intransitive verbs and suffixed on transitive verbs. In transitive verbs where the agent is not overtly expressed, the verb takes 3augA marking, even if the agent refers to one single person:

- (21) *Nyena*      *nyigi ki-so,*      *mo la*  
 tree            one    ASP-stand    CONJ    DEIC
- nupou la*      *i-päi-e-i*                      *ngä nula=na.*  
 string    DEIC    PFV-throw-go.up-3AUG.A    PREP    branch=DEIC

‘A/the tree is standing, and a/the string is thrown upon a/the branch.’

A third category of verbs occurs with an overt noun phrase representing the object of the action, but a formally intransitive person marking, that is, prefixed subject marking and no cross-referencing of the object on the verb:

- (22) *Pe*      *mi-na-lobâkou*      *nupää!*  
 go      2MIN.S-IRR-fold      cloth

‘Go and fold the / some cloths!’

(Næss in prep. 2)

Næss (in prep. 2) categorizes verbs like the one illustrated above in Example 22 as *semi-transitives*, and finds that there is a semi-transitive counterpart to most and perhaps all transitive verbs in Äiwoo. The semi-transitive verb is used with indefinite, non-specific or plural objects or with reference to generic, repeated or habitual events, while the transitive verb is used with definite, specific, singular objects and with reference to

specific events. The semi-transitive and the transitive verb are sometimes distinguished by vowel alternation, as the following pair (*vätäli-vätäle*):

- (23) *Le-inenge pepa i-vätäli.*  
DEIC-DEM paper PFV-tear

‘This one tore the paper.’

- (24) *Sime nyigi ki-vätäle pepa.*  
person one IPFV-tear paper

‘A/the person tears paper.’

Intransitive and semi-transitive verbs can form morphological causative forms by the addition of the prefix *wâ-* (*pa-* on intransitive verbs with 3minS). The examples below illustrates the verb *nubo* ‘to die’ in an intransitive (25) and in a causative (26) verb clause:

- (25) *I-nubo go nyagova.*  
PFV-die PREP disease

‘He died from the disease.’

- (26) *I-wâ-nubo-wâ-no.*  
PFV-CAUS-die-AO-1MIN.S

‘I killed him.’

Morphological causative verbs which are formally transitive (with suffixed person marking), generally have either the suffix *(w)â* (26), *nâ* or *eâ*, whereas morphological causatives which are semi-transitive and thus formally intransitive (that is, occurring with an object NP which is not cross-referenced on the verb and prefixed subject marking) generally do not:

- (27) *(..) ku-wâ-nubo sii ä ki-pekälää nuwâdâ.*  
IPFV-CAUS-die fish and IPFV-collect shell

‘(..) to catch fish and collect seashells.’

The status of these suffixes is discussed in Section 5.3.1.

Morphological causatives can also be intransitive, when derived from stative verbs denoting qualities (29) or feelings (31):

- (28) *Sime mi-ebulou i-te-kâ-no li-eve.*  
 person NOM-be.big PFV-see-DIR-1MIN.A 3AUG.O-be.three

‘I saw three tall men’

- (29) *Lâ-wâ-eve=kâ.*  
 DEIC-CAUS-be.three=DEIC

‘The third time’

- (30) *I-ku-bou go nyigidowe.*  
 1MIN.A-IPFV-be.afraid PREP snake

‘I am afraid of snakes.’

- (31) *Ku-wâ-bou.*  
 IPFV-CAUS-be.afraid

‘It is forbidden.’

In addition to morphological causatives, Äiwoo also has lexical causatives, some of which are described in Section 5.4.

Intransitive verbs can be used with an object in Äiwoo with the addition of an applicative suffix *-ive*. I.e. *lopa* ‘to talk’ and *lopa-ive* ‘to tell (a story)’.

### 2.4.3 Tense, aspect and mood

Äiwoo has a complex system of TAM marking. The prefixes *i-* marks perfective (32) and *ki-* or *ku-* marks imperfective aspect (33):

- (32) *Buki-enge i-e-no.*  
 book-DEM PFV-write-1MIN.S

‘I wrote this book.’

- (33) *Le i-ki-ea ke buk.*  
 DEIC 1MIN.S-IPFV-write DEIC book

‘I am writing a book.’

The clitics *naa* (35), *ngaa*, *(w)aa*, *laa*, and *kaa* (34) marks future tense (the only attested temporal distinction in Äiwoo is that of future versus non-future), and may combine with aspect prefixes:

- (34) *Ileke ki-väke=kaa näte(..)*  
 now IPFV-chop=FUT firewood

‘Now, he is going to chop firewood (..)’

The prefix *nâ-* marks irrealis mood:

- (35) *(..) go sii nâ-togulo=naa nâ-dau.*  
 PREP fish IRR-beat=FUT IRR-many

‘(..) so that he would catch a lot of fish.’

#### 2.4.4 Serial verb constructions

As will be demonstrated in Chapter 6, verbs in Äiwoo can be serialized both on the nuclear and core layer of the clause structure. Transitive agreement in nuclear layer serial verb constructions where the first verb is transitive, and the second (and/or third) verb is intransitive, is indicated by a transitive marker *-i* suffixed to the last verb stem in the construction. The following examples show an intransitive (36) and transitive (37) nuclear layer serial verb construction. The last verb in the transitive serial verb construction has a transitive marker.

- (36) *ä i-boki-päko-du-kâ-mu=wä jii*  
 CONJ PFV-break-be.good- all-DIR-2MIN.A=CL 3AUG

‘you did a lot of hard work for them’

- (37) *Ki-äkäte-mana-i-wâ-no ngâgu-mu*  
 IPFV-ask-very-TR-DIR-1MIN.A to-2MIN

‘I beg you (lit. ask you very much)’

### 2.4.5 Numerals

Numerals follow the noun: *sime nyigi* ‘one person’, *bolo lilu* ‘two balls’. When modifying a noun, the numeral is often, but not always, clause-final, even when the noun which it modifies is clause initial. Numerals are considered verbal, as they can be nominalized, take TAM marking, and form morphological causatives (as illustrated in Example 29).

## 2.5 Prepositions

Äiwoo is prepositional. The most frequent preposition is *ngä*, which covers a range of spatial meanings, it can be translated as ‘in’, ‘on’, ‘to’, ‘from’, amongst others. Another preposition is *go*, ‘with / by’.

## 2.6 Adjectives

It is uncertain whether Äiwoo has actual adjectives. Næss (in prep. 1) has found one plausible candidate so far, namely *nyibengä*, meaning ‘big / huge’. It precedes the noun which it modifies, as in *nyibengä nyiivä* ‘big stone’.

## 2.7 Directionals

As will be demonstrated in Section 4.2, spatial direction is coded in verbs like *ee* ‘go up’, *woli* ‘go down’, *to* ‘go in’, and *lä* ‘go out’. Deictic direction is coded in directional markers suffixed to the verb. The following directional markers code direction relative to the speaker-hearer: *-mä* ‘towards 1<sup>st</sup> person’; *-wä* ‘towards 2<sup>nd</sup> person’; and *-kä* (or *kä*), ‘towards 3<sup>rd</sup> person’. The directional suffixes precede the person-number marking in transitive verb complexes:

- (38) *Teenu nyigi wä-bää-eä-kä-i ngä nuo nyenaa.*  
 bottle one CAUS-lean-AO-DIR-1MIN.A PREP root tree

‘A/the bottle is leaned towards the root of a/the tree.’

*Limä*, *tokä*, and *lamä* are often translated ‘on top of’, ‘against’, and ‘towards/inside’ respectively. They are probably combinations of the motion and direction verbs *li* ‘go down’, *to* ‘go in’, and *la* ‘go out’ (described in Section 4.2) and the directional suffixes described above. The following example, where the segment *epu* intervenes between *to* and *kä* supports this analysis:

- (39) *ilä wä-bää-eä-to-epu-kä=jo=wä.*  
 then CAUS-lean-AO-go.into-again-DIR=PH=DEIC

‘(..) then she leaned it towards (it) again.’

## 2.8 Possessive classifiers

Possession is marked by affixation for inalienably possessed items, such as body part terms. For all other nouns it is indicated by a classifier which follows the noun. Possessive classifiers in Äiwoo categorize the semantic relation between the possessor and the possesee. The classifiers follow the possessed noun and are marked for person and number of the possessor. The classifiers follow the same pattern as person marking on verbs (described in Section 2.4.1). There are six possessive classes:

Table 2.8. Possessive classifiers

	General	Food	Drink	Betel	Utensils	House/loc.
1min	<i>nou</i>	<i>nugo</i>	<i>numo</i>	<i>dano</i>	<i>nugu</i>	<i>to</i>
2min	<i>nomu</i>	<i>namu</i>	<i>numomu</i>	<i>damu</i>	<i>nugumu</i>	<i>tomu</i>
1+2min	<i>nouji</i>	<i>näji</i>	<i>numoji</i>	<i>däji</i>	<i>nuguji</i>	<i>toji</i>
3min	<i>no</i>	<i>na</i>	<i>numä</i>	<i>da</i>	<i>nogo</i>	<i>tä</i>
1aug	<i>noungole</i>	<i>nugongole</i>	<i>numongole</i>	<i>dangole</i>	<i>nugungole</i>	<i>tongole</i>
2aug	<i>nomile</i>	<i>nämile</i>	<i>numomile</i>	<i>dämile</i>	<i>nugumile</i>	<i>tomile</i>
1+2aug	<i>noudele</i>	<i>nädele</i>	<i>numodele</i>	<i>dädele</i>	<i>nugudele</i>	<i>todele</i>
3aug	<i>noile</i>	<i>naile</i>	<i>numäile</i>	<i>daile</i>	<i>nogoile</i>	<i>täile</i>
1aug	<i>noungo</i>	<i>nogongo</i>	<i>nomongo</i>	<i>dango</i>	<i>nugungo</i>	<i>tongo</i>



2aug	<i>nomi</i>	<i>nämi</i>	<i>numomi</i>	<i>dämi</i>	<i>nugumi</i>	<i>tomi</i>
1+2aug	<i>noude</i>	<i>näde</i>	<i>numode</i>	<i>däde</i>	<i>nugude</i>	<i>tode</i>
3aug	<i>noi</i>	<i>nai</i>	<i>numäi</i>	<i>dai</i>	<i>nogoi</i>	<i>täi</i>

Possessive classifiers can function as predicates, and take TAM marking, and nominalizing prefixes. 3augO person marking on the the classifier indicates that the possesee refers to more than one item, as in *kuli noguii* ‘his dogs’.



## Chapter 3

# Stative locative verbs

### 3.1 Introduction

This chapter deals with verbs used in sentences with a locative function in Äiwoo. An expression is considered to have a locative function if a speaker uses it to indicate the location or motion of an entity relative to a location or goal. A typical locative sentence is an affirmative sentence which is considered to be an appropriate answer to the question ‘Where is *x*?’, *x* being the item described as located.<sup>3</sup>

Speakers of Äiwoo have to choose either the existential verb or an appropriate posture verb when describing the stative location of inanimate entities. In Äiwoo, as in many other more or less unrelated languages, the same verb forms can be used to

1. indicate the location and specify the posture of an animate being
2. indicate the assuming of a posture by an animate being
3. indicate the location and configuration of an inanimate item

The first two uses are descriptions of volitional states and activities which are controlled by the subject referent, the last use is a description of a non-volitional state (there is no volition involved with inanimate referents). These verbs could have been referred to as *verbs of spatial configuration* or *verbs of position* (in which case all three uses of the verbs would have been described), but following earlier works on similar verbs (Newman (2002), Lemmens (2002), Lichtenberk (2002), amongst others) they will be referred to as *posture verbs* in this thesis. In this choice of terminology lies the assumption that the description of human posture is the prototypical use of these verb forms. Posture verbs are dealt with in Section 3.2. A superficial description of the use of

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<sup>3</sup> This type of sentence is also referred to as *simple location*.

posture verbs with animate theme referents (which is seen as the prototypical use of posture verbs) is presented in Section 3.2.1. In Section 3.2.2, it will be argued that posture verbs used with inanimate theme referents do not only indicate the location of the theme referent, but also information on its spatial configuration and orientation (sometimes even elongation). Furthermore, it will be demonstrated that the posture verbs are used to describe inanimate entities in configurations which are similar to human and animal postures described by the same verb forms. The use of the existential verb to denote the location of inanimate entities is described in Section 3.3, where it is argued that the existential is used if a posture verb is not applicable.

Note that this chapter will not give a full description of the semantics of verbs used to describe the stative location of inanimate entities in Äiwoo, because such descriptions more often than not involve a combination of the verbs described in this chapter and other verbs in complex junctures. These complex junctures will be described and categorized as serial verb constructions in Chapter 6.

Finally, a short summary of this chapter is presented in Section 3.4.

## 3.2 The posture verbs

Posture verbs are verbs describing the maintenance (and sometimes the assumption) of a posture by a human being or an animal. Examples of posture verbs includes English verbs like *stand*, *sit*, *lie* et c. Not all languages have verbs coding posture. For example, there are no simple verbs coding posture in French. The state of being in a posture is expressed by the use of the existential verb, *être*, with an adverb coding posture, as in *être debout* ‘be in a standing position’, *être assis* ‘to be in a sitting position’, and *être allongé(e)* ‘to be in a lying position’.

In many languages that have posture verbs, these verbs are used to express various lexical and grammatical features. Amongst others, posture verbs are commonly used to describe the location, and sometimes to specify the overall shape and spatial configuration, of inanimate entities. Languages vary in the extent to which posture verbs (or other posture expressions) can be used with inanimate theme referents. The French posture expressions seen above, for instance, can only be used with animate referents.

In some languages, posture verbs do not necessarily specify information on spatial configuration, overall shape or orientation of their inanimate theme referents. For example, the posture verbs in the Oceanic language Toqabaqita (spoken on the island of Malaita in the Solomon Islands) are used to describe human beings maintaining specific postures (40), but they can also be used to describe the location of inanimate items without being specific about the configuration of the item described (41):

(40) *Raʔania*      *soa ʔ-baya*.  
never.mind      sit-LIM

‘It’s no good just sitting (there, doing nothing).’

(Lichtenberk (2002): 269)

(41) A:    *Ma*    *sofu*    *baa?*    B:    *Teo*    *ba-na*.  
         and    soap    what                    lie    LIM-3SG.PERS

‘A: And where is the soap? B: It’s there (where it usually is).’

(Lichtenberk (2002): 288)

Another example is the use of the verb *me* ‘lie’ in Lewo (spoken in Vanuatu):

(42) *Pawa*    *puru-tawo*    *tai*    *ϕ-m̃e-ke*                    *e-a*<sup>4</sup>  
big    tree-nut                    ART    3SG.S-lie-CONT                    LOC-3SG.O

‘There was a big nut tree there. / There had been a big nut tree there for some time.’

(Lichtenberk 2002: 284)

Lewo has the three posture verbs which code different temporal extensions of location, not different spatial configuration and orientation of their theme referents.

