A Sketch of the Demonstrative System of Amarasi



Nelly van Kranenburg 22-8-2016, Leiden University Supervisor: Prof. Dr. M. A. F. Klamer

Table of Content

Glossary	IV
1 Introduction	1
2 Theory of demonstratives	4
2.1 Demonstratives in cross-linguistic typology	4
2.1.1 Syntactic features of demonstratives	5
2.1.2 Semantic features of demonstratives	7
2.1.3 Endophoric functions of demonstratives	10
2.2 Demonstratives in Austronesian languages	15
2.2.1 Morphosyntax of Austronesian demonstrative systems	15
2.2.2 Semantics and pragmatics of the Austronesian demonstrative systems	16
2.2.3 Endophoric functions of Austronesian demonstrative systems	22
3 Methodology of data collection	26
3.1 Collection of spontaneous data	26
3.2 Collection of demonstrative questionnaire data	28
4 A Sketch of Amarasi	33
4.1 Phonology	33
4.1.1 Phonemes	33
4.1.2 Stress and syllable structure	35
4.1.3 Metathesis	35
4.2 Morphology	36
4.2.1 Word classes	36
4.2.2 Derivational processes	40
4.3 Syntax	41
4.3.1 Structure of possessive noun phrase	41
4.3.2 Basic sentence structure	42
5 Amarasi demonstratives	45
5.1 Form	45

	5.2	Meaning	47
	5.3	Discourse function	53
6	Sum	mary and conclusions	59
R	eferend	res	61
A	ppendi	ces	65
	Apper	ndix A: List of Results Demonstrative Questionnaire	65
	Apper	ndix B: List of Data Recorded	69

Glossary

Abbreviations

1	first person	NEARA	near addressee
2	second person	NEARS	near speaker
3	third person	NEG	negator
ACC	accusative	NMLZ	nominalizer
ANPH	anaphor	NOM	nominative
ART	article	NP	noun phrase
СТРН	cataphor	NPROP	proper noun
DAT	dative	0	object
DEF	definite	PASS	passive
DEM	demonstrative	PL	plural
DET	determiner	POSS	possessive marker
DIST	distal	PRON	pronoun
ENDT	end of topic	PROX	proximal
ERR	error of speech	QPRT	question particle
EXC	exclusive	RED	reduplication
F	feminine	S	subject
INC	inclusive	SG	singular
LOC	locative	ТОР	topic marker
Μ	metathesized	U	unmetathesized
Ν	noun	V	verb

Symbols

- morpheme boundary
- = clitic boundary

1 Introduction

The context of an utterance influences its meaning. Without knowledge of context, it is impossible to interpret even seemingly simple utterances such as '*I saw him*', since the entities referred to by *I* and *him* are unknown. Apart from such pronominals, there are other words with shifting referents in English. Consider these examples¹:

- (1) 'That lady I suppose is your mother.'
- (2) 'How pleasant it is to spend an evening in **this** way!'
- (3) 'You must know that I am thinking of his marrying one of them.'
- (4) 'Is **that** his design in settling here?'

These examples show that the English words *this* and *that* can have quite different referents and serve a variety of functions. They can refer to abstract things (as in (2)); to a proposition (as in (4), referring to the proposition in (3)). They can be part of a noun phrase (as in (1) and (2)), function as a whole noun phrase (as in (4)), or connect two propositions (as in (3)). However, their most common function is their being able to refer to objects in the physical environment of the speaker (as in (1)).

It is assumed that all languages have a certain amount of nominal words that have this 'pointing' or 'deictic' quality (Diessel 1999) (Dixon 2003). This thesis aims to analyze and discuss this set of words for Amarasi, a language variety spoken on Timor Island in Indonesia. The Amarasi speech variety is part of the complex dialect chain called Uab Meto, which covers the greater part of the island (see Figure 1). A detailed account of these speech varieties can be found in Edwards (in prep).

According to Ethnologue, Amarasi had 70,000 speakers in 2011 (Lewis et al. 2015). It has various dialects, practically conflating with different groups of villages. It is part of the Central-Eastern Malayo-Polynesian sub-branch of the Austronesian language family (Blust 2013) (Lewis et al. 2015). Ethnologue does not recognize this group of language varieties as a dialect chain, recognizing instead three 'Nuclear Timor' languages belonging to an 'Uab Meto' subgroup: Amarasi, Baikeno and Uab Meto. As this distinction seems rather arbitrary, I will follow Edwards (in prep.) in calling all languages 'Uab Meto speech varieties'.

¹ All unmarked numbered English examples are taken from the novel 'Pride and Prejudice' (Austen 1853).

Since the data presented here was mainly collected with speakers from one village, the speech variety described in this thesis is actually one of the Amarasi dialects: Kotos. Research was mostly done in Nekmese, located on the south of the island, on the border with the Ro?is variety shown in Figure 1.



Figure 1: Uab Meto Speech Varieties across Timor Island (Edwards, in prep.)

Kupang is the vibrant central capital of the region where a variety of cultures, languages and ethnicities meet. People from surrounding areas and islands come to Kupang for purposes like work and education. The village of Nekmese on the other hand is a relatively small place, where most people are farmers. Most Amarasi speakers are at least bilingual (with Kupang Malay as a second language); some add Indonesian as a third language.

Chapter 2 contains a discussion of demonstratives cross-linguistically and in Austronesian languages specifically. Chapter 3 contains an account of the methodology used for the collection of data. Chapter 4 provides a short sketch of the Amarasi language, based on my fieldwork data. Chapter 5 presents a sketch of the forms, meanings and discourse functions of Amarasi demonstratives. This thesis ends with a summary and concluding remarks.

I am indebted to many people, without whom my fieldwork project would not have been possible. I want to thank ibu June Jacob for her willingness to help me, for her practical and linguistic help and advice during my stay in Kupang, and for her hospitality during the six weeks I stayed there. I am grateful that I was received as guest of the Universitas Kristen Artha Wacana and that I was invited to stay in the campus guest house during my stay. I want to thank my principal consultant, Yedida Ora, for her invaluable help and practical assistance during my stay both in Kupang and in Nekmese. I am grateful to her family and Roni Bani's in Nekmese for their hospitality and kindness during my stay. I owe all consultants for their willingness to take time to answer my questions.

Last but not least, I owe thanks to Owen Edwards, who has helped me connect with consultants, gave important information about the language and the community and about doing fieldwork; who was always enthusiastic and always ready to answer any question I had and shared his own data set with me to look through.

2 Theory of demonstratives

This chapter aims to present an overview of the theoretical framework used to interpret the results of the research done for this thesis. It contains two parts: a discussion of demonstratives cross-linguistically and of demonstratives as occurring in Austronesian languages specifically.

2.1 Demonstratives in cross-linguistic typology

This paragraph contains a discussion of the syntax, semantics and pragmatics of demonstratives cross-linguistically. Since demonstrative systems differ greatly across languages with regard to their semantics, examples from many different languages are mentioned in the paragraph about semantic features of demonstratives. Syntactic and pragmatic features of demonstratives are less different across languages; they can be grouped under universal headings. Diessel (1999) mentions four universal syntactic contexts for demonstratives and Himmelmann (1996) mentions four universal pragmatic features of demonstratives. Therefore, the paragraphs about syntactic and pragmatic features of demonstratives contain less examples from different languages than the paragraph about semantics.

The English terms *this, that, these* and *those* are used primarily to 'point' to objects in the speech situation, while *here* and *there* refer to places with the same sort of 'pointing' quality. This 'pointing' quality is also called 'deictic', derived from the Greek noun *deixis* meaning 'display, demonstration'. In linguistics the term *deictic* is problematic, since it is used in two different senses. In the first it is a cover term for a set of items with shifting reference (demonstratives, pronouns etc.), in the second it denotes the pointing *function* of such items (Dixon 2003). That is, in the first sense *deictic* is a noun, in the second an adjective. Consider the following definition: 'Deixis is the name given to *uses of* items and categories of lexicon and grammar that are controlled by certain details of the interactional situation in which the utterances are produced.' (Fillmore 1982: 35, emphasis mine). I shall use the term only in this second sense and mark the other sense 'shifting'.

Note that not only terms like *this* and *there*, but also pronouns like *I* and *you* are used deictically; they 'point' to entities in the speech situation. However, such pronouns are not considered demonstratives: '[a demonstrative is] any item, *other than* 1^{st} *and* 2^{nd} *person pronouns*, which can have pointing (or deictic) reference' (Dixon 2003: 61, emphasis mine). In using a demonstrative (and not a pronoun) to point to entities and objects in the speech situation, the speaker uses a certain perspective, implying that the referent brought into the

speech event is conceptualized as being a certain distance away. Himmelmann (1996: 210-211) states that a demonstrative is '[an element that is] in a paradigmatic relation to elements that, when used exophorically, locate the entity referred to on a distance scale: as proximal, distal, etc.' Thus, an item is a demonstrative if its basic function is deictic and if it can carry a certain notion of distance.

Himmelmann's definition also implies the counterpart of what he calls 'exophoric' use: 'endophoric' or language-internal use. This will be discussed in 2.1.3.

2.1.1 Syntactic features of demonstratives

Diessel (1999: 57) mentions four different syntactic contexts in which demonstratives can occur: "(i) [used as] independent pronouns in argument positions of verbs and adpositions (ii) [co-occurring] with a noun in a noun phrase (iii) [functioning] as verb modifiers, and (iv) [occurring] in copular and nonverbal clauses [referred to as]: pronominal, adnominal, adverbial and identificational demonstratives, respectively. Some languages have only one series of demonstratives that they use in all four contexts, but most languages employ distinct demonstrative forms in some or all of these positions. [If they are formally distinguished, they are referred to as] (i) demonstrative pronouns, demonstrative determiners, demonstrative adverbs and demonstrative identifiers.'

In English, nominal demonstratives *this* and *that* can be used both pro- and adnominally. Consider the example in (5):

(5) '[She] dined with him (...) four times. **This** is not quite enough to make her understand his character.'

Here, *this* is used pronominally, i.e. as a full noun phrase. Consider now example (6):(6) '[You] have gone [to Mr. Bingley] **this** morning!

Here, *this* is used adnominally, co-occurring with the noun *morning*, together forming the noun phrase *this morning*. This shows there is no formal distinction between demonstrative pronouns and demonstrative determiners in English.

According to Diessel (1999), demonstrative pronouns have the usual morphological features of nominals in the language (i.e. gender, number, case). Dutch for example has nominal demonstratives for two genders and a singular/plural distinction (*deze* and *die* for lexical items which take definite article *de* and *dit* and *dat* for those which take *het*).

Himmelmann (1996: 206) states that there are two ways in which the use of demonstrative pronouns is more restricted than that of adnominally-used demonstratives: 'Quantitatively, demonstrative pronouns tend to occur less frequently than adnominally-used demonstratives. Qualitatively, there are fewer contexts for use of demonstrative pronouns than for adnominally-used demonstratives.' He further states that 'in a few languages, the pronominal and the adnominal form are clearly distinct and equally complex, as in French (*celle* vs. *cette*) (1996: 214).' French is also a language that has special demonstrative forms in copular and nonverbal clauses (identificational context) e.g. in *C'est Pascal* (Diessel 1999: 5). However, most languages employ the same demonstrative form for both pro- and adnominal use.

There are two types of demonstrative adverbs: locational deictics and manner demonstratives. English has locational deictics *here* and *there*. These can co-occur with demonstrative determiners, intensifying them: *this guy here* (Diessel 1999: 74). Manner demonstratives can be glossed 'like this/that' or 'in this/that way' (Diessel 1999).

That demonstratives can be 'identificational' seems at first to be a pragmatic instead of a syntactic notion. However, Diessel (1999) states demonstratives can by syntactically identificational on the basis of the fact that some languages do have a formal distinction between pronominal and identificational demonstratives. Diessel (1999: 88) gives German example *Das ist meine Schwester* (DEM is my sister.SG.F). Here, *das* refers to a feminine referent. However, as a pronominal demonstrative *das* should be glossed as neutral instead of feminine (DEM.NOM/ACC.SG.N). He concludes German has a formal difference between pronominal demonstratives (which inflect for gender, number and case) and identificational demonstratives (which are uninflected).

Note that in English, the demonstrative pronoun occupies the only determiner slot in a noun phrase and cannot co-occur with an article or a possessive marker. Compare *this book/ this *the book/ this *your book*. In other languages however, demonstratives may co-occur with other determiners, as in Ewondo (Bantu, Cameroon). Consider example $\acute{e} \mod n\acute{o}$ (ART man DEM) 'the man this' (Redden 1979).

Pronominal demonstratives behave like 3^{rd} person pronouns. Compare *I like this* and *I like him*. That demonstratives and 3^{rd} person pronouns are functionally similar has long been recognized in the literature (Lyons 1977) (Himmelmann 1996). Diessel (1999) argues that 3^{rd} person pronouns are often historically grammaticalized from demonstratives. Demonstratives also have a semantic link with interjections. Consider for example French *voilá!* which contains distal demonstrative form *lá*. Wilkins (1995) argues that all interjections are built

semantically out of basic deictic (i.e. shifting) elements and should be properly seen as deictic (i.e. shifting).

2.1.2 Semantic features of demonstratives

Diessel (1999: 3) divides the semantic features of demonstratives into two domains: '(i) deictic features, which indicate the location of the referent in the speech situation, and (ii) qualitative features, which classify the referent.' The deictic features indicate the referent on a certain type of scale: near-far, uphill-downhill etcetera. The qualitative features provide information about the referent: whether it is animate or inanimate, a single entity or a set etcetera. Cross-linguistically, distance is the most common deictic feature: 'all languages have at least two demonstratives locating the referent at two different points on a distance scale: a proximal (...) and a distal' (Diessel 1999: 36). Some languages involve deictic reference not only to the speaker, but also to the addressee or even to third persons. Examples of additional parameters are: height, stance, visibility (Dixon 2003) and 'side' (based on the horizontal line of the speaker's sight) (Imai 2003: 38).

Fillmore (1982: 48-49) argues that three levels of distance is the maximum and that when languages have more terms, other parameters are involved. Based on experimental research, Imai (2003: 170) states that it is an absolute universal that 'all languages may encode at least two degrees of distance' and a near universal that 'languages may not encode more than three degrees of distance'. The geography of the region may influence the parameters used in a language. The deictic feature of verticality ([up] vs. [down]) is reported in Papuan and Tibeto-Burman languages: 'presumably, the terrain where these languages are spoken is mountainous' (Imai 2003: 36).

The following three examples show how greatly the semantic features of demonstratives across languages can differ. Tiriyó (Taranoan, Cariban) has a system involving qualitative features, marking animacy ('animate' vs. 'inanimate') and collectiveness ('all' vs. 'less than all'). The language has a three term distance-based demonstrative system: proximal, medial and distal. In addition, it has a form for invisible referents. Examples are $m\ddot{e}r\ddot{e}$ (inanimate, non-collective, medial) and $m\ddot{e}k\ddot{i}ja(mo)$ (animate, collective, invisible) (Meira 2003: 4).

Languages of the Waikurúan family (South-America) have demonstratives marking presence or absence of the noun they modify. For present referents, they can mark motion (coming/going) or position (standing/sitting/lying); e.g. in the Mocoví languge: *a-ka ?alo* (F-

absent woman) 'that woman (absent)', *a-so ?alo* (F-going woman) 'that woman (going)' or *a-ni ?alo* (F-sitting woman) 'that woman (sitting)' (Grondona 1998: 107).

The Inuit languages are famous for their enormous amount of deictic terms. In Inuktikut, places and objects are classified according to their extent (restricted vs. extended, or spot vs. area); the language has five distal categories (up-there, down-there, in-there, out-there, over-there); a distinction of 'speaker field' vs. 'other field' and of 'in-field' (visible) vs. 'out-field' (invisible) and distinctions between locative, source, path and goal. Examples are root form *takpik*- (in-field, at reference-point, high, other-field) and *pik-unga* (restricted up there- to) 'to right up there' (Denny 1982).

These examples show that some but not all languages mark demonstrative for qualitative features; that distance may not be the only parameter and that parameters may involve more than two distinctions. Senft (1997: 5) states that deixis is a general heading categorizing linguistic means of "transferring information about the three-dimensional space into the one-dimensional format of language". The linguistic devices available to carry out this transferring process correlates with the way space is conceptualized in a given language; hence deixis operates differently in different languages. Lyons (1977: 638) called the canonical situation-of-utterance 'egocentric, in the sense that the speaker (...) relates everything to his viewpoint.' However, more recent research has shown that this egocentric or 'relative' way of conceptualizing space is only one of three methods used cross-linguistically to deal with deixis. Levinson (1996) calls the other two 'intrinsic' and 'absolute' respectively. Consider the figure below.



Assuming the left side of this page points to the west, there are three options to describe the location of the house relative to the elephant. The default English option is stating the situation from one's own viewpoint (Levinson 1996), as in (7):

(7) The house is left of the elephant.