Many languages use posture verbs to draw attention to the overall shape and spatial configuration of the entity being described as located. However, speakers of some languages seem to specify spatial configuration in locational expressions more

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<sup>4</sup> In this example, the verb *me* also indicates extended temporal duration.

often than others. For example, while speakers of English may, but generally prefer not to use the posture verbs in locative sentences, posture verbs are preferred to the existential in the same types of constructions in Dutch (Newman 2002: 9):

- (43) *There's a lamp (**standing**) in the corner.*  
*Er staat (is) een lamp in de hoek.*

(Newman 2002: 9)

Newman (2002: 7) considers the use of posture verbs to describe the location and spatial configuration of inanimate entities to be an extension of their central meaning, namely to describe human posture. Posture verbs are used to conceptualize the positions of entities surrounding us. This theory fits well with observations that a great many concepts are oriented in our conceptual structure with respect to whether or not they are similar to properties associated with a prototypical person (Lakoff & Johnson 1980: 132). The use of posture verbs to describe human posture is thus considered the prototypical use of verbs like *stand*, *sit*, *lie* et c. In the prototype model, a category is defined with reference to a prototype. The prototype combines the most representative attributes of a category. Entities are considered central members of a category if many of their properties conform to the prototype, and peripheral members if it only has few of the prototype attributes.

Not all works on posture verbs conform to this theory. Hellwig (2003: 143-9) finds it unlikely that the meaning of posture verbs used with inanimate theme referents in Goemai (a West-Chadic language spoken in Nigeria) can be explained with reference to human posture. In Goemai, posture verbs must have formal marking if used to describe human posture, and it is unlikely that the most marked use of the verb is the basic one.

This thesis will argue that speakers of Äiwoo use posture verbs to describe the location and specify the spatial configuration of items which are considered to resemble human or animal postures, and that the properties of the items described by each of the posture verbs are similar to those of the human or animal posture described by the same verb.

### 3.2.1 Posture verbs used with animate theme referents

The five verbs *so* ‘stand’, *tokoli* ‘sit’, *ko* ‘lie’, *bää* ‘lean’, and *täve* ‘hang’ can all be used to describe the maintenance of a posture by a human being or animal. The verbs are formally intransitive: they take prefixed person and number marking<sup>5</sup>:

- (44) *I-ki-so*  
 1MIN.S-IPFV-stand  
 ‘I am standing.’

The verbs may occur with a locative phrase, like the PP in Example 45, but this is optional:

- (45) *Sime i-so ngä nyike nelo nyigi.*<sup>6</sup>  
 person PFV-stand PREP leg/edge water one  
 ‘A person stood on the beach.’

The verbs *so* ‘stand’, *tokoli* ‘sit’, and *ko* ‘lie’ are typically (and probably prototypically) used to describe the maintenance of specific postures by a human being. Their use seems more or less equivalent to their English counterparts. *So* ‘stand’ is used to describe human beings and animals in a position of self supported erection, with a vertical elongation and orientation, and contact with the ground made through the feet:

- (46) *Sime lâ-ki-so ngä nyike nelo=kâ.*  
 person DEIC-IPFV-stand PREP leg/edge water=DEIC  
 ‘A person is standing there on the beach.’

Vertical elongation of the animate being described is not a necessary criterion for the use of *so*, however. Quadrupeds like dogs, are consequently described by the verb *so*

<sup>5</sup> For more information on the person and number marking system on verbs in Äiwoo, see Section 2.4.1.

<sup>6</sup> According to my consultants, the word for ‘beach’ in Äiwoo, *nyike nelo*, literally translates ‘the leg of the sea’. *Nyike* may also be a variant of *nyige* ‘side / edge’. Næss has recorded *nyige nelo* in several elicitations.

when standing on all fours, although their overall shape may be longer horizontally than vertically in this posture:

- (47) *Kuli ki-so.*  
 dog IPFV-stand

'The dog is standing.'

*Ko* 'lie' is used to describe humans and animals in a typical resting posture, with vertical elongation and orientation:

- (48) *I-ki-ko ngä nubo.*  
 1MIN.S-IPFV-lie PREP ground

'I am lying on the ground.'

- (49) *Kuli ki-ko ngä nubo.*  
 dog IPFV-lie PREP ground

'The dog is lying on the ground.'

According to Newman (2002: 7), one can think of the three postures 'stand' – 'sit' – 'lie' as a kind of continuum corresponding to the degree of sensimotor control required to maintain the posture, standing being the posture which requires the most sensimotor control, and lying the posture that requires the least. *Tokoli* is used to describe human beings in various sitting postures, in which the body is relatively compact (having little or no elongation) and a vertical orientation:

- (50) *Jack le-ki-tokoli-ke ngä sea.*  
 J. DEIC-IPFV-sit-DEIC PREP chair

'Jack is sitting here in a chair.'

*Ko* seems to be the only verb which is ambiguous between a stative and an ingressive reading. It can be used to describe either the maintenance of a lying position (48, 49) or the action of assuming one (51, 52), in the last case with the addition of the



segment *li* (which is interpreted and glossed as a form of the directional verb *woli*<sup>7</sup> in this thesis but might also be a directional suffix meaning ‘down’).

- (51) *I-ki-ko-li*                      *ngä*    *nubo.*  
 1MIN.S-IPFV-lie-go.down    PREP    ground

‘I am lying (myself) down on the ground.’

- (52) *Kuli ki-ko-li*                      *ngä*    *nubo.*  
 dog    IPFV-lie-go.down    PREP    ground

‘The dog is lying (itself) down on the ground.’

Separate verb forms exist for the ingressive action of assuming the postures described by *tokoli* and *so*, namely *tääe* / *tââli* ‘sit up / down’ (53) and *liää* ‘stand up’ (54) respectively.

- (53) *I-ki-tââ-li*                              *ngä*    *numomoji.*  
 1MIN.S-IPFV-sit.INGR –go.down    PREP    canoe

‘I am sitting (myself) down on the canoe.’<sup>8</sup>

- (54) *I-ki-liää.*  
 1MIN.S-IPFV-stand.INGR

‘I am standing up.’

The verb *täve* ‘hang’ is used to describe human beings or animals suspended from a high point to which s/he is attached:

- (55) *Mo tepeka le-ki-täve ke.*  
 but flying.fox DEIC-IPFV-hang DEIC

‘But the flying fox was still hanging.’

(Næss p. c.)

<sup>7</sup> For a description of the verb *woli*, see Section 4.2.

<sup>8</sup> When old and useless, canoes are often put upside-down on the ground and used as benches.

- (56) (...) *lâto ku-wä-to=wâ ngââgu kâ kä=nä nä-täve.*  
 then IPFV-go=PH=DEIC bush DEIC want=CL IRR-hang

‘then he went into the woods to hang (himself).’

(Næss p. c.)

The verb *bää* ‘lean’ is used to describe human beings in a posture of diagonal elongation and orientation, supported by the location in both ends:

- (57) *Ilâ Delaa nyibä Usaliki kâ*  
 DEIC blood.3MIN.POSS eye.3MIN.POSS U. DEIC
- i-pu-kä=nä i-so-to-kä i-bää-to-kä ngä topou.*  
 PFV-go-DIR=CL PFV-stand-go.in-DIR PFV-lean-go.in-DIR PREP post

‘So Usaliki’s Eye Blood<sup>9</sup> went and stood and leaned against the post.’

(Næss p. c.)

One might argue that sitting, standing and lying are more prototypical postures than that of hanging and leaning. Hellwig (2002: 155) considers the fact that the form class of posture verbs in Goemai includes the verb *lang* ‘hang/move’ as one of several reasons why the verbs in this form class cannot be explained with reference to human postures. We will not pursue this discussion here. In this thesis the term *posture verb* is used to refer to a verb which can be used to code information on the location and posture of a human being. No structural differences between the verbs *täve* and *bää* and the other posture verbs are attested (except that causative verb forms derived from these verbs *wâ-täve* and *wâ-bää* appears with suffixes which are not found on *wâ-ko* and *wâ-so*, as mentioned in Section 5.3.1).

### 3.2.2 Posture verbs used with inanimate theme referents

The posture verbs described above are also used to describe the location and specify the configuration of inanimate entities in Äiwoo. There are no formal differences between

<sup>9</sup> *Usaliki’s Eye Blood* is a proper name.

the verb forms used to describe animate posture and the verb forms used to describe the location and configuration of inanimate items. The verbs are formally intransitive, thus they take a single argument, which is cross-referenced on the verb as a prefix:

- (58) *Bolo lilu ki-li-tokoli-woli-mä ngä tebol.*  
 ball two IPFV-3AUG.S-sit-go.down-DIR PREP table

‘Two balls are sitting on a/the table.’

Morphological causative verb forms can be formed from some of the posture verbs by the addition of the prefix *wâ*. The same sorts of items occur as theme referents in the intransitive posture verb (59) and its causative counterpart (60). The intransitive verb takes the theme as a subject and the causative verb takes the theme as a direct object. More information on the causative forms is found in Section 5.3.

- (59) *Maniok nyigi ko-li-mä ngä nâmââ.*  
 cassava one lie-go.down-DIR PREP platform

‘A/the cassava is lying on a/the table.’

- (60) *Sime wâ-ko-to maniok ngä bokis.*  
 person CAUS-lie-go.in cassava PREP box

‘A/the person puts a/the cassava into a/the box.’

Both intransitive and transitive verb forms occur with a PP expressing location or goal. There are examples of postural verbs with animate subject referents without a locative phrase, but all postural based locative verbs with inanimate theme referents in the test data have a PP specifying location, as illustrated in the examples above (58, 59). Posture verbs used with inanimate theme referents are found in verb junctures that will be characterized as serial verb constructions on the nuclear (61) and core layer (62) of the clause structure (see descriptions in Section 6.2 and Section 6.3, respectively):

- (61) *Souspane ki-tokoli-woli-mä ngä tebol nyigi.*  
 pot IPFV-sit-go.down-DIR PREP table one

‘A/the pot is sitting on a/the table.’

- (62) *Nyena* *wâ-ki-e-i* *ko-li-mä* *ngä* *tebol.*  
 tree CAUS-IPFV-go.up-3AUG.A lie-go.down-DIR PREP table

‘A/the stick is put up on a/the table, so that it is lying.’

It will be seen from the data presented in the following that posture verbs encode information on the overall shape, spatial configuration and orientation of the inanimate entities described as located in Äiwoo.

The notion of vertical versus horizontal orientation seems to be crucial for the choice between the verbs *so* and *tokoli* on the one hand, and the verb *ko* on the other. In one of the surveys on which this thesis is based, the consultants were asked to describe film clips showing several different items appearing in different locations<sup>10</sup> (for more information on the tests, see Section 1.2.1). Generally, the verb *so* was used to describe the location of all single items with a distinguishable vertical elongation and orientation, such as a bottle standing upright on a table (63), a tree (64), and a cassava root forked between two branches in a tree (65):

- (63) *Teenu nyigi ki-so-li-mä* *ngä* *tebol.*  
 bottle one IPFV-stand-go.down-DIR PREP table

‘A/the bottle is standing on a/the table.’

- (64) *Nyena* *nyigi i-to-kâ-no* *ki-so.*  
 tree one PFV-see-DIR-1MIN.A IPFV-stand

‘I saw a/the tree standing.’

- (65) *Maniok nyigi ki-so-li-mä* *ngä nyena.*  
 cassava one IPFV-stand-go.down-DIR PREP tree

‘A/the cassava is standing in a/the tree.’

*So* is also used to describe the location of items in a canonical position which are no longer vertically than horizontally, if the item is considered to have legs (66), rather like the dog in Example 47 above.

<sup>10</sup> Descriptions of the stimuli is found in the Appendix.

- (66) *Tebol to-kâ-no ki-so, ki-to-li-mä*  
 table see-DIR-1MIN.S IPFV-stand IPFV-be-go.down-DIR  
*ngämi=nâ nuwâle.*  
 ANAPH=DEIC rope.

‘I see a table standing, on which there is a rope.’

Speakers of Äiwoo seem to prefer to use *so* to *tokoli*, when describing objects with a distinguishable vertical elongation (63-65). Entities with little or no elongation and vertical orientation are typically described by the use of *tokoli*:

- (67) *Pot ki-tokoli-woli-mä ngä tebol.*  
 pot IPFV-sit-go.down-DIR PREP table

‘A/the pot is sitting on a/the table.’

*Tokoli* is also preferred when describing symmetrical or near-symmetrical entities with no salient orientation, such as a ball (68), and a cube, like a cardboard box (69).

- (68) *De-ku-lu-popoi ki-tokoli-woli-mä ngä tebol.*  
 NOM-IPFV-3AUG.S-kick IPFV-sit-go.down-DIR PREP table

‘A/the ball is sitting on a/the table.’

- (69) *(..) bokis ki-tokoli-woli-mä ngä tebol.*  
 box IPFV.sit-go.down-DIR PREP table

‘(..) a/the box (is) sitting on a/the table.’

The fact that items described by the verbs *so* and *tokoli* are described by *ko* when considered to be lying on their side (70, 71), indicates that the use of both *so* and *tokoli* requires that the theme referent is considered to be in an upright position (of vertical orientation).

- (70) *Pot wâ-ko-li ngä nyigelebiä ko-li-mä ngä tebol.*  
 pot CAUS-lie-DIR PREP its.side lie-go.down-DIR PREP table

‘A/the pot put down on its side, lay on a/the table.’

- (71) *Teenu nyigi ko-li-mä ngä nämââ.*  
 bottle one lie-go.down-DIR PREP platform

‘A/the bottle lies on a/the table.’

Furthermore, *so* and *tokoli* are generally used to describe items which are able to support themselves, that is, able to maintain their own position without the need of a big contact area with the surface. However, there are exceptions: the cassava root described in Example 65, is supported by two branches, which enables its vertical erection. Without this support, the cassava would be in a position of horizontal elongation, due to its long shape, and lack of a *base*. By a *base*, I mean a clearly distinguishable section of an item’s shape, which enables the item to support itself, and through which contact between the item and the surface is realized. For example, the base of a bottle is its bottom. Generally, items without a base are unable to maintain an erect position, and tend to be in a position of horizontal orientation.

Entities which are considered to have a horizontal orientation are generally described by the verb *ko*. Two-dimensional objects which are unable to maintain a vertically erect position due to their flat shape and the flexibility of their material, such as a coil of rope or a folded cloth, are generally described by the use of *ko* (as illustrated in Example 72 and 73 respectively).

- (72) *Nuwâle ko-li-mä ngä tebol.*  
 rope lie-go.down-DIR PREP table

‘A/the rope lay on a/the table.’

- (73) *Nupää mi-lobwaku-i ko-li-mä ngä tebol.*  
 cloth NOM-fold-3AUG.A lie-go.down-DIR PREP table

‘A/the folded cloth lay on a/the table.’

Items with a horizontal elongation are typically described by *ko*, such as a cassava root (74) and a stick (75).

- (74) *Nyike manioki ko-li-mä ngä tebol nyigi.*  
 root cassava lie-go.down-DIR PREP table one

‘A/the cassava root lay on a/the table.’