This is called the 'relative' frame of reference, since left can become right and vice versa if the speaker changes position. Using an intrinsic frame of reference however, one looks at the house from the elephant's perspective, so to speak, as shown in (8):

(8) The house is in front of the elephant.

Using an absolute frame of reference, the way to describe the situation is as in (9): (9) The house is west of the elephant.

In Mopan (Mayan) the intrinsic frame of reference is the default one (Levinson 1996). The Aboriginal language Guugu Yimithirr uses only the absolute frame of reference and only absolute spatial relations (the cardinal directions) (Levinson 1997). One says for example 'There is an ant just north of your foot' (Levinson 2003: 4). Experimental research showed that Dutch speakers on the other hand use mostly relative reference (Levinson 1997) (Haun et al. 2011). Being Dutch myself, I know that when I say 'That street is on the west side of the city' I actually mean 'I know it is on the left side of the map'.

There are some languages with deictic systems that make use of absolute directions in a less abstract way than the cardinal directions. These systems use landmarks like mountains and rivers as reference points (Levinson 1996). Note that the distance scale functions as a radius around the speaker and is thus in a sense relative. When the speaker moves, the radius moves also. However, in languages with absolute frame of reference, the deictic scale functions along an immobile axis instead.

The Tenejapan Tzeltal (South-America) live in a sloping area and use the upwarddownward axis across their area as reference. This axis even has cultural significance: the ceremonial center is upward, the corral of the souls downward (Levinson 1996: 376).

Next to spatial reference, demonstratives can also have temporal reference. For the Tenejapans, temporal reference also functions along the upward-downward axis. Levinson (1996: 376) states that for them 'time is conceived of as stretching up to the south. Temporal use of demonstratives in English is exemplified in (10) (the referent is underlined):

(10) 'My eldest sister has been in town these three months.'

The proximal form is used since the period referred to is still going on (the person has gone to town three months ago and is there still). The use of the distal form in such a context implies that the time referred to is farther back in time and that the period is concluded.

2.1.3 Endophoric functions of demonstratives

Himmelmann (1996) divides the function of demonstratives into four uses: situational, discourse deictic, tracking and recognitional use. He claims these four uses are universal. Therefore, he gives all four uses equal status. Diessel (1999) however claims that the situational, or what he calls 'exophoric' function of demonstratives is their primary function. He lumps the other three uses together, calling them 'endophoric' or language-internal. Diessel states exophoric use is primary on the basis of diachronic grammaticalization processes and markedness theory: the unmarked form is basic, derived forms are marked. Cleary-Kemp (2007) supports Diessel's conclusion about markedness. She provides the first evidence that not only recognitional and tracking use tend to be marked, but discourse deictic use also. The four uses are discussed below.

Demonstratives used exophorically refer to objects and entities in the physical world (Diessel 1999). These usually are in the immediate physical environment of the speaker, as in (11). Such referents can be pointed at. But the referent can also be abstract, or something that is not 'pointable' in any simple sense, as in (12).

- (11) 'These miniatures are just as they used to be then.'
- (12) 'And of this <u>place I might have been mistress</u>!'

Diessel (1999: 4) argues that 'exophoric demonstratives (...) have three distinctive features: They involve a specific deictic center, they indicate a deictic contrast on a distance scale, and they are often accompanied by a pointing gesture.' When someone says for example *That house is big*, the speaker is at a specific distance from the house. The 'deictic contrast on a distance scale' is twofold in English: *this* and *here* denote proximity to the deictic center (i.e. to the speaker); *that* and *there* distance. Apparently the house is relatively far from the speaker. Pointing in the context of this example can help to specify which house is meant.

Exophoric use of demonstratives strongly correlates with the semantics of demonstratives. The way demonstratives are used to bring objects from the physical surroundings of the speaker into the discourse is influenced by the parameters the language uses to conceptualize deixis. Though distance is a universal parameter (Himmelmann 1996) (Diessel 1999) (Dixon 2003), its use and that of other parameters vary across the world's demonstratives. Examples of possible parameters are distance, visibility and verticality.

Language-internal functions of demonstratives are called *endophoric*. Endophoric demonstratives have no referent in the physical world, but 'function to organize the

information that is encoded in the ongoing discourse' (Diessel 1999: 112). According to Himmelmann (1996) and Diessel (1999), these can be subdivided into three types: anaphoric (Diessel) or tracking (Himmelmann), discourse deictic and recognitional demonstratives.

The term *anaphor* is a bit problematic. In the first sense, anaphora are tracking devices coreferential with a prior noun phrase. In the second, anaphora are a subtype of discourse deictic use of demonstratives, coreferential with a proposition.

Anaphoric demonstratives are used to: '[track] participants of the preceding discourse' (Diessel 1999: 96). Anaphoric demonstratives are coreferential with a prior noun phrase, they refer to entities. This construction also occurs in English, but usually only when the noun phrase referred to is a place, as in (13) and (14):

- (13) While <u>Meryton</u> was within a walk (...), they would be going there forever.
- (14) 'They must all go to Brighton. That is the place to get husbands.'

In these examples, distal demonstratives *there* (locative) and *that* (nominal) are used to refer back to the places *Meryton* and *Brighton*.² However, English anaphoric elements are usually pronominal (Diessel 1999), as in example (15), where the pronominal *she* refers back to the noun phrase *Mrs. Long.*:

(15) "Mrs. Long has just been here, and she told me all about [Netherfield Park]."

The use of a demonstrative instead of a pronominal is possible, but less felicitous (consider the equivalent sentence '*Mrs. Long has just been here, and* that lady *told me all about Netherfield Park.*').

English has some other anaphoric devices, like *aforementioned* or *such as*, exemplified in (16), where *such as* is used to refer back to the noun phrase *Mr. Bennet's emotions*:

(16) <u>Mr. Bennet's emotions</u> were much more tranquil (...), and **such as** he did experience he pronounced to be of a most agreeable sort.

² This is in direct speech, which suggests exophoric use. The speaker uses distal *that* to refer to Brighton, where she has just returned from. Were this use exophoric, the demonstrative would refer to an entity in the real world, in distal form supposedly because the place is far. But supposedly she does not use any gesture, and since she has just uttered the noun phrase *Brighton* it is logical to analyze this demonstrative as a proper anaphor.

Discourse deictics are not coreferential with a noun phrase, but with a proposition (Diessel 1999). Or, they 'point to the meaning content of an immediately adjacent discourse segment' (Cleary-Kemp 2007: 335). Consider the example in (17):

(17) 'I am sick of Mr. Bingley,' cried [Mrs. Bennet]. 'I am sorry to hear that.'

In this example, *that* is used to link the clause [*I am sorry to hear*] to the previous proposition (i.e. that Mrs. Bennet is sick of Mr. Bingley). The proposition being referred to in this way may be longer than a sentence, it can be a whole story.

According to Diessel (1999), discourse deictic use can be both anaphoric and cataphoric. Consider the following examples, where the demonstrative in (18) refers back (anaphor) and (19) refers forward (cataphor):

(18) "...had you behaved in a more gentlemanlike manner.' Those were your words."

(19) [Mr. Collins] addressed the mother in these words: "May I hope, madam,...."

Other cataphoric markers in English include phrases like *as follows* as shown in (20): (20) [The letter] (...) was **as follows**:— "<u>Be not alarmed, madam ...</u>"

Apart from discourse deictic demonstratives, there are more English terms that function to link two propositions. Consider the following examples:

- (21) Though vanity had given [Mary] application [on the piano forte], it had given her **likewise** a pedantic air.
- (22) "Whatever I do is done in a hurry," replied [Mr. Bingley]; "and **therefore** if I should resolve to quit Netherfield, I should probably be off in five minutes.

In (21), *likewise* functions as a sort of 'manner linker', linking the two propositions *vanity gave Mary application* and *vanity gave Mary a pedantic air*, implying that these two had the same manner of process. In (22), *therefore* links two propositions indicating the first would be a reason for acting upon the second. Note that this linker has a demonstrative base, it is derived from distal locative *there* combined with a preposition. This construction is also possible with other English prepositions (though most are considered archaic), e.g. *upon, in,* and *by*.

The third endophoric type of demonstrative is the recognitional one (Himmelmann 1996) (Diessel 1999). Recognitional demonstratives do not have a referent in the discourse or the surrounding physical world; they relate to information that is known both to speaker and hearer, and part of their particular shared knowledge (Diessel 1999). Consider the use of the English demonstrative in (23):

(23) My uncle was called away upon business to that horrid man Mr. Stone.

In this example, the speaker refers to a person named Stone, who is neither present at the speech act nor mentioned earlier in the discourse, but he is apparently known to the hearer. According to Diessel (1999: 106), these demonstratives are 'used to mark information that is discourse new (...) and hearer old'.

A recognitional demonstrative is always used adnominally, i.e. as part of a noun phrase. Such a noun phrase is often followed by a relative clause containing additional information about the referent (in case the hearer does not immediately think of the right referent), as in (24):

(24) "La!" replied Kitty, "it looks just like that man that used to be with him before. Mr. what's-his-name. That tall, proud man."

Note that the default recognitional demonstrative in English is distal *that*.

Bowden (2014) proposed to call the recognitional type of use 'nousophoric' (derived from the Greek term denoting the mind), since recognitional demonstratives in a sense 'point' to a place in the mind of the addressee. This is a sensible suggestion, since recognitional use is indeed quite different from anaphoric and discourse deictic use. 1) Anaphora and discourse deictic markers serve to organize elements in the surrounding discourse; 2) they have no referent in the world outside the discourse and 3) they may be used in a variety of syntactic contexts. Recognitional demonstratives however 1) do not have a referent in the surrounding discourse; 2) they refer to entities with physical existence and 3) their syntactic use is very restricted (they are used only adnominally).

In colloquial English, unstressed proximal *this* in adnominal position can also introduce a new entity into the discourse. Consider the example in (25):

(25) I couldn't sleep last night. This dog (next door) kept me awake. (Gundel et al. 1993: 277)

As with recognitional demonstratives, *this* is followed by a noun mentioned for the first time in the discourse. Diessel (1999: 109) notes two pragmatic differences with recognitional use: '(i) it introduces hearer new instead of hearer old information, and (ii) (...) the topic usually persists in the subsequent discourse'. Wald (1983) calls this type *new-this*, analyzing it as a type of anaphoric use. Himmelmann (1996: 222) however links it to the proper situational use, 'since it has the force to introduce a referent firmly in the universe of discourse with the use of just a single [noun phrase]. Gundel et al. (1993) call this use of

indefinite *this* 'referential'. Referential use is very low in what they call 'the Givenness Hierarchy'. From low to high givenness, the statuses are 'type identifiable' (*a dog* kept me awake) \rightarrow 'referential' (*this dog* kept me awake) \rightarrow 'uniquely identifiable' (*the dog* kept me awake) \rightarrow 'familiar' (*that* dog kept me awake) \rightarrow activated' (*that/this/this dog* kept me awake) \rightarrow 'in focus' (*it* kept me awake). Each more restrictive status includes all lower statuses, but not vice versa. This givenness hierarchy shows that use of 'referential' *this* indicates that the referent has very low topicality. It is true that indefinite *this* brings into the discourse an entity that is new and thus has low topicality, but this entity gains topicality by being referred to with the use of indefinite *this*. As Diessel (1999) states, such entities usually persist in the subsequent discourse.

For a summary of the features of English demonstratives, consider sentence (26):

(26) 'Well, John met **this₁** friend **there₂**, and **that₃** man said: 'My advice is **that₄** you burn **that₅** ugly table of yours and buy **this₆** one.''

This sentence illustrates the variety of pragmatic functions and possible syntactic constructions of demonstratives in English, as shown below.

No.	Syntactic context	Pragmatic use	Semantics
1 this friend	adnominal	new-this / referential	-
2 there	local adverbial	exophoric	distal
3 that man	adnominal	anaphoric / tracking use	-
4 that	pronominal	discourse deictic	-
6 that ugly table of yours	adnominal	recognitional	-
7 this one	adnominal	exophoric	proximal

The features of demonstratives cross-linguistically can be summarized as follows:

Syntactically, demonstratives in a given language can occur in four different contexts: pronominal, adnominal, adverbial and identificational. These functions may or may not be formally distinguished. Nominal demonstratives follow the usual morphology of nominals in the language.

Semantically, demonstratives in a given language may be classified by deictic parameters such as distance, visibility, verticality and reference to the addressee; they may contain additional information about the referent with regard to features such as animacy, motion or extent.

Pragmatically, demonstratives in a given language have four uses: exophoric, anaphoric, discourse deictic and recognitional.

2.2 Demonstratives in Austronesian languages

This paragraph contains a short overview of the morphosyntax, semantics, pragmatics and endophoric features of demonstrative systems in Austronesian languages. Examples are taken from many different sub-branches of the Austronesian language family.

2.2.1 Morphosyntax of Austronesian demonstrative systems

The morphology of Austronesian demonstratives usually follows what is normal for nominals in the language, as Diessel (1999) predicts. Rongga is highly isolating and spatial forms are monomorphemic, while demonstratives in the agglutinative language Balinese are morphologically complex (Arka 2004). Most Austronesian demonstrative pronouns may be used pronominally as well as adnominally, like Arelle-Tabulahan which has *pisomu nee* (knife NEARS) 'that knife' and *beaä nee* (give.me NEARS) 'give me that' (McKenzie 1997: 222). Some languages have separate demonstrative pronouns and demonstrative determiners, like Taba which uses proximal root form *ne* adnominally and corresponding demonstrative pronouns *ine* (SG) and *sine* (PL) pronominally (Bowden 2014: 82).

Using the singular and plural 3^{rd} person markers to form demonstratives pronouns is also done in Biak (Steinhauer 2005) and Kambera, which has deictic elements *ni* (near speaker), *nai* (near speaker but further than *ni*), *na* (near addressee), *nu* (far away from both). These can be combined with pronominal clitics *na* ' 3^{rd} person singular' and *da* ' 3^{rd} person plural' to form demonstrative pronouns (Klamer 1998).

In Mori Bawah, the most basic form is the locational verb. The prefix *a*- is added to form the demonstrative: e.g. *a-ndio* (DEM-NEARS), a-tuu (DEM-NEARA). Mori Bawah locational verbs may be marked for person and number of the subject (Mead 2005).

Manner adverbs exist in many Austronesian languages. They are often formed by combining an affix to the demonstrative root forms. Consider the examples from Mori Bawah: *kana-ndio* (like-NEARS), *kana-tahu* (like-DIST.higher) (Mead 2005: 695) and from Taba: *ta-ne* (like-PROX) and *ta-dia* (like-DIST) (Bowden 2014: 82). A more complex construction is found in Kwaio: *age 'i-no'ona a-i* (do verbalizer-DIST LOC-it) 'do it like that' (Keesing 1997: 131). Diessel (1999: 74) states that the function of manner adverbs is often discourse deictic. This is true for colloquial Indonesian forms *begini* 'like this' and *begitu* 'like that' and short forms *gini* and *gitu*, which can be used 'to refer to a previously mentioned proposition' (Ewing 2005: 249).

Co-occurrence with other determiners in a noun phrase is possible in some languages, as in Muna with a possessive marker in a noun phrase: *ghole-no ini* (top-its this), 'this its top'; and emphatically with a pronoun: *ihinti ini* (you this) [you come from where] 'where do YOU come from?' (Van den Berg 1989: 93) *Aitu* can be used contrastively (not object X *aini* but object Y *aitu*) (Van den Berg 1989).

2.2.2 Semantics and pragmatics of the Austronesian demonstrative systems

This paragraph lists the most common semantic features of the Austronesian demonstrative systems. Different deictic parameters are mentioned and exemplified; the use of particular parameters is linked to the geography of regions and also to cultural practices.

The ancestor of all non-Formosan Austronesian languages (Proto-Malayo-Polynesian) had a system of directional orientation based on "two orienting features: a land-sea axis (...) and the south-east Asian monsoons (...), [a system clearly] adapted to a life on or near the sea, in which the sailing winds were of basic importance and the landforms encountered frequently were small islands" (Blust 1997: 39). The land-sea axis feature is most pervasive throughout all daughter languages existing nowadays (Blust 1997). Blust (2013: 308) states that 'all Austronesian systems of demonstrative reference [considered in his comprehensive study] can be expressed in terms of 1) degrees of distance in relation to speaker or hearer, or 2) visibility.' and that 'most Austronesian languages divide [the] semantic space into a proximal deictic and two distal deictics' (2013, 305).

However, other factors may also be relevant alongside distance and visibility. Semantically, deictic systems in Austronesian languages can involve the following parameters (to be discussed below in turn):

- degrees of distance
- visibility vs. non-visibility
- reference to persons in the speech situation (speaker and addressee most notably)
- reference to geographical landmarks (e.g. mountain or land vs. sea or river)
- (degrees of) elevation
- cardinal points (North, East, South and West)

Distance and person

Semantically, Austronesian deictic systems usually have a 2-, 3- or 4-way split system which is either distance-oriented, or both distance- and person-oriented. Examples of two-way

split distance based systems include the Southern dialect of Nias, with two forms for each distance: *ha'a* (PROX) and *andra* (PROX) and *hö'ö* (DIST) and *andre* (DIST) (Brown 2005) and Tetun which has *ne'e* (PROX) and *nia* (DIST) respectively (Van Engelenhoven and Van Klinken 2005).