- (75) *Namugile*    *nula nyenaa*    *ko-li-mä*    *ngä*    *tebol.*  
 piece            branch tree            lie-go.down-DIR    PREP    table

‘A/the piece of a branch lay on a/the table.’

As can be seen from the data above, *so* and *ko* are used to describe inanimate entities with properties resembling the postures of human beings and animals described by the same verbs. *So* is only used with inanimate themes which show properties in shape and configuration which resembles a standing human being, such as vertical elongation and a base. It could be argued that the base of an inanimate figure considered as ‘standing’ could be a metaphorical extension of human feet. Furthermore, the inherent ability to support itself in most inanimate entities described by the verb *so*, resembles the high degree of sensimotor control described by Newman (2002) which a human being must possess in order maintain a posture considered as standing. Like human beings in a sitting posture, entities described by the verb *tokoli* have little or no elongation, vertical orientation, and a compact or symmetrical / near-symmetrical shape. Theme referents used with the verb *ko* show properties which resemble animate theme referents of the posture verb *ko*. The lack of self-supportedness of theme referents in sentences such as those described above (72, 73) may be a metaphorical extension of the lack of sensimotor control associated with lying human beings, and both animate and inanimate themes in clauses with the verb *ko* are considered to have a horizontal orientation, and often elongation.

As will be seen in Section 3.3, another verb may be considered appropriate when describing multiple items than the one used to describe one single item, if the items are conceptualized as a whole. Thus, whereas one bottle is described by *so* (as illustrated in Example 63 above), two bottles can be described by *tokoli*:

- (76) *Teenu lilu*    *ki-tokoli-woli-mä*    *ngä*    *nämââ.*  
 bottle two    IPFV-sit-go.down-DIR    PREP    platform

‘Two bottles are sitting on a/the table.’

Note that the verb does not have augmented aspect marking. The compact shape and the lack of vertical elongation of the two bottles conceptualized as a whole, seem to be better described by *tokoli* than *so*.

When the consultants were asked to describe items suspended from a branch, the verb *täve* ‘hang’ was used. The verb was used to describe the location and configuration of flexible items hanging over a branch, such as a rope and a table cloth, and a cassava suspended in a string from a branch:

- (77) *Namugile nuwâle o nupou ki-täve-li ngä nula nyenaa.*  
 piece rope or string IPFV-hang-DIR PREP branch tree

‘A/the piece of rope or string is hanging on a/the tree branch.’

- (78) *Nupää mi-lobwak-i ki-täv-oli-mä ngä nyenaa.*  
 cloth NOM-fold-3AUG.A IPFV-hang-go.down-DIR PREP tree

‘A/the folded cloth is hanging in a/the tree.’

- (79) *Maniok ki-täve ngä nuwâle.*  
 cassava IPFV-hang PREP rope

‘A/the cassava is hanging in a/the rope.’

The verb *bää* ‘lean’, was used with inanimate subject referents being long and in a position of slightly diagonal, near-vertical orientation, and diagonal elongation, being supported in both ends. A stick, a cassava root, and a ladder leaned against a tree were all described by the verb *bää*:

- (80) *Dâmbulä nyenaa ki-bää ngä none nyenaa.*  
 piece tree IPFV-lean PREP trunk tree

‘A/the stick is leaning against a/the tree.’

- (81) *Maniok eâ bää-kä ngä nula nyenaa.*  
 cassava DEM lean-DIR PREP branch tree

‘A/the cassava is leaning against the branch of a/the tree.’



- (82) *De-ki-li-ngâbw-e=nä*                      *bää-kä*                      *ngä nuwo nyenaa.*  
 NOM-IPFV-3AUG.S-climb-go.up=CL    lean-DIR                      PREP    root    tree

‘A/the ladder is leaning against the root of a/the tree.’

Although it might be argued that it is far less common to find human beings in a hanging or leaning posture, than standing, sitting and lying, the configurations and orientations of inanimate themes described by the verbs *täve* and *bää* resemble the human and animal postures described by the same verbs. *Täve* is used to describe animates or inanimate items suspended from a high point, and *bää* is used to describe inanimates or animates with a diagonal elongation and orientation, supported in both ends by the location.

### 3.2.3 Other metaphorical use of posture verbs

Posture verbs are also used to describe abstract phenomena, as in the following example where the verb *tokoli* is used to describe a point in time:

- (83) *Ilä nyidâbu mi-tokoli-kä=nä (..)*  
 then    day                      NOM-sit-DIR=CL

‘Then, the next day (Lit. the day that sits next).

(Næss p. c.)

The verb *tokoli* can also be used in the sense ‘remain’ or ‘be left’, as in the following example:

- (84) *Mo tepulâka na-i-le ki-tokoli=to=wä*  
 but    taro                      POSS:FOOD-3AUG.S-UA                      IPFV-sit=PH=CL  
*laki=to (..)*  
 be.small=PH

‘But there was only a little bit left of their taro, (..)’

(Næss p. c.)

A similar metaphoric use can be found in Foley's (1986: 147, 148) description of Kiwai (a Papuan language spoken along the coast of the Western and Gulf Provinces of Papua New Guinea), where the verb *omi* 'sit' with an aspectual suffix indicating the continuous performance of an action means 'stay'

- (85) *omi*  
sit  
'sit'

(Foley 1986: 147)

- (86) *omi-diro*  
sit-CONT  
'stay'

(Foley 1986: 148)

The verb *so* can also be used metaphorically, like in the example below, where it is used to describe a jet of blood forced up into the air and plummet down again into a bowl:

- (87) *Delââ êângâ*      *lâ*    *ki-so*      *ngä*    *nyibä=nâ*  
blood DEM            DEIC    IPFV-stand    PREP    eye.3MIN=DEIC
- lâ*    *ki-so*      *ngä*    *daa*      *täpilo* *kâ*  
DEIC    IPFV-stand    PREP    bottom      bowl    DEIC

'The blood flowed from his eye and into the bowl.'

(Næss p.c.)

Rather similar to the use of *so* in the example above, is the use of the verb *tui* 'stand' in Manam (a language spoken in Papua New Guinea and Indonesia) to describe smoke raising in a column from a fire:

- (88) *Ewa kasu*                      *maka* *maka* *i-tui-tui*  
fire    smoke.3SG.AD            here    here    3SG.REAL-stand-RED

‘The smoke of the fire is rising here’

(Lichtenberk 2002: 277)

### 3.3 The existential verb

As in many other languages, the location of inanimate entities in Äiwoo can be described by using either the existential verb *to* or an appropriate posture verb. An existential verb is a verb which is typically used to describe states of existence.

The existential verb *to* ‘be’ is formally intransitive. Whether or not *to* can form morphological causative forms is discussed in Section 5.3. Serial verb constructions with *to* combined with other verbs are not attested.

The verb *to* is generally used to describe states of existence (89). It can also be used to describe the location of a theme referent (90). When used as a locative verb it is always followed by a locative phrase, like the PP *ngä tebol* in Example 90.

- (89) *(..)* *mi-uvä=nä*      *ngâ*    *nuwosi*      *ki-to*      *le*  
 NOM-four=CL      PREP    clan            IPFV-exist      DEIC
- Nyiwoo*      *ke.*  
 R.I.            DEIC

‘(..) the fourth of the clans that exist here in the Reef Islands.’

(Næss p.c.)

- (90) *Nuwo bin ki-to-li-mä*      *ngä*    *tebol.*  
 pile    bean    IPFV-be-go.down-DIR    PREP    table

‘A/the pile of beans is on a/the table.’

The verb *to* generally occurs in locative sentences with themes representing multiple or mass items, such as a pile of beans (as illustrated above in Example 90), or two balls, as in the following sentence:

- (91) *De-ku-lu-popoi*                      *lilu*    *ki-to-li-mä*                      *ngä*    *nämââ.*  
 NOM-IPFV-3AUG.S-kick                      two    IPFV-be-go.in-DIR                      PREP    platform

‘Two balls are on the a/the table.’

Recall that one single ball is generally described by the verb *tokoli* (as ‘sitting’):

- (92) *De-ku-lu-popoi*                      *ki-tokoli-woli-mä*      *ngä*      *nämââ*.  
 NOM-IPFV-3AUG.S-kick              IPFV-sit-go.down-DIR PREP      platform

‘A/the ball is sitting on a/the table.’

Two balls may also be described by *tokoli* (93), although *to* is more commonly used with themes representing multiple items.

- (93) *Bolo lilo ki-li-tokoli-woli-mä*                      *ngä*      *tebol*.  
 ball      two      IPFV-3AUG.S-sit-go.down-DIR PREP      table

‘Two balls are sitting on a/the table.’

It seems that speakers of Äiwoo tend to use *to* when the overall spatial configuration of the item(s) located cannot be adequately described by any of the posture verbs. Two balls can either be conceptualized as two individual balls, and thus be described using the same verb as with a single ball, or they can be conceptualized as a whole. Note that *to* in Example 91 does not have augmented person and number marking, whereas *tokoli* in Example 93 does. When conceptualized as a whole, the overall shape and spatial configuration may be too unconventional to fit the meaning of any of the posture verbs. As demonstrated in Example 90 above, mass items are also generally described by the use of *to*, probably due to their unconventional and sometimes inconstant shape.

In his study of posture verbs in Dutch, Lemmens (2002: 123-4) finds that whether or not the theme is in containment determines which verb is used to describe its location. The notion of containment does not seem to be of any significance for the use of *to*. Mass objects, like water and beans are described by *to* if not contained (as in Example 90 above), and if contained in a pot or a coconut shell (94, 95):

- (94) *Souspane*              *ki-to-la-mä*                      *nuwoi=kä*              *eâ* (..)  
 pot                      IPFV-be-go.out-DIR              water=DEIC              DEM

‘A/the pot with water in it (..)’

- (95) *Nuo bin ki-to-lâ-mä ngä debolowanenu (..)*  
 pile beans IPFV-be-go.out-DIR PREP coconut.shell

‘A/the pile of beans are in a/the coconut shell (..)’

Unfortunately, there are no data on items normally described by the posture verbs described in 3.2.2 in containment.

The verb *to* was also used to describe an uncoiled rope spread out on a table in an unorganized manner:

- (96) *Tebol to-kâ-no ki-so ki-to-li-mä*  
 table see-DIR-1MIN.A IPFV-stand IPFV-be-go.in-DIR

*ngämi=nâ nuwâle.*  
 ANAPH=DEIC rope

‘I see a/the table standing, and on it is a/the rope.’

Whereas, a coil of rope is described as lying:

- (97) *Nuwâle ko-li-mä ngä tebol.*  
 rope lie-go.down-DIR PREP table

‘A/the rope lies on a/the table.’

The configuration of the rope described in Example 96 probably does not fit any of the meanings of the posture verbs (which are described above in Section 3.2.2).

As we have seen, the use of the verb *to* in locative sentences is almost limited to themes representing multiple or mass items, which one might argue is more difficult to define with regard to overall shape and configuration than single items. Single items are generally described by posture verbs. Furthermore, whenever the verb *to* is used to describe the location of single items, it describes items of unconventional shapes and configurations. This indicates that speakers of Äiwoo find it important to specify the overall shape and spatial configuration of items described as located, and that they try to be specific regarding this information whenever possible. When the item(s) described as located cannot be adequately described by any of the posture verbs, however, the existential verb *to* is used. Hellwig (2003:153) describes a similar use in Goemai, where

the existential verb is used only if the locative relation is unknown, either because the relation is invisible or because there is more than one theme referent. When the locative relation is known, the appropriate posture verb is used. She concludes that the use of the existential verb indicates that no posture verb is applicable.

### 3.4 Summary

When describing the location of inanimate entities, speakers of Äiwoo must choose to use either the existential verb or one of several posture verb forms.

The posture verbs *so* ‘stand’, *tokoli* ‘sit’, *ko* ‘lie’, *bää* ‘lean’, and *täve* ‘hang’ can be used both to describe human and animal posture and location, and to describe the location and specify information on overall shape, spatial configuration and orientation of inanimate items in Äiwoo. The data seem to indicate that speakers of Äiwoo use posture verbs to describe entities with an overall shape, spatial configuration and orientation that resembles the human or animal postures described by the same verbs.

The following features of the human and animal postures are similar to the overall shape and spatial configurations of inanimate items described by posture verbs in Äiwoo:

- Standing: vertical elongation and orientation, contact with the ground via legs or another form of base
- Sitting: relatively compact, little or no elongation, vertical orientation, contact with the ground through a base
- Lying: horizontal elongation and orientation, unable to maintain an erect position
- Leaning: diagonal elongation and orientation, contact with the location through both ends
- Hanging: suspended from a high point to which the theme referent is attached

These data support the position of Newman (2002) amongst others, that the use of posture verbs to describe the location of inanimate entities is a metaphorical extension of the use of the same verb forms to describe human postures.

Morphological causative verb forms can be derived from several of the posture verbs, these are described in Section 5.3. Some of the posture verbs combine with other verbs in serial verb constructions, both on the nuclear and core layer of the clause structure. This is described in Section 6.2 and 6.3, respectively.

An existential verb is a verb which is mainly used to describe states of existence. The existential verb *to* 'be' is generally preferred when describing the location of multiple or mass items in Äiwoo. A posture verb can also be used to describe the location of more than one item, but this is far less common than the use of *to*. It seems that posture verbs are used if the items are conceptualized as several individual items, and *to* is used if the items are conceptualized as a whole. This is probably because the overall shape and configuration of a set of items is more difficult to define than that of a single entity. The fact that the posture verbs have augmented marking whereas the existential does not when used to describe a set of several items, supports this hypothesis. Furthermore *to* is also used to describe an uncoiled rope spread on a table, an item with a shape that cannot be described adequately by any of the posture verbs. These data and the fact that the use of posture verbs in locative sentences is much more frequent than that of *to*, indicates that speakers of Äiwoo consider it important to specify information on overall shape, spatial configuration and orientation of the items described as located, and try to include this information whenever possible by the use of posture verbs

Whether or not a morphological causative verb can be derived from the existential verb is discussed in Section 5.3. The existential verb is not attested combined with other verbs in serial verb constructions.