Examples of three-way split systems with forms meaning 'near speaker', 'near addressee' and 'far away from both' include Buol, which has deictic bases tia(n), tii(n) and too(n) (Zobel 2005); Makassar with *anne*, *antu* and *anjo* (Jukes 2005), and Pileni with *ne/nei*, *na* and *la* (Naess 2003). The second form in a 3-way system may have other meanings than 'near addressee', such as 'within call of speaker but not in reach' in Leti (Van Engelenhoven 2005) or simply 'medial distance away', as in Kilivila (Senft 2003) and in Takivatan Bunun (De Busser 2009).

Blust (2013: 306) notes that in the Philippines and in Western Indonesia, some deictic systems are asymmetrical, e.g. Malay 'has 1) *di-sini* 'here', 2) *di-situ* 'there (near you)', 3) *di-sana* 'there (distant, whether in view or not)', but *ini* 'this', 2) *itu* 'that' (no **ana). So the adverbial demonstratives follow a three-term split, the nominal ones a two-term split.

Four-way split systems all seem to involve both person-orientation and distanceorientation. Kambera has deictic elements *ni* (near speaker), *nai* (near speaker but further than *ni*), *na* (near addressee), *nu* (far away from both) (Klamer 1998). Sinama has a 4-way distance split system for demonstratives and corresponding locational adverbs (near speaker, near addressee, away from both but not far, far from both) (Jun 2005). Samoan can also be analyzed to have a four-way system of distance: near speaker, near addressee, not too far away from both and far from both. The seven demonstratives are: *lea* and *lenei* (together with speaker, informal vs. formal), *lele* (within reach of speaker), *nale* (within reach of addressee), *lena* (together with addressee), *lale* (out of reach, not too far from both) and *lela* (far from both) (Mosel 2004). Van den Berg (1997: 203) states that 'the distance parameter [in Muna] has four contrastive categories [and] height and visibility two each.' The six basic demonstrative pronouns are (*a*-)*ini* (near speaker), *(a-)itu* (near addressee), *(a-)maitu* (near), *(a-)watu* (far: neutral), *(a-)tatu* (far: high) and *(a-)nagha* (audible/invisible/anaphoric) (Van den Berg 1989: 89) (Van den Berg 1997: 199).

Systems with more than four distinctions are relatively rare. Mori Bawah has a fivefold distinction (near speaker, near addressee and three forms of distal demonstratives based on elevation: level, higher and lower) (Mead 2005). Malagasy is a special case. Rasoloson (2005: 470) states 'it involves the remarkably high number of seven degrees of distance from the speaker in addition to a visible/non-visible distinction'. Although the seven

forms are mentioned, the exact differences between these forms are not explained in the article. The forms are simply grouped into three groups, the first two forms called 'proximal', the third and fourth 'medial' and the last three forms 'distal'. It seems illogical to state there is a seven-way distance contrast and then group the forms into a 3-way split system. Imai (2003, 95: 107), after discussing this supposed 7-fold distance contrast along with another analysis (involving a 5-fold distance contrast and a 'punctual' vs. 'extended' contrast), analyzes the Malagasy deictic system as having a three-way distance contrast, along with a 'bounded' vs 'unbounded' distinction (similar to the abovementioned Inuktitut 'restricted' vs. 'extended').

For languages with a three-fold system, the precise meaning (and function) of the second demonstrative form is often problematic. Some languages instigate disagreement among scholars on this point. For Biak, Steinhauer (2005) implies the middle demonstrative root is distance-based, stating that it means 'medial distance away, neither very near nor very far', but Van den Heuvel (2006: 327) claims it is person-based 'relatively close to S or close to A'. For Tagalog, the three basic forms *ito*, iyan and *iyon* are said to be meaning 'this', 'that (near addressee)' and 'that (not near addressee)' (Schachter and Reid 2008: 854). These seem more like English translation equivalents than well-defined glosses. Fincke (1995) does not use reference to addressee and glosses the forms as proximal, medial and distal respectively.

In other three-fold systems, the second demonstrative form does not only carry an element of distance, but also additional information about the referent or the way the referent is brought into the discourse. In Takivatan Bunun, 'medial forms are not only encoding the distance to the deictic center, but additionally indicate that the marked referent or event is situated at an identifiable distance (...), within visible range or in a space shared with the [speaker]' (De Busser 2009: 418).

Visibility and audibility

Visibility plays a role in a lot of Austronesian languages, though by no means all of them. Iloko demonstratives mix distance with visibility: *toy* (proximal) *ta* (medial or near addressee) *diay* (distal) *tay* (out of sight, remote) and *di* (out of sight, recent). The distal form is visibility-neutral. Iloko temporal adverbs are paradigmatically related to these forms and distinguish five degrees of temporal 'distance' (Rubino 2005). In Kavalan, the proximal demonstrative may only be used when the entity is visible. The medial and distal forms are visibility-neutral (Jiang 2006) (Jiang 2009). In Mori Bawah, the demonstrative or locational verb is used when the entity is visible, but invisibility of the referent triggers the use of deictic adverbs instead (Mead 2005: 696). Paiwan has two distance categories (proximal vs. distal)

and visibility (Chang 2006). Audibility is mentioned as a parameter for Muna, but the primary function of the audible demonstrative is in fact anaphoric (Van den Berg 1989).

Geographical landmarks, elevation and cardinal directions

Languages spoken on relatively small islands tend to make more use of distinctions related to the surrounding geography. Important parameters are the seaward vs. landward axis and elevation. Some Austronesian languages use an interesting mixture of what Levinson (1996) called 'relative' and 'absolute' frame of reference. 'Local landmarks (...) do not have the same abstract properties as notions like 'north'. (...) Many Austronesian island languages [fix] an East-West absolute axis by reference to the monsoons but use a 'mountain'-'sea' axis to contrast with it. As one moves around such islands the one axis remains constant, the other rotates (Levinson 1997: 124).

Iaai for example is spoken on Uvea, an island sloping from east to west. The uninhabited higher east coast is associated with 'inland', while the inhabited west coast facing the lagoon is low. Alongside three terms for near-speaker, near-addressee and distal reference, Iaai has deictic locatives *jii, jo, dhöö* and *lââ* (downward/seaward; down, near speaker; up/inland; beside) and also \ddot{u} (west/seaward) and $i\ddot{o}$ (east/inland). These last two terms are based on the reference points related to the sunrise and the sunset, which are fixed points. In limited setting however, the terms become relative points and go along the sloping seaward/landward axis (Ozanne-Rivierre 2004).

Balinese north/south terms *kaja/kelod* are 'partly absolute and partly relative' (Arka 2004: 3). A mountainous range across central Bali running from west to east splits the island into a northern part and a southern part. *Kaja* literally means 'mountainward' and *kelod* 'seaward', which results in opposite uses for the northern and southern speakers. However, the terms have gained absolute reference in the cognition of speakers. Thus, a southern speaker uses *kaja* for 'north' even when visiting the northern part of the island (Arka 2004). Alune also makes use of the transverse axis, parallel to the shore and the mountain range. Alune has 6 directionals 'mapped onto three planes: seawards/inland (*mlau/nda*), upwards/downwards (*mlete/mpe*), and opposing directions on the transverse axis (*ndi/mpai*) (Florey 2002: 15). The transverse axis is also used in Kilivila, but there the same distal demonstrative form can be used to refer to the far left and to the far right (Senft 2003). The cardinal directions are relevant in Muna for the two distal terms. Only when height is neutral, the two forms can refer to east/north and west/south respectively (Van den Berg 1997). Rivers may function as axis in the same way as mountain-shore axes. Aralle-Tabulahan has three

directionals and locatives for height or 'contour' (upwards, downwards and level) and three related to the river (upstream, downstream and across) (McKenzie 1997).

Above, we have discussed types of 'spatial deixis' (covering 'place deixis', 'person deixis' and 'time deixis', i.e. linguistic categories concerning pointing to places, persons and time respectively) and 'discourse deixis', which is a language-internal type of deixis. Another type of deixis is 'social deixis'. Foley (1997: 313) defines it as 'the overt expression, in the actual indexical linguistic forms used, of some parameters of the relative social position of one or more of the linguistic interactants.' Social deixis concerns for example the choice between calling someone *Mister, Bill* or *honey*, marking the different social positions one can have in relation to another person. Examples of social deixis in Austronesian societies are use of speech levels, spatial expressions in greetings and spatially related cultural customs.