Table 3.4. Attested use of the stative locative verbs

<i>to</i> 'be'	<p>The existence of human beings and animals</p> <p>The existence of inanimate entities</p> <p>The location of inanimate entities</p>
<i>so</i> 'stand'	<p>The location of human beings or animals in a standing posture, or the maintenance of a standing posture by human beings or animals</p> <p>The location of inanimate items in a state of vertical elongation and orientation, often with a base or legs</p>
<i>tokoli</i> 'sit'	<p>The location of human beings or animals in a sitting posture, or the maintenance of a sitting posture by human beings or animals</p> <p>The location of inanimate items with a vertical or no salient orientation, little or no elongation, sometimes with a base</p>
<i>ko</i> 'lie'	<p>The location of human beings or animals in a lying posture, or the maintenance of a lying posture by human beings or animals</p> <p>Human beings or animals assuming a lying posture</p> <p>The location of inanimate items with a horizontal elongation and orientation, sometimes flexible</p>
<i>bää</i> 'lean'	<p>The location of human beings or animals in a leaning posture, or the maintenance of a leaning posture by human beings or animals</p> <p>The location of inanimate items with a diagonal elongation and orientation, supported in both ends</p>
<i>täve</i> 'hang'	<p>The location of human beings or animals in a hanging posture, or the maintenance of a hanging posture by human beings or animals</p> <p>The location of inanimate items suspended from a high point to which it is attached</p>



## Chapter 4

# Motion and path verbs

### 4.1 Introduction

A number of verbs coding motion and path typically occur in serial verb constructions with the locative verbs described in the previous chapter and the causative verbs described in the next. They also form morphological causative forms (see Section 5.3). A short presentation of these verbs will thus be necessary before moving on to causative verb forms and serial verb constructions. Unfortunately, the amount of data available on these verbs is too limited for a detailed description. Verbs coding motion and direction is presented in Section 4.2, verbs which seem to encode motion and route<sup>11</sup> are described in Section 4.3, and a short summary is given in Section 4.4.

### 4.2 Motion and direction verbs

Whereas deictic direction is marked on verbs by directional affixes (see Section 2.7), other spatial direction is expressed by independent verb stems in Äiwoo. The coding of direction in independent verb stems is found in several languages in the area. Whereas direction is usually coded in non-verbal affixes in the neighbouring Polynesian language Vaeakau-Taumako and other Polynesian languages, there are some independent verb stems coding directions, like the verb *iho* ‘go down’ in Vaeakau-Taumako:

(98) *Iho-mai ki lalo!*  
 go.down-DIR PREP under

‘Come down to me!’

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<sup>11</sup> For explanations of the different types of paths (route, direction and so on), see Section 1.3.1.

(Hovdhaugen p. c.)

Independent verb stems coding direction are also found in several Papuan languages. Amongst others in Dani (Foley 1986: 149), where they typically occur in serial verb constructions, coding the direction of activities described in other verbs, as in the following examples:

- (99) *pi*                      *aka*  
 descend                      come-REAL-3SG.S  
 ‘he came down’

(Foley 1986: 149)

- (100) *ki*                      *aka*  
 enter                      come.REAL.3SG.S  
 ‘he came in’

(Foley 1986: 149)

The four verbs *ee* ‘go up’, *woli* ‘go down’, *to* ‘go in’ and *lâ* ‘go out’ conflate information on motion and direction in Äiwoo. The verbs are formally intransitive: they take prefixed subject marking, as demonstrated below:

- (101) *Lâto*    *ku-lu-pwoli<sup>12</sup>-ute-le*                      *ku-lu-pokâu-le*                      *nâ.*  
 then    IPFV-3AUG.S-go.down-again-UA                      IPFV-3AUG.S-swim-UA                      DEIC

‘Then they went down again to swim.’

The verbs can form morphological causative verb forms, with the addition of the prefix *wâ* (as described in Section 5.3):

- (102) *Nyena*                      *wâ-i-woli-i*                      *ngä*    *nubo.*  
 tree                      CAUS-PFV-go.down-3AUG.A    PREP    ground

<sup>12</sup> *w > pw* in combination with the 3augS marker *lu*, see Section 2.2.

‘A/the stick is put down on a/the ground.’

The verbs frequently occur in nuclear layer serial verb constructions:

- (103) *De-ku-lu-popoi*                      *ki-tokoli-woli-mä*    *ngä*    *tebol.*  
 NOM-IPFV-3AUG.S-kick              IPFV-sit-down-DIR    PREP    table

‘A/the ball is sitting on a/the table.’

All four verbs fill the same positional slot in nuclear layer serial constructions. Motion and direction verbs in serial verb constructions are described in Chapter 6.

There are few attestations of the verbs used alone. Examples include the following sentences:

- (104) *Dekuluo*              *ku-ee.*  
 bird                      IPFV-go.up

‘The bird is going up.’

- (105) *(..) lâto*              *woli=to=wâ*              *ngä*    *nyike*              *nelo*    *kâ.*  
 then                      go.down=PH=DEIC    PREP    leg/edge              sea    DEIC

‘(..) then he went down to the beach.’

- (106) *Li-pwä-le*              *li-pwä-le,*              *li-i-to-kä-le,*  
 3AUG.S-go-UAUG              3AUG.S-go-UA              3AUG.S-?-go.in-DIR-UA

*ngä*    *naa*    *Topaapâ.*  
 PREP    point    T.

‘They went on and on, and went to shore at Natopaapa.’

- (107) *Li-pu-mä-le*              *ngä*    *nelo,*    *li-i-lâ-le.*  
 3AUG.S-go-DIR-UA              PREP    sea    3AUG.S-?-go.out-UA

‘They went into the sea, they went out.’

(The segment *i* that follows after the 3augS marker *li* in the last two examples, is still unclassified, and is thus glossed by a question mark).

The verbs, *ee* and *woli*, are used to describe animate and inanimate motion in opposite spatial directions (up and down respectively) along a conceptual vertical line, and are thus glossed ‘go up’ and ‘go down’ respectively. Both verbs have alternating forms, *ee/e* and *woli/oli* (*li* is probably also an alternating form of *woli*). The verbs may also be used metaphorically, as demonstrated in (108), where the verb *ee* does not code spatial direction, but describe an increase of fighting:

(108) (..) *nyiiwo*      *lâ*      *ku-ee=to=wâ* (..)  
 war                      DEIC      IPFV-go.up=PH=DEIC

‘(..) the fighting is increasing (..)’

The verbs *to* and *lâ* describes motion into and out of a location, respectively. As can be seen from Examples 106 and 107, speakers of Äiwoo use the verb *lâ* ‘go out’ to express movement towards or into the sea, and *to* ‘go in’ to express movement in the opposite direction, towards shore or towards inland, whereas in the neighbouring language, Vaeakau-Taumako, the directionals *ake* ‘down’ (109, 110) and *iho* ‘up’ (111) are used. Direction towards the water is ‘down’ in Vaeakau-Taumako and ‘out’ in Äiwoo, and ‘up’ in Vaeakau-Taumako and ‘in’ in Äiwoo is used to express direction away from the water.

(109) *A*      *iau*      *ne*      *onia-ake*      *te*      *puke.*  
 ART      1SG.S      PAST      push-up      ART      canoe

‘I pushed the boat up on land.’

(Hovdhaugen p. c.)

(110) *Hai*      *ne*      *mua-ke*      *la*      *paleake*      *na.*  
 one      PAST      first-up      DEM      paddle.ashore      DEM

’The first one paddled ashore’

(Hovdhaugen p. c.)

(111) *Ko-i*                      *oloa-oho*      *te*      *botu*      *ona*      *i*      *thaupé.*

PFV-3SG.S push-down his boat his PREP sea

‘He pushed his boat out into the sea.’

(Hovdhaugen p. c.)

### 4.3 Motion and route verbs

There are also verbs in Äiwoo which conflate information on motion and the type of path Jackendoff refers to as a *route* (1983: 164). In locational expressions where the theme moves along a route, the path is related to some point(s) in the interior of the location. Examples of routes includes *along the river* and *inside the tunnel*.

The verbs *wopo* (sometimes *opo*) ‘emerge’ and *poli* ‘go between’ are motion verbs which specify a route in Äiwoo. *Wopo* and *poli* are formally intransitive, as can be seen from their prefixed subject marking:

(112) *Lu-popo*<sup>13</sup>-*ee-mä*                      *ngä*    *nye-polââ*.  
3AUG.S-emerged-go.up-DIR    PREP    place-light

‘They came up into the light.’

(113) *Ku-lu-poli*                                      *vi*    *ngä*    *numoleaa*    *neio*    *kâ*.  
IPFV-3AUG.S-go.between                      down    PREP    between                      hill                      DEIC

‘They go down between the hills.’

Both verbs form morphological causative forms by the addition of the prefix *wâ* as illustrated with *poli* in Example 114. Morphological causatives derived from *poli* and *wopo* are described in Section 5.3. The verbs combine with other verbs in serial verb constructions (115).

(114) (..) *teenu*                      *wâ-i-poli-to*                                      *ngä*    *numolea*                      *nyenaa*.  
bottle                                      CAUS-PFV-go.between-go.into                      PREP    between                      tree

‘(..) a/the bottle is put in between (the branches of) a/the tree.’

<sup>13</sup> *W > p* in combination with 3augS *lu*, see 2.2.

- (115) (..) *bolo*            *i-vite-poli-to-i*                            *ngä*    *nyenaa.*  
 ball                            PFV-put-go.between-go.into    PREP    tree

‘(..) a/the ball is out in between (the branches of) a/the tree.’

*Wopo* and *poli* fill the same positional slot in nuclear layer serial verb constructions. The verbs *wopo* and *poli* combined with other verbs are serial verb constructions is described in Chapter 6.

*Poli* describes the theme going through a passage in the location, as illustrated in Example 113 above. *Wopo* describes the theme emerging, as in Example 112, and can also be used in an extended sense, to describe things appearing, like in:

- (116) *Ile*    *singedâ*                            *wopo-lâ-mä*                            *ngä*    *totokale*                            *ke* (..)  
 DEIC    girl                                    emerge-go.out-DIR                            PREP    picture                                    DEIC

‘The woman appearing in this picture (..)’

#### 4.4 Summary

Äiwoo has several verbs conflating information on motion and path, which often combine with other verbs in serial verb constructions, but seldom occur alone.

Whereas deictic direction is marked on the verbs by suffixation, spatial direction is encoded in verbs, which describe motion in a specific direction when used alone, and specifies the direction or orientation of the theme in events and states respectively in serial verb constructions (see Chapter 6).

There are also verbs coding motion and route.

## Chapter 5

# Causative verbs in locative sentences

### 5.1 Introduction

Äiwoo has both lexical causatives and morphological causatives. Morphological causatives are formed by adding the prefix *wâ*, which was introduced in Section 2.4.2, to intransitive and semi-transitive verbs. This chapter investigates the use of causative constructions in locative sentences in Äiwoo. A short description of causative verbs in general is offered in Section 5.2. Morphological causatives are treated in Section 5.3 and lexical causatives are treated in Section 5.4. Section 5.5 gives a short summary.

### 5.2 Causative verbs

Causative verbs are verbs which describe causative situations. In order for a situation to be considered causative, it must consist of two events,  $e_1$  and  $e_2$ , where  $e_1$  is seen to cause  $e_2$ , and  $e_2$  is seen to be an effect of  $e_1$ . Most causative verbs can thus be classified as such by testing whether they may be paraphrased as two events, one cause and one effect. For example, the verbs in (117) may be paraphrased as shown in (118):

(117) *Mary dropped the book*  
*Sarah hides the letter*

(118) *Mary caused the book to fall*  
*Sarah causes the letter to be hidden*

The expressions in Example 117 and 118 are not synonymous, but the causative paraphrase test can be effective in telling us which transitive verbs are not causative.

The sentence in Example 119 cannot be correctly paraphrased as the sentence in Example 120, thus the sentence in Example 119 cannot be considered causative:

(119) *Leylah liked the book*

(120) *\*Leylah caused the book to be liked*

Like many other languages, Äiwoo has two types of causative verbs, one which is morphologically regular (and probably) productive, and one which is morphologically irregular and non-productive. Morphologically regular causative verbs in Äiwoo are formed by adding the prefix *wâ* to intransitive (121 > 122) or semi-transitive verbs.

(121) *I-nubo*            *go*    *nyagovä.*  
 PFV-die            PREP    disease

‘He died from the disease.’

(Næss p. c.)

(122) *I-wâ-nubo-wâ-no.*  
 PFV-CAUS-die-AO-1MIN.A

‘I killed him.’

(Næss p. c.)

Since morphologically regular causative verbs are formed by a regular derivational pattern, they need not be listed as independent forms in the lexicon, whereas morphologically irregular causative verbs must be listed in the lexicon because of their irregularity. Therefore, morphologically regular and irregular causative verb forms will be referred to as morphological and lexical causatives, respectively, in the following.

All verbs described in this chapter describe situations of manipulative causation, that is, situations where the causer physically manipulates the causee effecting the caused event, the causee being an inanimate, and thus nonvolitional entity. The caused event involve motion of the theme.



### 5.3 Morphological causatives

Morphological causative verbs in Äiwoo consist of the morpheme *wâ* prefixed to an *underlying verb* (which is the term used to refer to the verb from which a morphological causative is formed in the following). The morphological causative verb seems to function as a single nucleus: it takes a single set of arguments, and a single set of person and number marking<sup>14</sup>, as illustrated in Example 122 above. Morphological causatives formed by the addition of the prefix *wâ* can be intransitive, semi-transitive or transitive, as described in Section 2.4.2.

Transitive morphological causative forms can be derived from many of the verbs described in the foregoing chapters (3 and 4). An agent (a causer) is introduced as a subject, and the subject argument of the underlying verb becomes the direct object (undergoer) of the corresponding causative:

- (123) *Teenu*            *nyigi ko-li-mä*            *ngä nāmâ.*  
 bottle            one lie-go.down-DIR            PREP platform

‘A/the bottle lay on a/the table.’

- (124) *Sime i-po-mä wa-kä=nä teenu*  
 person PFV-come-DIR take-DIR=CL bottle

*wâ-ko-e*            *ngä tebol.*  
 CAUS-lie-go.up            PREP table

‘A/the person came (and) took a/the bottle and put it up on a/the table.’

The agent is often not overtly expressed in the sentence. In (126), *nyike manioki* is the direct object:

- (125) *Maniok*            *nyigi ko-li-mä*            *ngä nāmâ.*  
 cassava            one lie-go.down-DIR            PREP platform

‘A/the cassava lay on a/the table.’

- (126) *Nyike manioki*            *wâ-ko-e-i*            *ngä tebol*

<sup>14</sup> The ability to take double aspect marking described in Section 5.3.2 is puzzling, though, if the morphological verb constitutes a single nucleus.

root cassava CAUS-lie-go.up-3AUG.A PREP table

‘A/the cassava root is laid up on a/the table’

In the absence of an overtly marked agent, the agent is marked on the verb by a 3augA marker (even if the speaker happens to describe an action performed by one single person), as demonstrated in Example 126 above. It is the direct object of the causative which is the theme of the locative sentence, the item which is described as moving or being located relative to a location or goal. A PP expressing the goal follows all of the productive and lexical causatives in locative sentences in the elicited material, for example *ngä tebol* in (124) and (126).

Some of the morphological causatives derived from posture verbs and motion and path verbs combine with motion and path verbs in nuclear layer serial verb constructions (as illustrated above in Examples 124 and 126, where the morphological causative verbs combine with the motion and direction verb *ee*). Serial verb constructions are described in the next chapter.