Javanese is an example of a language with rich social deixis; it has three 'speech levels': *ngoko* (basic or crude level), *karma* (common standard polite address) and *mayda* (middle). The nobility for example use mainly *krama*; and *mayda* when they speak to commoners (Errington 1985). Taba also has three speech registers, labelled *biasa* (normal) *alus* (refined) and *kasar* (coarse) (Bowden 2014).

Everyday greetings may involve spatial expressions, e.g.: "Where are you going?" "I am going toward the north." (as opposed to asking about someone's health or the weather as in Germanic languages). This is true for Indonesian/Malay: (mau) kə-mana (want to-where) 'Where are you going?', jalanjalan saja (walk-walk just) 'Just strolling', but also for Balinese and Rongga k-ija? (to-where) 'Where are you going?' ngajanan (AV-north-LOC) 'toward the north' (Arka 2004). A Longgu speaker can answer vu toli (toward west). When a Longgu speaker goes to the garden he may say na ho la vu longa (1SG IRR go to inland), since gardens are located inland of a village. The sea-inland and east-west axes are also used in Longgu to specify descent or clan membership: a genu asi (woman sea) is a woman who lives toward the sea (Hill 1997).

Religious or cultural customs may be spatially related. In the Balinese belief system, the spatial distinction of the mountain vs. lower places is related to the distinction between sacred place vs. non-sacred place, as the elevated place is associated with the dwellings of gods. In Rongga, a similar distinction exists for up vs. down (or mountain vs. river). These distinctions result in cultural practices like the orientation of a sleeping or dead person, whose head is supposed to be on 'mountainward' side, or rituals involving the disposal of bad things in the river (i.e. on the non-sacred side) (Arka 2004).

Another example of the cultural significance of spatial concepts concerns the Malagasy myth about the origin of the royal family of the Merina dynasty. The first Malagasy dynasty was that of the ZafiRaminia ("the desencdants of Raminia"), whose nobles were called *Andriana*. The title of the ZafiRaminia sovereigns contains the spatial term denoting the center (*Andriambahoaka afovoan'ny tany* (lit. 'sovereigns of the middle of the Earth')) (Ottino 1982: 224). The center is associated with the residence of power, whereas the four cardinal points are inferior to the center just as the other *Andriana* are inferior to the *Andriambahoaka afovoan'ny tany*. Rice is introduced by a daughter of God at a place in the middle of Madagascar, where the swampy plains later became the great rice plantations of the center. The importance of the center and the four cardinal points is apparent in cultural practices like the royal circumcision dance, where the dancers traverse these five points, thereby symbolically taking possession of the universe (Ottino 1982).

Nowadays, the fivefold system is still being used in parts of Madagascar. The Malagasy define their position and objects around them in reference to the cardinal directions. Malagasy people sleep head-north facing east (similar to Balinese custom) and cardinal directions are mentioned in prayers and sacral formulas. Moreover, each of the cardinal directions is associatively related to a cultural concept: the north with honor and command, the south with humility, the east with sacredness and the west with profanity. The north side is where elders sit and important guests are received. Sacred objects are kept in the north-east corner. The west is where women sleep during menstruation, where the slaves reside and where the garbage is thrown or placentas are buried. The south is the polite side to enter the house when one is visiting (Adelaar 1997).

The five-fold system with the four cardinal directions plus the center is also relevant for Javanese people. Javanese village confederates contain five villages, one in the center and one in each of the cardinal directions from the central villages. These villages used to cooperate in periods of need. Nowadays the figure 5 is still in use. Crops are divided into five portions before any other divisions are made, village markets rotate between five villages during a five-day week, the names of the five days correspond to each of the directions and there are five positions of power in the hierarchy of villages (Adelaar 1997) (Koentjaraningrat 1985).

Two other examples of social deixis concern deictic parameters 'formality' and 'social space'. Formality is a parameter in two of the seven demonstratives in Samoan *lea* (with speaker, informal) and *lenei* (with speaker, formal) (Mosel 2004). The concept of social space is important in Alune directionals, which are used within a zone of local space; a radius of

some 30 kilometers at most: 'the realm of everyday interactions and experiences' (Florey 2002: 15). The world beyond this zone is divided into three more zones according to relative distance, the farthest of which denotes everything beyond Maluku. Three directionals homophonous with the ego-zone directionals are used to denote these three zones: the two transverse directionals and the upwards directional respectively (Florey 2002).

2.2.3 Endophoric functions of Austronesian demonstrative systems

This paragraph contains a short discussion on the endophoric uses of Austronesian demonstratives. Pragmatics of demonstratives can be subdivided into exophoric and endophoric uses (Himmelmann 1996). Note that linguists may use different terms for the various endophoric uses. For example, Bril (2003: 100) calls all endophoric use anaphoric or cataphoric, distinguishing 'two anaphoric markers [in Nêlêmwa]: one for something previously mentioned, one for facts known from shared knowledge'. Following Diessel (1999), I would call these anaphoric and recognitional respectively.

Exophoric use involves pointing out objects and entities in the speech situation. Most of the factors relevant for this relate to the semantic parameters deployed in the deixis of languages, discussed above in 2.2.2. However, another important factor for exophoric use of Austronesian demonstratives is the use or non-use of gesture. In some languages, specific demonstratives must always be accompanied by a gesture. In Samoan for example, three of the seven demonstratives are necessarily accompanied by gesture:, *lele* (within reach of speaker), *nale* (within reach of addressee), and *lale* (out of reach, not too far from both) (Mosel 2004). In Taba, use of gesture can indicate exophoric use (as opposed to anaphoric use) (Bowden 2014). Margetts (2004) mentions that touching vs. non-touching of the referent object or use of finger pointing vs. head nods/eye gaze are criterions for use of Saliba demonstrative alongside spatial distance.

Considering the difference between exophoric and endophoric pragmatics, note that some forms in a demonstrative paradigm may be "pragmatically restrained", i.e. they may be used only exophorically or only endophorically. That the first restraint seems to occur far more often than the second is logical considering exophoric use is the basic function of demonstratives (Diessel 1999). For example, Samoan uses all seven forms exophorically but only three for endophoric purposes: *lea* and *lenei* (together with speaker) and *lena* (together with addressee). Interestingly, three of the other four demonstratives are obligatorily accompanied by a gesture (Mosel 2004), which is quite impossible for endophoric use.

The other type of constraint can result from diachronic processes. Ross (2004) states that Takia has a three-way formal distinction of demonstratives, but only two degrees of distance. The non-spatial series are used only anaphorically. Apparently, Takia once had a three-term system of spatial deixis, the third series now having lost all spatial function. However, most forms in a paradigm can be used both exophorically and endophorically. In Takia, the proximal series can be used for cataphoric reference.

The most proximal demonstrative in three-way systems is used for cataphoric use in other languages as well: the speaker-based free demonstrative *teina* (sometimes with clitic) in Saliba (Margetts 2004); speaker-based *lenei* and *lea* in Samoan. Note that *lea* is the default Samoan demonstrative, it can also be used for anaphoric reference. The other Samoan anaphoric demonstrative is addressee-based *lena* (Mosel 2004). Ross (2004: 177) states that 'usually, one member of an Oceanic demonstrative system functions anaphorically, in accordance with one of two strategies. Under the first, form 2 [near-A or intermediate form] is semantically the least marked, serving as an anaphor (...). Under the second strategy, the system has a fourth purely anaphoric member, with neither person- nor distance-orientation.'

In the three-way system of Pileni, both the proximal and distal forms are used for anaphoric reference: 'the proximal form is used when the antecedent is recently mentioned, while the distal form is used when the antecedent is found relatively far away in the preceding discourse (Naess 2003: 88). In Muna, the audible form *(a-)nagha* is used primarily for anaphoric reference. Near-speaker form *aini* and near-form *amaitu* can also be used anaphorically. Van den Berg (1989) does not clearly indicate the difference between these three anaphoric devices.

Apart from demonstratives, languages may have other anaphoric devices. Pileni for example has a special anaphoric form for prepositional phrases (Naess 2003). In Takivatan Bunun, demonstratives are rarely used anaphorically (only contrastively), since the language has an anaphoric marker *sia* (De Busser 2009: 425). Indonesian has anaphoric (or tracking) marker *tadi* (Himmelmann 1996: 236). For Takia, Ross (2004) recognizes three discourse deictic uses of the proximal demonstratives series: introducing new referents, contrasting referents with other referents and cataphora.