As pointed out by Shibatani (1975: 40), causative verbs, and productive causatives in particular, are often semantically abstract, in the sense that they do not specify what the causer does to bring about the caused state or event (the effect). The semantic relationship between the productive causative verbs described here and its underlying verb consists in the underlying verb describing the resulting state or event (the effect) of the action described by the causative construction. For example, *ko* ‘lie’ or ‘lie down’ describes the result of *wâ-ko* ‘cause to lie’ in the examples above (124, 126). The same semantic relationship holds for most of the motion and path verbs (128, 130, 132) and posture verbs (134, 136, 138) which occur in morphological causative constructions:

(127) *Lato woli-to-wâ ngä nyike nelo kâ.*  
 then down-go.in-DIR PREP leg sea DEIC

‘Then he went down to the beach.’

(Næss p. c.)

- (128) *Dabulä nyenaa wâ-i-woli ngä nubô.*  
 piece tree CAUS-PFV-go.down PREP ground

‘A/the stick is put down on the ground.’

- (129) *Dekuluo ku-ee.*  
 bird IPFV-go.up

‘The bird is going up.’

(Næss p. c.)

- (130) *Nyeleä nupou wâ-ki-e-i ngä tebol nyigi.*  
 coil rope CAUS-IPFV-go.up-3AUG.A PREP table one

‘A/the coil of rope is put up to a/the table.’

- (131) *Ku-lu-poli vi ngä numoleaa neio kê.*  
 IPFV-3AUG.S-go.between down PREP between hill DEIC

‘They go down between the hills.’

(Næss p. c.)

- (132) *Sime nyigi i-to-kâ-no ki-towa maniok*  
 person one PFV-see-DIR-1MIN.A IPFV-hold cassava

*wâ-i-poli-to-i ngä numoleaa nyenaa.*  
 CAUS-PFV-go.between-into-TR PREP between tree

‘I saw a person holding a cassava and putting it in between (the branches of a) tree.’

- (133) *Dâmbulä nyenaa ki-bää-eâ ngä none nyenaa.*  
 piece tree IPFV-lean-AO PREP root tree

‘A/the stick is leaning towards the root of a/the tree.’

- (134) *Dabulä nyenaa wâ-bää-eâ*  
 piece tree CAUS-lean-AO

*ngä nuwo nyenaa.*  
 PREP root tree

‘A/the stick is leaned towards the root of a/the tree.’

- (135) *Teenu eâ ki-so-opo-li-mä ngä nämââ.*  
 bottle DEM IPFV-stand-emerge-go.down-DIR PREP table

‘A/the bottle stands upside-down on a/the table.’

- (136) *Sime nyigi to-kä-no ki-towa teenu*  
 person one see-DIR-MIN.A IPFV-hold bottle  
*i-pi-lamä wâ-so-opo-i ngä tebol.*  
 PFV-come-DIR CAUS-stand-emerge-3AUG.A PREP table

‘I saw a/the person holding a/the bottle, (s/he) came and stood it upside down on a/the table.’

- (137) *Maniok ki-täve ngä nuwâle.*  
 cassava IPFV-hang PREP rope

‘A/the cassava hangs in a/the rope.’

- (138) *Sime i-looli-kä nyibä lâto ku-wâ-täve-eâ=nä.*  
 person PFV-lift-DIR basket then IPFV-CAUS-hang-AO=CL

‘A/the person lifted up a/the suitcase, then (s/he) is carrying it (Lit. hanging (it)).’

As seen in Section 4.3, the verb *wopo* (or *opo*), means ‘emerge’ when occurring alone (139), but the causative form *wâ-opo*, is used to describe something being put upside-down (140). As will be seen from Chapter 6, *wopo* can also mean ‘be upside-down’ in nuclear layer serial verb constructions. Whether this is a specialization of the underlying verb which occurs in certain circumstances, or whether *wopo* is polysemous remains unknown.

- (139) *Lu-popo-ee-mä ngä nyepolââ.*  
 3AUG.S-emerge-up-DIR PREP light

‘They came up into the light.’

- (140) *Teenu wâ-i-opo-i ää-i ngä tebol nyigi.*  
 bottle CAUS-PFV-emerge-3AUG.A ?-? PREP table one

‘A/the bottle is put upside-down on a/the table.’

The posture verbs *so* ‘stand’, *ko* ‘lie’, *bää* ‘lean’, and *täve* ‘hang’ can all form morphological causative forms. Causative verb forms derived from *ko* and *bää* seem to be used to describe the items of the same overall shape and configuration and orientation at the endpoint of the movement as their underlying verbs. The location of items which are considered to be without a base (for a description of *base*, see Section 3.2.2), with a large contact area between itself and the horizontal surface underneath, and considered to be flat or of horizontal elongation, are generally described by the verb *ko* ‘lie’ by speakers of Äiwoo. Long items with a horizontal orientation, such as a cassava root, a stick, and a ladder which usually occur as subject referents of *ko*, also generally occur as direct object referents of the causative construction *wâ-ko*:

- (141) *Nyike manioki wâ-ko-e-i ngä tebol.*  
 root cassava CAUS-lie-go.up-3AUG.A PREP table

‘A/the cassava root is laid up on a/the table.’

- (142) *Sime i-pu-mä wa-kä=nä nyenaa*  
 person PFV-come-DIR take-DIR=CL tree
- wâ-ko-e ngä tebol.*  
 CAUS-lie-go.up PREP table

‘A/the person came and laid a/the stick up on a/the table.’

- (143) *Lada wâ-ko-woli ngä nubo.*  
 ladder CAUS-lie-go.down PREP ground

‘A/the ladder was laid down on the ground.’

The verb *bää* ‘lean’ is used with inanimate subject referents being long and in a position of slightly diagonal, near-vertical elongation, being supported in both ends. *bää* and *wâ-bää* are both used to describe the position and positioning of a stick, a cassava root (144), and a ladder leaned against the foot of a tree.

- (144) *Sime nyigi i-to-kâ-no ki-towa maniok*

person one    PFV-see-DIR-1MIN.A    IPFV-hold    cassava  
*i-pi-lâ-kä*                      *wâ-bää-eâ=nâ*                      *ngä*    *nuwo*    *nyenaa.*  
 PFV-come-go.out-DIR    CAUS-lean-AO=DEIC    PREP    root    tree

‘I saw a/the person holding a/the cassava, and (s/he) leaned it against the root of a/the tree.’

The use of the forms *wâ-so* and *wâ-täve* are marginal, in fact each form is only attested once in the data from the tests. The causative *wâ-so* was used in combination with the verb *wopo*, to describe a video clip in which a person stood a bottle upside down on a table.

(145) *Sime nyigi to-kä-no*                      *ki-towa*                      *teenu*  
 person one    see-DIR-MIN.A                      IPFV-hold                      bottle  
*i-pi-la-mä*                      *wâ-so-opo-i*                      *ngä*    *tebol.*  
 PFV-come-go.out-DIR    CAUS-stand-emerge-TR                      PREP    table

‘I saw a/the person holding a bottle, (s/he) came and stood it upside down on a/the table.’

The causative *wa-täve* is used to describe a video clip in which a woman lifts up a suitcase and carries it out of the room:

(146) *Sime i-looli-kä nyibä lâto ku-wâ-täve-eâ=nä.*  
 person PFV-lift-DIR    basket then    IPFV-CAUS-hang-OA=CL

‘A/the person lifted up a suitcase, then (s/he) is holding (Lit.: hanging) (it).’

Generally, the verb *vitelié* was used to express ‘hang’ in a transitive sense (see description below in Section 5.4). Äiwoo has several different verbs for carrying, depending on how something is carried: *ägilei* ‘carry on one’s shoulder’; *gosi* ‘carry on one’s head’; *upwâ* ‘carry in a scarf on one’s back’; and *pä* ‘carry on one’s back (for instance, a child)’. *Wâ-täve* should probably be considered a verb for carrying as well, in a manner in which the item carried ‘hangs’ down from one’s hand.

Some of the causative verb forms described above combine with other verbs in verb junctures that will be characterized in Chapter 6 as serial verb constructions on the nucleus and core layer, as described in Section 6.2 and 6.3, respectively.

The causative verb *wâ-to* was preferred by the consultants when describing items being put into a container of some sort, especially where the item being moved was invisible to the speaker at the end-point of the movement. Examples include various items (apples, stones, cassava roots et c.) or parts of the human body (arms, legs, head) being put inside a cardboard box, a bag, a bucket or a pocket. Having documented that morphological causative forms can be derived from both stative locative verbs and motion and path verbs, there are two ways to interpret *wâ-to*: either as the causative counterpart to the existential verb *to* (described in Section 3.3), or as the causative counterpart to the homophonous verb *to* ‘go into’ (described in Section 4.2). Let’s consider an interpretation of *wâ-to* as the causative counterpart of the existential verb *to* first.

- (147) *Sime nyigi i-pi-la-mä ki-towa*  
 person one PFV-bring-go.down-DIR IPFV-carry
- maniok wa-kä=nä wâ-ki-to ngä kaes*  
 cassava take-DIR=CL CAUS-IPFV-be/go.into PREP box
- ki-tokoli-woli-mä ngä tebol.*  
 IPFV-sit-go.down-DIR PREP table

‘A/the person came, carrying a/the cassava then s/he put in into a/the box sitting on a/the table.’

That a causative construction with an existential verb is preferred to one with a position-specific verb, may be because the speaker is unaware of the configuration of the item at the endpoint of the movement. For example, in the sentence (147) above, the position of the theme in the end-point is unknown, but the speaker saw that cassava root was put inside a box, and know that the item exists and is located inside the box at the end-point of the movement. The use of an existential verb to describe the location of an item instead of a posture verb when the item is invisible, and the speaker / observer cannot determine the exact spatial configuration of the item described is also attested in other languages. As already mentioned, the existential is used instead of posture verbs when





verbs do not. Judging from these data, it could seem that *(w)â* and *eâ* mark formal transitivity. However, morphological causative forms, derived from posture verbs or motion and path verbs occur with suffixed person marking and preverbal object NPs (the typical transitive word order in Äiwoo) which indicates that they are formally transitive, but they are not attested with either *(w)â* or *eâ* suffixed to them. For example:

- (149) *Nyike kasava wâ-ki-e-i ngä tebol nyigi.*  
 root cassava CAUS-IPFV-go.up-3AUG.A PREP table one

‘A/the cassava root was put up on a/the table.’

Furthermore, a closer examination reveals that *wâ* suffix do appears on some semi-transitive verbs (which are formally intransitive) with a generic agent, such as:

- (150) *ilâ sime-engâ iki ku-lu-pâ-nubo-wâ.*  
 there person-DEM suitable IPFV-3AUG.A-CAUS-nubo-AO

‘he should be killed.’

If *(w)â* and *eâ* were transitive markers, they should not appear on a formally intransitive verb. Rather, what the events described by the verbs which do have one of these suffixes have in common, is that there has been a radical change in the patient as a consequence of the action described in the verbs. In the events described in Example 26 in Section 2.4.2 and Example 150 above, the patient is alive before, and dead after the event. In the event described by the transitive causative verb without a *(w)â* or *eâ* suffix in Example 149, however, the object is not considered to be a different kind of thing before and after the event. There is a possibility that *(w)â* and *eâ* marks that the object is highly affected by the action described in the verb. An analysis of *(w)â* and *eâ* as markers of *highly affected object* also explains why these suffixes do not apply to the semi-transitive sentence in Example 27:

- (151) *(..) ku-wâ-nubo sii ä ki-pekellä nuwâdâ.*  
 IPFV-CAUS-die fish and IPFV-collect shell

‘(..) to catch fish and collect seashells.’

The object in the sentence has generic reference, it refers to fish in general, not a specific individual or set of individuals. *Ku-wâ-nubo sii* translates ‘kill fish’, and not ‘kill a/the/some fish’.

A categorization of the *(w)â* and *eâ* suffixes as markers of highly affected object, can explain why morphological causative forms derived from posture verbs and motion and path verbs generally do not have these suffixes, although they are formally transitive. This is because the object is not changed as a result of the action described in by these verbs. However, it does not explain why the verbs *wâ-täve* and *wâ-bää* consistently appears with an *eâ* suffix:

- (152) *Sime i-looli-kä nyibä lâto ku-wâ-täve-eâ=nä.*  
 person PFV-lift-DIR basket then IPFV-CAUS-hang-AO=CL

‘A/the person lifted up a/the suitcase, then (s/he) is holding (lit. hanging) (it).’

- (153) *Lada tepaa wâ-bää-eâ-kä-i ngä nyenaa*  
 ladder metal CAUS-lean-OA-DIR-3AUG.A PREP tree

‘A/the metal ladder was leaned against a/the tree.’

However, the ability to appear with the suffix *eâ* makes *wâ-täve* and *wâ-bää* different from morphological causatives derived from other posture verbs, and might support the view that *täve* and *bää* are different from the posture verbs *so*, *tokoli* and *ko* (as briefly discussed in Section 3.2.1).

An interesting observation is that verbs in the neighbouring language Vaeakau-Taumako are generally marked by a suffix *i* if transitive, and five verbs all meaning ‘put’ are among the very few exceptions.

### 5.3.2 Aspect marking inside the causative verb nucleus

What seems like aspect marking occurring after the prefix *wâ* is attested on several morphological causatives. It occurs on the following verb forms: *wâ-ee*, *wâ-woli*, *wâ-poli*, *wâ-opo*, *wâ-to*, and *wâ-bää*.

- (154) *Nyike kasava wâ-ki-e-i ngä tebol nyigi.*

root cassava CAUS-IPFV-go.up-3AUG.A PREP table one

‘A/the cassava root is put up on a/the table.’

(155) *Sime i-po-kä wa-kä=nä lada*  
 person PFV-come-DIR take-DIR=CL ladder

*wâ-i-e-kä ngä nyenaa miolo.*  
 CAUS-PFV-go.up-DIR PREP tree big

‘A/the person came, took a/the ladder (and) put it up against a/the big tree.’

There are examples where aspect marking occurs both before and after the *wâ* prefix, and the prefixes before and after *wâ* marks different aspect, like in the following example, where the morphological causative verb has perfect aspect marking before and imperfect aspect marking after the *wâ* prefix:

(156) *Manioki i-wâ-ki-to-i ngä bokis*  
 cassava PFV-CAUS-IPFV-be/go.in-1MIN.A PREP box

*ki-tokoli-woli-mä ngä tebol.*  
 IPFV-sit-go.down-DIR PREP table

‘A/the cassava was put down into a/the box sitting on a/the table.’

A possible explanation is that the aspect marking preceding *wâ* has scope over the whole event, whereas the aspect marking after *wâ* has scope over the resulting state. The resulting state may continue after the event has terminated. Examples from a story recorded by Næss support this view. The two forms *wâ-i-woli* and *wâ-ku-woli* is used repeatedly. *Wâ-i-woli* is used to describe the action of lowering a fishing net into the water repeatedly (157), whereas *wâ-ku-woli* is used to describe the action of either leaving a fishing net out in the water for the night (158) or putting it away for good (159).

(157) *I-pe=kâ wâ-i-woli-usi, (..)*  
 PFV-go=DEIC CAUS-PFV-go.down-again

‘She went and put it down again, (..)’