Diessel states that the *specific* type of information designated by recognitional demonstratives should be distinguished from *general* (cultural) information shared by all members of the speech community. In English such information is marked by a definite article instead. (For example: *I saw the /*this /*that king*) (Diessel 1999). However, in Muna, the basic set of demonstrative forms (called anaphoric or referential) are not only used for

previous discourse entities or given referents, but it is also found with 'unique referents (world, sun, moon)' (Van den Berg 1997: 198). Recognitional use of a basic demonstrative form is reported in for example in Indonesian, with distal *itu* (Himmelmann 1996). Taba however has a special demonstrative form for recognitional use, which is in a syntactic paradigm with the core demonstrative forms, but not in a morphological paradigm. All other demonstrative forms are derived from *ne* (PROX) and *da/dia* (DIST), but the recognitional form is *ya* (Bowden 2014).

In his paper on Iloko, Rubino (2005: 336) notes that 'referents that are recently activated into the consciousness of the speaker may (...) appear with a non-visible demonstrative.' It is not explained whether the use of the non-visible demonstrative is properly anaphorical or recognitional.

Ewing (2005: 249) notes that '[in languages with a 3-way split system], the second form (medial or near-addressee) is used in fixed expressions with which a narrative or discourse can be concluded. In colloquial Indonesian, the demonstrative manner adverbs *begini* (like this) and *begitu* (like that) can be used anaphorically. The short form, *gitu* is often used to refer back to the proposition which the speaker has just expressed; this usage usually occurs at the end of a short cluster of intonation units and is an important rhetorical device to marked unit boundaries.' This also occurs in Pileni, where addresse-based *na* is used in the fixed expression (*te*)*na koi a* 'that's it, just like that' (Naess 2003: 83). Taba has *ta-dia* (simulative-DIST) 'It's like that' (Bowden 2014: 96) and Kambera *nu-ya*... (DEI3-3SG.ACC) 'thus it is...' (Cleary-Kemp 2007: 336).

It is claimed that the pragmatic importance of spatial reference is greater in Austronesian languages than in Indo-European languages. Mosel (2004: 141) claims that 'Samoan is extremely rich in deictic means of expressions, not only in respect of the number of deictic morphemes and the semantic distinctions they express, but also with regard to text frequency.' Ozanne-Rivierre (1997:84) points out that spatial reference is so important in the languages of New Caledonia that 'oral texts can often only be properly understood when the spatial context of utterance is precisely known'. For Alune, statistic evidence is given that directionals and locatives are highly important in adult texts (Florey 2002: 24).

Another form of discourse importance of deictic terms is discussed by Fincke (1995: 87), who argues that what he calls 'accord' and 'discord' in interaction are important factors for use of deixis in Tagalog. If all speech participants act as if the proposition is common knowledge, or if they all characterize the proposition as socially consistent, there is accord; when they do not there is discord. When there is accord, the distal form is used by all

participants. However, when there is discord, deixis indicates who made the proposition available to the interaction. If it is the speaker, the proximal is used, but if it is another participant, the medial is used.

The features of Austronesian demonstrative systems can be summarized as follows.

Morpho-syntactically, Austronesian demonstrative systems either formally distinguish between demonstrative pronouns and demonstrative determiners, or use the same form pronominally and adnominally.

Semantically, Austronesian demonstrative systems usually follow a 2- or 3-way split distance contrast. Additional reference to the addressee is common. Visibility plays a role in some languages. Languages spoken on smaller islands tend to make more use of geographical landmarks like the mountain-sea axis and elevation.

Pragmatically, spatial reference in Austronesian language is more important than in Indo-European languages. This is apparent in use of speech levels, use of spatially related greetings and use of spatially related cultural and religious customs. The exophoric, anaphoric, discourse deictic and recognitional uses of demonstratives are all attested in Austronesian languages.

3 Methodology of data collection

All data referred to as my own in this thesis were collected during a six-week field trip to Timor in March and April 2015. My fieldwork activities involved the collection of two types of data: spontaneous data (conversations and narratives) and specific data on demonstratives. The data recording was done both in Kupang and in the village called Nekmese. In Appendix B full information on place and date of the collected data is given. In paragraph 3.1 the collection of spontaneous data will be discussed. In paragraph 3.2 the data collected specifically to gain insight in the Amarasi demonstrative system will be discussed and exemplified.

3.1 Collection of spontaneous data

The word 'spontaneous' is used here to describe any data that is not immediately linked to the demonstrative questionnaire discussed in paragraph 3.2. The term implies that I did not take any active part in the speech act that was recorded. Consultants who participated in this type of data recording were asked to tell a story. Most of these 'stories' are short narratives about relatives. An Amarasi version of the famous Frog Story (Mayer 1969) was also included. I also recorded some conversations, but only one of them (which was also about relatives) was of sufficient quality. The other recording had too much noise in the background. More information on the contents of the spontaneous data used in this thesis can be found in Appendix B.

I worked with one main consultant, referred to in this thesis by her nickname Oma, who helped me by finding consultants. After the sessions, Oma transcribed most of the audio material into Amarasi orthography. She also provided me with some word-by-word translations. I used these transcriptions for further analysis. Often, I had to ask her questions about the meaning of specific words. The spontaneous data was glossed in Toolbox and used primarily as a basis on which to write Chapter 4.

Not all data is of equal quality. One point is extremely important to note. Consultants were all early bilinguals in Malay. It is therefore logical to assume they have all been influenced by Malay at least to some extent. This point holds also for the demonstrative data discussed in 3.2.

The influence of Malay was visible in various ways: most notably in use of loanwords and code-switching. Examples of loanwords from Malay in the data include *botor* from 'botol' (bottle), *warung* from 'warung' (shop) and *warna* from 'warna' (colour). One consultant, who was a school teacher, told about her siblings and children and whether they had gone to school or not. She had to use a lot of educational terms to do this, and these terms are all Malay. In this particular recording, she used Malay words in other contexts as well. An example of this (with all Malay words in bold print) is shown in (27):

(27)	Anah	pertama	sementara	n-ait	Esdua.
	child.U	first	while	ЗSG-go.м	S2
	'The first	st child is in	S2.' [Akila-	-Cerita.024]	

The speaker began her narrative using sentences without Malay terms, but when she related the successive numbers of siblings she began to mix them up with Malay equivalents. This example is taken from the second half of the text. It includes the educational term *Esdua*, referring to the second grade. Although educational terms have to be in Malay, some of the Malay words could have been replaced by Amarasi equivalents.

Apart from their use or lack of use of Malay terms, there were some other notable differences between the way consultants acted during the elicitations. One consultant did not point at any objects and only touched the two objects next to her, while most other consultants used pointing gestures in various elicitation scenes.

Code-switches and back translations were even more visible in the elicitation sessions discussed in paragraph 3.2, presumably because I was participating by talking only in Malay. An example of confusion is shown in (28)-(30):

(28)	Me:	[botol] warna apa?
		bottle colour what
		'What colour is [that bottle]?'
	W:	Muti n-ok biru
		white 3sg-with blue
		'White and blue.'
(29)	Me:	Dan di kalimat? botol punya beberapa warna
		and in sentence bottle have several colour
		'And in a sentence? The bottle has several colours'
	Oma:	Ini botol punya warna putih dan biru.
		DEM.PRX bottlehave colour white and blue
		'This bottle is white and blue.'
(30)	W:	Ini botol punya
		DEM.PRX bottle have
		'This bottle is'
	Oma:	Kahaf! Kahaf!
		No no
		'No, no!' [Wilhelmce-Ques-1]

When Oma gives an example response sentence in Malay in (29), indicating by gesture for the consultant to translate it, the consultant starts to repeat the sentence in Malay instead of giving an Amarasi equivalent containing a demonstrative.

3.2 Collection of demonstrative questionnaire data

The specific demonstrative data was elicited with the method proposed by "The 1999 demonstrative questionnaire" (Wilkins 1999), an elicitation tool developed by the Max Planck Institute of Psycholinguistics. The tool 'has been designed to help differentiate and compare:

 $(i) \ speaker-anchored \ vs. \ addressee-anchored \ vs. \ speaker- \ \& \ addressee-anchored \ vs.$

other-anchored terms

(ii) distance distinctions (up to at least four degrees of distance distinction from speaker)

(iii) distinctions of visibility versus non-visibility (1999: 1).'

This tool focusses on reference to single objects and hence avoids contrastive reference (as in: '*This* cup is blue, but *that* one is red.' The writers of the tool are interested primarily in demonstrative pronouns and demonstrative adjectives (Wilkins 1999).