- (158) *Ilâ wâ-eve=kâ mo wa-kä=nâ wâ-ku-woli.*  
 there CAUS-be.three=DEIC CONJ take-DIR=DEIC CAUS-IPFV-go.down

‘After three times she left the net.’

- (159) *(..) nupo ba ku-tu-jo-gu. Wâ-ku-woli-jo.*  
 net NEG IPFV-bring-PROGR-NEG CAUS-IPFV-go.down-PROGR

‘(..) she stopped taking the net. She put it down.’

I have not been able to find any descriptions of a similar phenomenon in any other languages.

## 5.4 Lexical causatives

As seen from the data presented above, morphological causative correlates cannot be derived from all of the verbs described in Chapter 3. Furthermore, the derived causative verb form is not always a transitive correlate of the semantics of the posture verb. The action of putting something into positions like those described by the verbs *tokoli* ‘sit’, *so* ‘stand’ and *täve* ‘hang’ are generally described by the use of lexical causative verbs. The verbs *vite* ‘put’ and *vitelie* ‘hang’ are dynamic, transitive verbs, which takes an agent and an object, the agent being the causer, which causes the object (the theme) to move into or onto a goal. The verbs *vite* and *vitelie* seem always to occur with a PP expressing the location of the theme at the endpoint (the goal):

- (160) *Bolo i-vite-i ngä tebol nyigi.*  
 ball PFV-put-3MIN.A PREP table one

‘A/the ball is put on a/the table.’

- (161) *Nuwâle i-vitelie ngä nula nyenaa.*  
 rope PFV-hang PREP branch tree

‘A/the rope was hung on the branch of a/the tree.’

Like the morphological causatives described above, *vite* combines with motion and path verbs in nuclear layer serial verb constructions (162) and several other verbs in core layer serial verb constructions (163), as described in Section 6.2 and 6.3, respectively.

- (162) *Bolo i-vite-poli-to-i ngä nämââlâ nyienaa.*  
 ball PFV-put-go.between-go.into-TR PREP fork tree

‘A/the ball is put into a/the tree fork.’

- (163) *Sime i-pu-kä bolo i-vite-poli-to-i ngä nyenaa.*  
 person PFV-come-DIR ball PFV-put-go.between-go.into-TR PREP tree

‘A/the person came and put a/the ball down into a/the tree.’

The verb *vitelie* combined with other verbs in serial verb constructions is not attested. In fact, the form *vitelie* might itself be segmentable.

The verb *vite* is generally used to describe events with the same sorts of theme referents having the same configurations and orientations at the end-point of the movement described as those described by the posture verbs *tokoli* (164) and *so* (167) in states.

- (164) *Bol i-vite-e-i ngä tebol nyigi.*  
 ball PFV-put-go.up-TR PREP table one

‘A/the ball is put up on a/the table.’

- (165) *Teenu i-vite-poli-to-i ngä numoleaa nyenaa=kâ.*  
 bottle PFV-put-go.into-TR PREP between tree=DEIC

‘A/the bottle was put in between (the branches of) a/the tree.’

It is used to describe the movement of both single (164, 165) and multiple items (166), and items being put into atypical locations, such as a bottle or a pot being forked between two branches of a tree (165, 167).

- (166) *Teenu i-vite-e-i ngä tebol lilu.*  
 bottle PFV-put-go.up-TR PREP table be.two

‘Two bottles are put up on a/the table.’

(167) *Souspane*      *i-vite-poli-to-i*                      *ngä*    *numoleaa*  
 pot                      PFV-put-go.between-go.into-TR              PREP    between

*nula nyenaa.*  
 branch tree

‘A/the pot is put in-between the branches of a/the tree.’

When describing a video clip in which a bottle appeared standing in a tree fork, 6 of 8 consultants used the causative verb *vite* instead of the intransitive stative verb *so*, although there was no movement involved in the event described. *Vite* is sometimes also used with theme referents described by the other posture verbs. It seems that *vite* can be used with themes of all shapes and numbers. It is used to describe various items being put into or onto different locations. It overlaps with several of the causative forms mentioned in Section 5.3, *wâ-to*, *wâ-so* and *wâ-ko*, and seems to be non-specific about the direction of the movement, and the position of the theme at the end-point of the movement.

*Vitelie* ‘hang (transitive)’ is used to describe flexible items being put into a hanging position. Generally *vitelie* was used to describe actions involving the same theme referents that are generally described by the verb *täve* ‘hang (intransitive)’ in states:

(168) *Namugile*      *nuwale*              *â*      *nupou*  
 piece                      rope                      or      string

*ki-täve-li*                      *ngä*    *nula nyenaa.*  
 IPFV-hang-go.down    PREP    branch tree

‘A/the piece of rope or string is hanging from a/the tree branch.’

(169) *Nuwâle*              *i-vitelie*              *ngä*    *nula nyenaa.*  
 rope                      PFV-hang.TR    PREP    branch tree

‘A/the rope hung from a/the tree branch.’

## 5.5 Summary

Äiwoo has both morphologically regular (and probably productive), and morphologically irregular and non-productive causative verb forms. Because of their irregularity, the latter type of causative verb forms must be listed in the lexicon. The morphologically regular and irregular causative verbs are therefore referred to as morphological causatives and lexical causatives, respectively.

Morphological causatives are formed by adding the prefix *wâ* to intransitive or semi-transitive verbs. Many of the causative verbs used in locative expressions in Äiwoo, are morphological causative verb forms derived from some of the intransitive verbs described in the foregoing chapters (3 and 4). Causative verb forms derived from motion and path verbs give the same information on the movement of the theme as their underlying verbs, but adds an actor, causing the movement. The causative verb forms derived from posture verbs do not give any information on how the effect of the described causative situation is brought about, but the resulting state is described in the semantics of the underlying verb. The morphological causative verb forms seem to be used to describe the same sorts of theme referents as their intransitive counterparts (except *wâ-täve* (and possibly *wâ-so*) which seems to have a highly specialized meaning).

Whereas morphological causative verbs are generally marked by either the suffix *(w)â* or *eâ* if transitive, the morphological causatives described in this chapter are not (with two exceptions: *wâ-täve*, and *wâ-bää*), although they are formally transitive. A possible explanation for this is that unlike the events described by the other morphological causative verbs, the object of the events described by morphological causative verbs derived from posture verbs and motion and path verbs, are not changed as a result of the event described. Thus, the reason why other morphological causatives are marked by *(w)â* or *eâ* may be because these suffixes mark highly affected object.

An interesting observation from the data is that it seems that the resulting state of the event described in a morphological causative verb may be marked for aspect independently of the aspect marking of the event as a whole.

The lexical causative verb *vite* ‘put’ is used when referring to actions of putting things into different configurations. The use of *vite* overlaps with the use of several of the morphological verbs derived from posture verbs described in Section 5.3. Speakers

of Äiwoo seem to prefer to use *vite* when describing items usually described by the posture verbs *so* and *tokoli* in states.

The lexical causative verb *vitelie* is generally used as the causative counterpart to the intransitive verb *täve* 'hang'.



## Chapter 6

# Serial verb constructions in locative sentences

### 6.1 Introduction

In the foregoing chapters (3-5) a rough analysis of the semantic content and formal properties of single intransitive and transitive verbs used to describe the location or motion of inanimate items in Äiwoo was presented. Many of these verbs may be combined together in a single verb clause, sharing arguments, and in some cases even sharing TAM marking. These junctures show similarities with constructions in other languages, classified as serial verb constructions by Margetts (1999), Næss (2004), Crowley (2002), Foley and Van Valin (1984), and Van Valin and LaPolla (1997), amongst others.

Verbs in Äiwoo may be serialized on both the nuclear and core layer of the clause structure.<sup>15</sup> This chapter provides a study of each of the serial verb constructions and the relationship between the serialized verbs. The verbs described in the foregoing chapters (3-5) combined in nuclear and core layer serial verb constructions with are described in Section 6.2 and Section 6.3, respectively. A short summary is given in Section 6.4.

### 6.2 Nuclear layer serial verb constructions

Verb constructions in which up to four verb stems are combined are not unheard of in the languages of the world. Margetts (1999: 99) reports that there can be one, two, three and four verb stems inside one inflected verb clause in Saliba (an Austronesian

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<sup>15</sup> For more information on the different layers of the clause structure, see Section 1.3.3.

language spoken on the island Saliba, and parts of Sidea Island, in the easternmost parts of Papua New Guinea):

- (170) *Ye-tu-isini-sae-kasaya-i-ø.*  
3SG-throw-raise-go.up-in.vain-APPL-3SG.O

‘He threw up in vain.’

(Margetts 1999: 107)

A combination up to three verbs in a single inflected verb clause is not uncommon in Äiwoo. In fact, some of the verbs described in Chapters 3-5 seem always to occur in such complex junctures. Complex constructions with two verbs are far more frequent in the elicited data than complexes with three verbs. Examples of verb nuclei with one, two and three verbs in Äiwoo are demonstrated below (171, 172 and 173 respectively):

- (171) *Tebol to-kä-no ki-so (..)*  
table see-DIR-1MIN.S IPFV-stand

‘A/the bottle is standing on a/the table.’

- (172) *Bok i-päi-woli ngä floa.*  
book PFV-throw-go.down PREP floor

‘A/the book was thrown on a/the ground.’

- (173) *Pot ki-tokoli-wopo-oli-mä ngä tebol.*  
pot IPFV-sit-be.upside.down-go.down-DIR PREP table

‘A/the pot is sitting upside-down on a/the table.’

The three verbs, *vite* ‘put’, *poli* ‘go between’, and *to* ‘go into’ in the complex below share both aspect and subject marking:

- (174) *Bolo i-vite-poli-to-i ngä nämââlâ nyenaa.*  
ball PFV-put-go.between-go.into-3AUG.A PREP fork tree

‘A/the ball was put into the fork of a/the tree.’

This construction resembles complexes described by van der Voort (2000) in the Amazonian language Kwaza. The lexemes *kwe* ‘in, enter’ and *tewe* ‘down’ in Kwaza resemble the Äiwoo verbs *ee*, *woli*, *poli* and *opo* in that they have a directional-like distribution when combined with other verbs in a complex (175, 177), but that they also occur as independent verbs (176, 178).

(175) *do=kwe-da-ki*  
leak=enter-1S-DECL

‘I pour water into a bottle’

(176) *āwāta=te’we-da-ki*  
look.at=down-1S-DECL

‘from above I’m looking downwards’

(177) *kwe-ki*  
go.enter-DECL

‘He entered’

(178) *‘mesa te’we-~y-ki*  
table down-ATT-DECL

‘The table is slanting’

(Van der Voort 2002: 228, 233-4)

Van der Voort (2000) points out the dilemma of whether complexes like those in the examples above (176, 178) should be analyzed as compound structures or suffixal derivations. A similar dilemma applies to complex verb clauses (like 174) in Äiwoo. Do verbs like *ee* and *woli* only modify the initial verb by coding its direction in which case one might argue that they function as directional markers, or may the verbs in the complex denote co-occurring actions, as in serial verbs? As can be seen from example 174 above and the example below, different types of verbs are restricted to certain positions within the verb construction:

(179) *Pot i-vit-oli-i ngä tebol.*  
 pot PFV-put-go.down-3AUG.A PREP table

‘A/the pot is put down on a/the table.’

An argument in favour of an analysis of these constructions as suffixal derivations is the observation that the distribution of the verbs inside the construction, is similar to that of a directional suffixed to a verb stem. Where a manner of motion or manner of location verb is combined with a verb coding motion and path in complex verb clauses in Äiwoo, the manner of motion or manner of location verbs are always the initial verb, whereas verbs coding motion and path are always the second (or third) verb. However, there are also arguments against an analysis of constructions as those illustrated above (174, 179) as suffixal derivations. The fact that different types of verbs are restricted to certain positions within a complex verb clause, is not unique for Äiwoo. Margetts (1999) describes similar distributional restrictions on verb stems in complex verbs in Saliba, where certain stems only occur in the initial position, while others obligatory appear in the final position in the complex. And the strongest objection to an analysis of these constructions as suffixal derivations must be: why should segments that are verbs in all other contexts be considered directional markers here? If we return to the dilemma brought up by Van der Voort above, and rule out an analysis of the complexes as suffixal derivations, are they some type of serialized verbs? Several languages spoken in West Africa, Southeast and East-Asia and Papua New Guinea have constructions in which verbs are combined together with no intervening conjunctions, sharing the same argument(s). Foley and Van Valin (1984: 189) refer to such complexes as *serial verb constructions*. No conjunction occurs between the verb stems in the Äiwoo and Kwaza complexes. Moreover, the verb stems have one and the same grammatical subject, although the semantic subject of the second and third verb may be another than in the initial. For example, the second verb *poli* in the Äiwoo complex below (180) describes the path in which the theme referent, that is, the object of the sentence – the ball, moves, thus one might argue that the semantic subject of *poli* is the semantic object of *vite*.

(180) *Sime i-pu-kä bolo i-vite-poli-to ngä nyenaa.*  
 person PFV-come-DIR ball PFV-put-go.between-go.in PREP tree

‘A/the person came (and) put a/the ball in between (the branches of) a/the three.’

The verbs combined in a complex clause like those illustrated above (174, 179, and 180) in Äiwoo act like a grammatical unit in several respects: other morphemes can not intervene between them, and affixes and clitics must come before or after the whole set of verb stems. The verb stems within the same complex share the same inflectional markers, such as person and number marking, aspect marking and so on. The verbs seem to constitute one complex nucleus, that is, the whole complex functions as a single verb. These junctures may thus be analyzed as nuclear layer serial verb constructions. As described in Section 1.3.3, the structure of a clause consists of three layers, namely nucleus, core and periphery. The *nucleus* of a verb clause is its predicate. The *core* includes the valence-bound arguments (of the predicate) and, the *periphery* contains arguments which express the spatio-temporal setting of the event denoted by the predicate and secondary participants (in the event). Different grammatical operators have scope over each of the layers. Aspect is a nuclear layer operator. In order for a set of verbs to be considered a nuclear layer serial verb construction, they must share all operators of the nuclear layer. Verbs can serialize on the nuclear and core layer of the verb phrase structure. (Foley and Van Valin 1984: 190-1). There is no independent inflectional marking on the verbs in these complex verb junctures in Äiwoo, rather the construction is inflected as a whole. The verbs in the construction share the same aspect marking (181), and since aspect is a nuclear layer operator, the construction may thus be considered a nuclear layer serial verb construction.

(181) *Bolo i-vite-poli-woli ngä numoleaa nyenaa.*  
 ball PFV-put-go.between-go.down PREP between tree

‘A/the ball is put down in between (the branches of) a/the tree.’

As mentioned, it seems that the function of the second (and third) verb in the constructions in the examples above (174, 179, 180, and 181) is to modify the meaning of the initial verb. The initial verb denotes the main state or event described by the construction. The relationship between the verbs in the constructions is *asymmetric*. In a case of a symmetrical nuclear layer serial verb construction, both verbs would contribute equally to the meaning and formal properties of the construction. The

following example from Barai (a Papuan language spoken in New Guinea) illustrates a symmetric nuclear layer serial verb construction:

(182) *Fu fāse fi isoe.*<sup>16</sup>  
 3SG letter sit wrote

‘He sat writing a letter.’

(Foley and Van Valin 1984: 190)

The two verbs combined in the Barai construction (182) denote a state and an event, which co-occur. The asymmetry that holds between the verbs of constructions in Äiwoo is particularly evident in lexical aspect, where the lexical aspect of the initial verb determines that of the whole construction. Serial constructions with an initial stative verb are used to describe states (183) and serial constructions with an initial active verb is used to describe events (184).

(183) *Pot ki-tokoli-wopo-oli-mä ngä tebol.*  
 pot IPFV-sit-emerge-go.down-DIR PREP table

‘A/the pot is sitting upside down on a/the table.’

(184) *Bolo i-vite-poli-woli ngä numoleaa nyenaa.*  
 ball PFV-put-go.between-go.down PREP branch tree

‘A/the ball is put down between the branches of a/the tree.’

Recall that the terms stative and active verbs are used merely to distinguish between verbs denoting states and verbs denoting events, respectively. Næss (2004) distinguishes between asymmetrical nuclear layer serial verb constructions (185) from regular (symmetrical) ones (186) in Vaeakau-Taumako:

(185) *Ko-i mot-ia na mara na, mot-ia vakao-ina.*  
 TA-3SG cut-TR 3SG.POSS eye DEM cut-TR encircle-TR

‘He cut off its (the coconut’s) end, (then) he cut around it.’

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<sup>16</sup> My emphasis.

(Næss 2004: 236)

(186) *Na no ua hehega na ko matu tuohine na.*  
 3SG TA paddlesearch DEM top IPOSS sister DEM

‘He has paddled here in search of his sister.’

(Næss 2004: 233)

Further study of serial verbs in Äiwoo might reveal whether there are nuclear layer serializations in this language that can be considered symmetrical.

The verbs in the juncture must agree in transitivity in a nuclear layer serial verb construction in Äiwoo. Thus, where the first verb in a complex is transitive, a transitive marker *-i* is suffixed to the last verb in the construction:

(187) *Singedâ nyigi wa-kä=nä saucepane i-vite-poli-to-i*  
 girl one take-DIR=CL pot PFV-put-go.between-DIR-TR

*ngä numoleaa nyenaa nyipielâ.*  
 PREP fork tree branch

‘A/the girl put a/the pot in a/the tree fork, between to branches.’

Transitive constructions generally occur with an overt object, but generally not with an overt subject (188). Where there is an overt subject of the construction, this is always the argument of another verb in the sentence as well (189).

(188) *Bol nyigi i-vite-e-i ngä nula nyenaa.*  
 ball one PFV-put-go.up-TR PREP branch tree

‘A/the ball was put in between the branches of a/the tree.’

(189) *Sime nyigi i-to-kä-no ki-towa*  
 person one PFV-see-DIR-1MIN IPFV-carry

*pot i-pi-la-mä i-vite-e-i ngä tebol.*  
 pot PFV-bring-go.out-DIR PFV-put-go.up-TR PREP table

‘I see a/the person carrying a/the pot (s/he) brought it (and) put (it) on a/the table.’

### 6.2.2 Positional slots in nuclear layer serial verb constructions

Margetts (2005) has analyzed nuclear layer serial verb constructions in Saliba in terms of positional slots based on the ordering constraints on the verbs in the construction and the paradigmatic relationship between them.

- (190) *ye-tu-isini-sae-kasaya-i- $\phi$* <sup>17</sup> V<sub>1</sub>-V<sub>2</sub>-V<sub>3</sub>-V<sub>4</sub>  
 3SG-throw-raise-up.in.vain-APPL-3SG.O  
 ‘he threw up in vain’

(Margetts 2005: 65)

The same analysis can be used on nuclear layer serial verb constructions in Äiwoo. Like similar constructions in Saliba, verbs in serial verb constructions in Äiwoo also consistently occur in a fixed order relative to each other.

The maximum number of verbs attested within one and the same nuclear layer serial verb construction in Äiwoo being three, it should be possible to distinguish at least three positional slots (191). Note that this analysis might not be an accurate description of nuclear layer serial verbs in Äiwoo in general, as serial verb constructions in which other types of verbs might be combined than those which occur in the material upon which this thesis is based may exist.

- (191) *Bolo i-vite-poli-woli* *ngä* V<sub>1</sub>-V<sub>2</sub>-V<sub>3</sub>  
 ball PFV-put-go.between-go.down PREP  
*numoleaa nyenaa.*  
 between tree

‘A/the pot is put in between the branches of a/the tree.’

Nuclear layer serial verb constructions in Äiwoo often consist of only two verbs, and those verbs need not be the ones we will find as the initial and second verb in a serial verb construction with three verbs (192).

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<sup>17</sup> My emphasis.



(192) *Souspane*      *ki-tokoli-woli-mä*      *ngä*      *tebol*      *nyigi.*      V<sub>1</sub>-V<sub>3</sub>  
 pot                      IPFV-sit-go.down-DIR      PREP      table      one

‘A/the pot is sitting on a/the table.’

(193) *Teenu*      *ki-so-opo-la-mä*                                      *ngä*      *numoleaa*      *nyenaa.* V<sub>1</sub>-V<sub>2</sub>  
 bottle      IPFV-stand-emerge-go.out-DIR                      PREP      between      tree

‘A/the bottle is standing upside-down in a/the tree.’

In other words, not all slots have to be filled in a nuclear layer serial construction in Äiwoo. The first slot, V<sub>1</sub>, contains the verb stem being the *head* of the complex. It is the semantics of the verb stem in V<sub>1</sub> which determines whether the construction as a whole is stative (192, 193) or active (191), intransitive (192, 193) or transitive (191). The posture verbs *so* ‘stand’, *tokoli* ‘sit’ and *täve* ‘hang’ and the causative verbs *vite* ‘put’, *wâ-ko* ‘cause to lie’ and *wâ-poli* ‘cause to go between’ occur in V<sub>1</sub>. V<sub>1</sub> seem to be the only slot which is always filled in nuclear layer serial constructions (combined with at least one of the others). Verbs occupying the other slots, V<sub>2</sub> and V<sub>3</sub>, modify the semantic content of the verb in V<sub>1</sub>. The verbs *wopo* ‘emerge’ and *poli* ‘go between’ specify the relation of the theme relative to the location. *Wopo* is used to express that the base of the theme referent is pointing upwards, instead of being in contact with the location. The theme referent is considered to be upside-down. *Poli* is used to express that the theme is situated or moving between two points of what constitutes the location or goal. Where *wopo* and *poli* occur in nuclear layer serial verb constructions, they always fill the V<sub>2</sub> slot (191, 193). The verbs *ee* ‘go up’, *woli* ‘go down’, *to* ‘go in’ and *lä* ‘go out’ always fills the last slot, V<sub>3</sub>, in the nuclear layer serial verb construction. The verbs modify active verbs by coding the direction of the motion described (191) and stative verbs by coding the orientation of the theme relative to the observer / speaker (193). Only intransitive verbs are found in V<sub>2</sub> and V<sub>3</sub>.

## 6.3 Core layer serial verb constructions

### 6.3.1 Same subject serial verb constructions

Above, serial verb constructions were defined as constructions in which two or more verbs are combined without any conjunctions intervening between them. The verbs of a serial verb construction must share a single set of arguments. Recall that verbs can serialize on the nuclear or core layer of the verb phrase structure. Whereas the verbs juxtaposed in a nuclear layer serial verb construction function as one, single predicate (nuclear layer serial verb constructions are often referred to as *complex verbs* or *complex predicates*), verbs serialized on the core layer must be considered independent predicates, sharing a single set of arguments, or at least one argument. Like individual verbs, nuclear layer serial verb constructions may be serialized with other verbs on the core layer (194). In order for a set of verbs to be considered a core layer serial verb construction, they must share at least one argument, and peripheral elements, such as PPs. A sequence of verbs with an intervening PP that only has scope over one of the verbs, should thus not be considered a core layer serial verb construction, even if the verbs share the same arguments. In the sequence below (194), the subject of the first verb is co-referential with the subject of the second verb (recall that nuclear layer serial constructions are to be considered one, single verb on the core layer).

(194) *Sime i-pu-kä bolo i-vite-poli-to-i ngä nyenaa.*  
 person PFV-come-DIR ball PFV-put-go.between-go.into-TR PREP tree

‘A/the person came and put a/the ball down into a/the tree.’

Furthermore, no peripheral arguments intervene between the verbs. The sequence of verbs seems to be a core layer serial verb construction. The relationship between the serialized verbs is of the type Lynch et al. (2002: 47) refers to as *sequential*. The first verb expresses a movement, and the second verb expresses the action that follows the movement. Margetts (2004) offers a similar example of a sequential core layer serial verb construction in Saliba:

(195) *Se sae kwateya se kuma-ø*

3PL go.up yam 3PL plant-3SG.O

‘They went up to plant yams’

(Margetts 2004: 75)

The verb *wa* (often translated ‘take’ and is thus probably a short form of *luwa* ‘take’) often occurs in what seems to be core layer serial constructions:

(196) *Singedâ wa-kä=nä maniok wâ-i-e-kä*  
 girl take-DIR=CL cassava CAUS-PFV-go.up-DIR

*ngä nuwo nyenaa.*  
 PREP root tree

‘A/the girl took a/the cassava and put (it) by a/the tree root.’

There are several examples of verb sequences which seem very much like core layer serial verb constructions with the verb *wa* ‘take’, where it seems that *wa* has a different function than to refer to the action of taking.

(197) *eâmo wa-kä=nä lâ ipe eângâ i-wâ-nubo-wâ*  
 then take-DIR=CL DEIC old-woman DEM PFV-CAUS-die-AO

‘then he killed that old woman’

(Næss p. c.)

(198) *eâmo wa-kä=nä eâmo i-lää-kä nyengi*  
 then take-DIR=CL then PFV-give-DIR wind

‘then he gave them breath’

(Næss p. c.)

(199) *Sime nyigi bol ki-siwo wa-kä=nä*  
 person one ball IPFV-hold take-DIR=CL

*i-vite-i ngä tebol.*  
 PFV-put-SUFF PREP table

‘A/the person is holding a/the ball (and took it) and put it on a/the table.’

In the first two examples, nobody is described as taking anything. In Example 199 the agent referent is described as already holding the ball, which makes it rather unlikely that s/he can take it. Furthermore, the absence of 3minA and 3augO person marking on *wa* in Example 198, suggests that it does not function as a regular verb in this sentence (the next verb, *lää*, is semi-transitive and thus not marked for any object, 3minS is zero-marked on intransitive and semi-transitive verbs). 3minA is zero-marked in combination with 3minO (see Section 2.4.1), and thus not marked on the verbs in the next example. Næss (2004: 242-4) finds that the verb *toa* ‘take’ in core layer serial constructions has other functions than referring to a physical act of taking in the neighbouring language Vaeakau-Taumako. It may be used either to introduce an object argument to the second verb, as in:

(200) *Te kuli ko-i toa na pihoulu*  
 ART dog TA-3SG take 3SG.POSS head  
  
*ko-i lulu-ia.*  
 TA-3SG shake-TR

‘The dog shook his head’

(Næss 2004: 242)

Or *toa* may be used to emphasise the volitional initiation of the action described in the second verb, as in:

(201) *Ko-i toa e te paua ko-i usi-a na vae.*  
 TA-3SG take AG ART clam TA-3SG bite-TR 3SG.POSS leg

‘The clam bit his leg.’

(Næss 2004: 244)

In the Äiwoo example (199) above, *wa* cannot be analyzed as a sort of object marker, introducing an object argument to the second verb, *vite*, since the object is already



The following sentence gives an example of a switch subject serial verb construction in Gitua (a language spoken in the Madang Province of New Guinea):

- (204) *ti-rap* *ngaya* *mate*<sup>18</sup>  
 3PL.hit pig 3SG.die  
 'They killed the pig'

(Crowley 2002: 41)

The single argument of each of the Äiwoo sentences above, is the object of the initial verb and the subject of the second verb. *Souspane* 'pot' is the object referent of the complex nucleus *vite-poli-to* 'put in-between' and the subject referent of *tokoli* 'sit' in (202), and *nyenaa* 'stick' is the object referent of the causative *wâ-e* 'put up' and the subject referent of *ko* 'lie' in (203). In both sentences the second verb describes the effect of the event described in the initial causative verb. There is definitely a causative relationship between the verbs. It is therefore plausible that the verbs sentences in Examples 202 and 203 can be analyzed as switch subject serial verb constructions.

## 6.4 Summary

Several of the verbs described in the previous chapters (3-5) combine with each others in serial verb constructions. Verbs can be serialized on the nuclear and core layer of the clause structure. Whereas the verbs juxtaposed in a nuclear layer serial verb construction represent a single nucleus, the verbs in core layer serial verb constructions represents distinct nuclei.

The relationship between the verbs in a nuclear layer serial verb construction can be explained in terms of positional slots, based on the ordering constraints on the verbs in the construction and the paradigmatic relationship between them. It is possible to distinguish between three positional slots in the nuclear layer serial constructions which are found in the data on which this thesis is based. The first slot,  $V_1$ , is filled by a (transitive or intransitive) verb which serves as the head of the construction, describing

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<sup>18</sup> My emphasis.

the main event or state, modified by the (intransitive) verbs filling the following slots, V<sub>2</sub> and V<sub>3</sub>. Not all slots need to be filled in a nuclear layer serial verb construction, only V<sub>1</sub> seems to be obligatory (combined with at least one of the others). The verb juncture as a whole has the transitivity status and the lexical aspect of the verb filling V<sub>1</sub>. Posture verbs and causative verbs fill V<sub>1</sub>, motion and path verbs fill V<sub>2</sub>, and motion and direction verbs fill the last slot, V<sub>3</sub>.

Core layer serial verb constructions can be formally differentiated on the criterion of argument sharing. The serial constructions which are found on the core layer seem to instantiate what Crowley (2002: 39-42) refers to as *same subject* and *switch subject* serial verb constructions. In the first type, the subject of the first verb is co-referential with the subject of the second verb, in the latter, the subject of the first verb is co-referential with the object of the last verb.

Semantically, the examples of same subject and switch subject serial verb constructions fall into the categories described in Lynch et al. (2002: 46-49) as *sequential* and *causative*, respectively. In a sequential core layer serial verb construction, the first verb expresses a movement and the second verb describes the action that follows the movement. In a causative core layer serial verb construction, an action is described in the first verb, and the second verb describes the effect of the action.





## Chapter 7

# Conclusions and further work

### 7.1 Summary of main results

The aim of this thesis has been to study verbs used in the description of the location and movement of inanimate entities in Äiwoo, from data produced through elicitation tests using video clip stimuli. The data, however, were richer than anticipated. There were not only data on the use of locative and motion verbs, but also interesting data on verbs coding information on motion and path, causativity, and serial verb constructions. This made it possible to discuss four phenomena which were undescribed in Äiwoo up to now: stative, locative verbs, motion and path verbs, causative verbs in locative expressions, and serial verb constructions in locative expressions.

When working with contributors with limited knowledge of English and Solomon Islands Pijin, the video clip stimulus kits developed by the Max Planck Institute of Psycholinguistics provided the ideal method for collecting data. Furthermore, similar tests has been conducted on various other languages, which makes results from such a test attractive as material for a comparative analysis. Although one might argue that the two stimuli sets, which show a limited range of items appearing or being placed in a limited range of locations, restrict the richness of the data, I doubt that a richer set of data could be collected as effectively under the given circumstances.

When describing the location of inanimate items, speakers of Äiwoo must choose between the use of the existential verb *to* and that of an appropriate posture verb. The overall shape, spatial configuration and orientation of the entity described as located determine which of the five posture verbs is used.

As can be seen from the data presented in Section 3.2.2, speakers of Äiwoo use posture verbs to describe items with a shape, configuration and orientation that resembles human postures described by the same verbs. These data support the view

that posture verbs used to describe the location of inanimate items is a metaphorical extension of the use of the same verbs to describe human posture. One might argue that leaning and hanging are not prototypically human postures, as opposed to sitting, standing and lying, but this discussion was not pursued in this thesis.

The existential verb seems to be used only when a posture verb is not applicable, which indicates that speakers of Äiwoo specify information on the spatial orientation and configuration of the items described wherever possible.

Verbs coding information on motion and path often combine with some of the posture verbs described in Section 3.2.2 and some of the causative verbs described in Chapter 5 in serial verb constructions. Unfortunately, the data available on these verbs when used alone is very limited. Four of the verbs describe motion in a specific direction, and two verbs describe motion along a specific route.

All of the motion and path verbs described in Chapter 4 and some of the posture verbs described in Section 3.2.2 can form morphological causative verbs by the addition of the prefix *wâ*. Morphological causative verb forms derived from posture verbs describe the movement of an object by an agent and the configuration and orientation of the object at the endpoint of the movement. Morphological causative verb forms derived from motion and path verbs describe the movement of an object by an agent and the direction or route of the movement. Not all posture verbs have morphological causative correlates. The causative meaning of these verbs are described by the use of lexical causative verbs.

The two suffixes *(w)â* and *eâ* tend to occur on transitive morphological causative verbs, but not on semi-transitive ones, which could indicate that they are transitivity markers. However, more thorough studies reveal that they also appear on formally intransitive verbs, and, as can be seen from the data presented in Section 5.3, morphological causative verbs derived from posture verbs and motion and path verbs do not occur with either of the suffixes, although they are formally transitive. The two verbs *wâ-täve* and *wâ-bää* were the only exceptions, which might support the view that the underlying verbs *täve* and *bää* are different than other posture verbs. From a closer look on the verbs that do take one of the suffixes, it seems that *(w)â* and *eâ* only occur on verbs which describe events in which the object referent undergoes some kind of radical change. A more plausible analysis is that the suffixes mark *highly affected object*.

Aspect marking may occur before and after the *wâ* suffix in morphological causative verbs derived from posture verbs and motion and path verbs. The aspect marking may even be different before and after *wâ*. It seems that the aspect marking before *wâ* has scope over the whole event described by the causative verb, whereas the aspect marking after *wâ* only has scope over the resulting state. I have not been able to find any descriptions of a similar phenomenon in any other languages.

Many of the posture verbs, causative verbs and motion and path verbs combine in serial verb constructions, both on the nuclear and core layer of the clause structure. In nuclear layer serial verb constructions, the different types of verbs are distributed in a fixed order relative to each other, which can be described in terms of positional slots. The causative verbs and the posture verbs fill one slot, motion and route verbs fill one slot, and motion and direction verbs fill one slot. The second (and third) verb in a nuclear layer serial verb construction modifies the meaning of the initial verb. Verbs serialized on the core layer of the clause structure may share one or both arguments.

Whereas deictic direction is marked on the verb by suffixation, spatial direction is coded in motion and direction verbs. Location and goal seem always to be expressed by an adjunct, most often a PP.

The data described above serves as a contribution to the on-going discussion of spatial information across languages. Furthermore the thesis adds to the description and analysis of the Äiwoo language, and provides data that may prove useful when comparing Äiwoo to other languages.

## 7.2 Questions for further research

As seen from the data presented in Section 5.3, not all of the posture verbs described in Section 3.2.2 have morphological causative correlates. More studies of which verbs do and which verbs do not form morphological causatives are needed to determine to what extent the formation of morphological causative verb forms from intransitive and semi-transitive verbs, by the addition of the prefix *wâ*, is productive.

Two alternative hypotheses were presented in Section 5.3.1 on the function of the (*w*)*â* and *eâ* suffixes, which occur on some morphological causative verbs but not on

others. More detailed data than that which is available at the time of writing may resolve this question.

A hypothesis on the occurrence of double aspect marking on morphological causative verbs derived from motion and path verbs and posture verbs was presented above. With a considerable amount of data on causative constructions in Äiwoo, a more thorough study may verify or falsify the explanation given, or find a new one. This issue raises several typologically interesting questions for further research: Under what circumstances does double aspect marking occur? Does it apply to other languages than Äiwoo?

With access to more data, and through the comparison of the verbs described in this thesis with other verbs, we may be able to determine form classes of verbs.

In Chapter 6, it was demonstrated that verbs in Äiwoo can combine in asymmetric nuclear layer serial verb constructions, and sequential, and causative core layer serial verb constructions. More thorough research is needed to determine which verbs can be combined in serial verb constructions in Äiwoo and their distribution and paradigmatic relationship. It is still unknown whether verbs in Äiwoo can combine in symmetric nuclear layer serial verb constructions.

Comparisons with other languages (especially languages in the area) are made throughout the thesis, and several structural similarities with both the neighbouring Polynesian language Vaeakau-Taumako, and other languages (amongst others, Papuan languages in the area) has been documented. However, a lot more work is needed to classify the Äiwoo language, as well as to determine the effect of language contact in the area.

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# Appendix

## 1 List of consultants

Place:	Approximate age (spring 2005):	Sex:
Nenubo	67	male
Nenubo	46	male
Nenubo	32	male
Nenubo	40	female
Nenubo	37	female
Nenubo	late 30s	female
Nenubo	late 30s	female
Nenubo	late 20s	female

## 2 Descriptions of video clip stimuli

### 2.1 Caused Positions

File name	Description
01_cloth1_table.mpg	A woman covers a table with an unfolded table cloth.
02_rope1_incho.mpg	A rope appears hanging over a branch.
03_beans_incho.mpg	A pile of beans appears on a table.
04_balls_table.mpg	A woman puts two balls on a table.
05_beans_table.mpg	A woman puts a pile of beans on a table.
06_rope_incho.mpg	A coil of rope appears on a table.
07_kassava_box.mpg	A woman puts a cassava root into a cardboard box which is standing on a table.
08_pot_tree.mpg	A woman puts a clay pot in a tree fork.
09_beans1_table.mpg	A woman puts half a coconut shell filled with beans on a table.
10_bottles_table.mpg	A woman puts two wine bottles on a table.
11_ball_incho.mpg	A ball appears on a table.
12_cloth_table.mpg	A woman puts a folded table cloth on a table.
13_stick_tree.mpg	A woman leans a stick to the bottom of a tree.
14_bottle_table.mpg	A woman puts a wine bottle on a table.

15_ball_table.mpg	A woman puts a ball on a table.
16_bottle1_tree.mpg	A woman leans a wine bottle towards the bottom of a tree.
17_ball_tree.mpg	A woman puts a ball in a tree fork.
18_pot2_incho.mpg	A clay pot appears in a tree fork.
19_rope_table.mpg	A woman puts a coil of rope on a table.
20_bottle1_table.mpg	A woman puts a wine bottle upside-down on a table.
21_cloth1_incho.mpg	A table cloth appears hanging over a branch.
22_bottle1_incho.mpg	A wine bottle appears in a tree fork.
23_kassava2_tree_mpg	A woman leans a cassava root towards the bottom of a tree.
24_ladder_tree.mpg	A woman leans a ladder towards a tree stem.
25_bottle_incho.mpg	A wine bottle appears on a table.
26_kassavas_table.mpg	A woman puts three cassava roots on a table.
27_rope_box_mpg	A woman puts a coil of rope into a cardboard box which is standing on a table.
28_bottle2_table.mpg	A woman lays a wine bottle down on a table, on its side.
29_kassava1_tree.mpg	A woman hangs a cassava root in a string from a branch.
30_stick_table.mpg	A woman puts a stick on a table.
31_kassava_tree.mpg	A woman puts a cassava root on a table.
32_ball1_incho.mpg	A woman stands a cassava root up in a tree fork (leaning against one of the branches).
33_pot_table.mpg	A woman puts a clay pot on a table.
34_pot_incho.mpg	A clay pot appears on a table.
35_kassava_incho.mpg	A cassava root appears lying on a table.
36_pot1_table.mpg	A woman puts a clay pot upside-down on a table.
37_cloth_box.mpg	A woman puts a folded cloth into a cardboard box which is standing on a table.
38_rope_tree.mpg	A woman hangs a coil of rope over a branch.
39_kassava_table.mpg	A woman lays a cassava root on a table.
40_pot1_incho.mpg	A clay pot appears standing upside-down on a table.
41_stick_ground.mpg	A woman pushes a stick into the ground, so that it stands upright.
42_cloth_incho.mpg	A folded cloth appears on a table.
43_bottle_tree.mpg	A woman stands a bottle up in a tree fork.
44_stick_incho.mpg	A stick appears on a table.
45_pot2_table.mpg	A woman lays a clay pot on its side on a table.

46\_ladder\_ground.mpg A woman lays a ladder down on the ground.

## 2.2 Put films Version 1

File name	Description
scen01_V1_put_014.mpg	A woman sits by a table and puts a candle into a candlestick.
scen02_V1_put_002.mpg	A woman puts a plastic cup on a table, using her mouth.
scen03_V1_put_004.mpg	A woman puts a pile of books down on a table.
scen04_V1_put_126.mpg	A person takes off one of her socks.
scen05_V1_put_028.mpg	A person pastes a picture of a horse and a dog on a wall.
scen06_V1_put_031.mpg	A person puts a plate on a cup, which is standing on a table.
scen07_V1_put_119.mpg	A person picks up a stone from a pot filled with water.
scen08_V1_put_010.mpg	A man is sitting on a chair and throws a book on the floor.
scen09_V1_put_103.mpg	A man picks up a banana from a table, using a thong.
scen10_V1_put_009.mpg	A man carries a pile of books. One of the books falls to the floor.
scen11_V1_put_115.mpg	A woman pulls a cucumber out from a bag.
scen12_V1_put_006.mpg	A man put a cardboard box into a bookshelf.
scen13_V1_put_112.mpg	A woman pours wooden blocks out of a wooden pipe.
scen14_V1_put_012.mpg	A man drops an apple into a small bag.
scen15_V1_put_130.mpg	A woman picks up a suitcase and carries it out of the room.
scen16_V1_put_123.mpg	A woman pulls her hand out from a hole in a tree.
scen17_V1_put_025.mpg	A man puts on a wool beanie.
scen18_V1_put_118.mpg	A person pulls a flower out of a girl's hair.
scen19_V1_put_122.mpg	A man takes a jar from a woman.
scen20_V1_put_011.mpg	A person puts an apple into a wooden bowl which is standing on a table.
scen21_V1_put_019.mpg	A person puts a stone into a pot filled with water.
scen22_V1_put_005.mpg	A person puts some unboiled rice on a plate which is standing on a table.
scen23_V1_put_135.mpg	A man picks up a pen from a hole in a tree.
scen24_V1_put_104.mpg	A woman picks up a pile of books from a table.
scen25_V1_put_120.mpg	A person pours water from a jar.
scen26_V1_put_120.mpg	A woman pours water from a jar into a pot which is standing on a table.
scen27_V1_put_016.mpg	A woman puts a small object (invisible for the viewer) into her pocket.
scen28_V1_put_021.mpg	A person picks up a cup, and spills some water.
scen29_V1_put_101.mpg	A person picks up a cup from a table.
scen30_V1_put_035.mpg	A woman puts a pen inside a hole in a tree.
scen31_V1_put_127.mpg	A person picks up a coiled rope from a branch.
scen32_V1_put_114.mpg	A woman pulls a candle out from a candlestick.
scen33_V1_put_106.mpg	A woman takes a cardboard box out from a bookshelf.

scen34_V1_put_008.mpg	A woman sits by a table and throws a books to the floor.
scen35_V1_put_017.mpg	A man puts a small cloth into the exhaust pipe of a car.
scen36_V1_put_024.mpg	A man puts his head into a bucket which is standing on a table.
scen37_V1_put_105.mpg	A person picks up some seeds from the table.
scen38_V1_put_124.mpg	A woman withdraws her head from a bucket which is standing on a table.
scen39_V1_put_022.mpg	A woman gives a cup to another woman.
scen40_V1_put_003.mpg	A woman puts a banana on a table, using a thong.
scen41_V1_put_117.mpg	A woman pulls a small cloth out of the exhaust pipe of a car.
scen42_V1_put_007.mpg	A woman squatting puts a book on the floor.
scen43_V1_put_013.mpg	A person puts a stone into a bowl, using a book.
scen44_V1_put_125.mpg	A man picks an orange out from a cardboard box which is standing on a table.
scen45_V1_put_133.mpg	A woman walks into the room and stumbles, thereby tipping over a bucket standing on the floor and causes some of its content (small wooden chips) to fall out.
scen46_V1_put_135.mpg	A woman takes off her beanie.
scen47_V1_put_133.mpg	A woman takes off her shirt.
scen48_V1_put_026.mpg	A person puts a boot on her/his right foot.
scen49_V1_put_102.mpg	A woman picks up a cup from a table, using her mouth.
scen50_V1_put_001.mpg	A woman put s cup on a table.
scen51_V1_put_027.mpg	A woman hangs a coiled rope on a branch.
scen52_V1_put_131.mpg	A person moves a plate from a cup (which is standing on a table) to the table.
scen53_V1_put_033.mpg	A man puts on his jacket.
scen54_V1_put_023.mpg	A woman puts her hand into a hole in a tree.
scen55_V1_put_116.mpg	A woman takes a small object out of her pocket.
scen56_V1_put_015.mpg	A woman puts a chinese cabbage into a sheath.
scen57_V1_put_129.mpg	A woman moves a suitcase from inside to outside a room.
scen58_V1_put_128.mpg	A person takes a picture of a dog and a horse down from a wall.
scen59_V1_put_018.mpg	A person sticks a flower into a girl's hair.
scen60_V1_put_107.mpg	A person picks up a magazine from the floor.
scen61_V1_put_050.mpg	A woman moves a small bag from a table onto a chair.
scen62_V1_put_051.mpg	A person moves an apple from a pile of books and onto a shoe (both the pile of books and the shoe is situated on a table).
scen63_V1_put_052.mpg	A person slides a suitcase a short distance.