The tool contains descriptions of 25 demonstrative scenes, in which a speaker is referring to a single object. These scenes are meant to be enacted or recreated with 5 to 10 different consultants. All scenes involve at least a speaker, often also an addressee and sometimes a third person. The questionnaire includes scenes with the speaker talking about referents within reach (e.g. body part, objects next to speaker or addressee); about a referent out of reach but visible and with the referent or either of the speech participants being outside a house. Two examples of scene descriptions can be seen in figure 2 below.



The referent is just beside Addr (within easy reach), on side away from Spkr. The object is difficult, if not impossible for Spkr to see, but Spkr knows where object is. "Is _____ your book/radio?"

"I like _____ book/radio." "Do you want to borrow ___ book?" • Does it make a difference if Addr already has attention on object vs. attention being drawn?

• Must Spkr point?

• What if object was more visible?

Figure 2: Demonstrative Scene Description

The adaptation of this elicitation tool to the specific Amarasi context involved creating the right circumstances for enacting the specific scenes. I did this by being the addressee myself and asking all kinds of questions about objects in the physical environment. To enhance the chance of demonstratives being used naturally, the consultants were not told the research was about demonstratives. I asked my consultants to respond to my Malay questions with an Amarasi answer. Basically, I kept asking questions relating to the specific scene until the answer to my question contained either *ia*, *naan* or *ne*, which I knew from Edwards (p.c) are the three Amarasi demonstrative pronouns. Oma assisted me during these elicitation sessions by filming the scenes where I could not do so conveniently myself, by acting as a third person in the scene when necessary and by adding explanations in Amarasi. The questionnaire was recorder with 7 consultants.

An example of a scene in a session is shown in figure 3. (In this illustration, five objects that are part of the scene are given a number between 1 and 5. Object 1, a Coca Cola bottle, is next to the addressee (designated A). Object 2, a water bottle, is before the addressee on the table. Object 3 is a glass, on the table between speaker (designated S) and addressee. Object 4, a white plastic bag, is between speaker and addressee on the sofa. Object 5 is a Coca Cola bottle, standing before the speaker on the table.) Part of the elicitation transcription related to this scene is shown in examples (31)-(35).



Figure 3: Scene demonstrative elicitation session

(31) Me: [botol 2] kosong atau penuh? [bottle 2]empty or full 'Is [bottle 2] full or empty?'

	E:	Botor naan ruman.
		bottle.U DEM empty
		'This bottle is empty.'
(32)	Me:	Dan botol itu? Penuh atau tidak?
		and bottle DEM.DIST full or empty
		'And that one? [points at 5] Is it full or not?'
	E:	Reek ia ruman.
		thing DEM empty
		'This bottle is empty.'
(33)	Me:	Ruman juga. Dan ini?
		empty also and DEM.PRX
		'Also empty. And this one? [points at 3]'
	E:	Kras naan msa? ruman.
		glass.U DEM also empty
		'This glass is empty.'
(34)	Me:	Ini warna apa?
		DEM.PRX colour what
		'What is the colour of this [picks up 1]?'
	E:	Reek naan warna me?e.
		thing.U DEM colour red
		'That bottle is red.'
(35)	Me:	Dan tas plastik ini warna apa?
		and bag plastic DEM.PRX colour what
		'And this plastic bag, what colour is it? [touches 4]'
	E:	Tas plastik ia warna muti? nok metan.
		bag.U plastic DEM colour white with black
		This plastic bag is white and black.' [Evrince-1: 00:34-1:43]

This particular consultant E. responded practically always using full sentences containing demonstratives. However, since I did not understand much of the language, it was often a challenge for me to keep track of the content of the Amarasi answers to my questions. Whenever I was given an answer in just one word that I did not know, I was inclined to ask for a full sentence. However, sometimes this one word would be a verb and therefore at the same time a grammatical sentence, such as the verb *naheun* in (36). Often, full sentences that were given did not contain a demonstrative, as in (37) (verb *nmui* plus object *oa*). Sometimes, Oma would give an example response sentence (with a demonstrative) in Malay, indicating the consultant to translate it, as in (38).

(36) Me: *Dan... penuh atau kosong?* and full or empty 'And.... is it full or empty?' T.: *na-heun*. 3SG-be.full.M 'It is full.'

- (37) Me: *Dan di kalimat?* and in sentence 'And in a sentence?'
 - T: *n-mui?* oa. 3SG-have.M water 'It has water [in it].'
- (38) Oma: *Di* ini botol ada air. in DEM.PRX bottle have water 'In this bottle there is water.'
 - T.: Botor re? ia nmui? oa. bottle.U rel **DEM** 3SG-have.Mwater 'This bottle has water [in it].' [Timotius-1:00:34-1:43]

One possible reason for the fact that the consultant's initial response frequently did not contain a demonstrative is that the consultant did not understand my question to respond in a full sentence and responds with just a noun phrase instead. This is logical since I asked things about objects, and these could all be answered without using full sentences. e.g. 'What is the name of that animal in Amarasi?' 'A cow.' 'What is the colour of the cow?' 'White.' Instead of: '*That is* a cow.' or '*That* cow is white.' Oma understood the goal of the research. Whenever I kept getting answers without a demonstrative in it, she would explain that a full sentence was needed. She did this very well, avoiding the use of Amarasi demonstratives herself.

Example response sentences however, such as the one in example (38), contained an Malay demonstrative (*ini* 'proximal' or *itu* 'distal'). This illustrates a problem of the bilingual elicitation method. The consultant is asked for a translation of an Malay expression containing the demonstrative *ini* 'PROX.DEM'. Often, when this Malay demonstrative was given in the question, I received the Amarasi demonstrative *ia* in the answer. This might indicate that the use of the Malay proximate demonstrative triggered the consultants to use the most proximate demonstrative of Amarasi, which is *ia*. But in such situations, *ia* is more properly analyzed as a translation equivalent than as the most appropriate spontaneous answer in the given situation. In (32) however, my use of the Malay distal demonstrative *itu* is followed by the Amarasi proximate demonstrative *ia*.

The data collected during my field trip was impeded both qualitatively and quantitatively by two factors. Firstly, there were circumstantial problems such as availability

of consultants and inopportune periods of electricity shortage. Secondly, there were cultural and linguistic interaction issues with consultants. A significant drawback of the use of this elicitation method is that my own use of Malay creates a context where code switching and back translating is actually encouraged. Because of their bilingualism in Kupang Malay, the consultants might have been using Amarasi translations of one of the Malay demonstratives, or they might even be mapping Malay demonstrative concepts onto the Amarasi situation. Quantitatively, the data set is too small to give definitive conclusions about occurrence percentages for each different syntactic and pragmatic type of demonstrative, which could be useful for comparative typological ends.

The sketch of the Amarasi demonstrative system presented in Chapter 5 is based firstly and most importantly on the data elicited with the questionnaire discussed in 3.2. However, because of its slightly artificial nature a sketch of the demonstrative system cannot be properly presented without additional reference to natural speech. Moreover, the questionnaire covers only the situational use of demonstratives. For the analysis of endophoric uses, other data was needed. For this further analysis, I used my own spontaneous data and the full data set of Owen Edwards. For an even larger sample of narratives, parts of the Amarasi Bible translation were checked for endophoric use of demonstratives. The use of translation material is in a sense hazardous for linguistic analyses, since translation material is more likely to be influenced by the speaker's prescriptive notions of 'good' versus 'less good' speech than spontaneous utterances. As linguistic research focusses on descriptive instead of prescriptive grammar, the function of this dataset is only additional.

The data set of Owen Edwards consists of recordings of different types of natural speech: 1) short narratives (mostly of people telling who they are, what work they do along with some information about their relatives); oral stories (e.g. about mythical characters, the history of the village and cursing practices); speeches (e.g. at a funeral) and conversations about various topics (e.g. a business deal at an auction, a conversation about a cow). Although all these data files were consulted for this thesis, not all files are cited. Utterances from these data files are marked as follows: [Edwards:abbreviation of file name. number of toolbox clause]. The abbreviations are as follows:

Biku	aaz-20120923-1-MelkiasMnao-Nekmese-biku
History	aaz-20160326-Roni-NekmeseHistory
KusnawiBani-2	aaz-20120715-4-Nekmese-KusnawiBani-2
CeritaTtgFinalCheck	aaz-20130920-1-HeronimusBani-CeritaTtgFinalCheck
Oma-1	aaz-20120715-1-Nekmese-Oma-1
4 A Sketch of Amarasi

This chapter presents a short sketch of the Amarasi language: its phonology, morphology and syntax. In paragraph 4.1 the phonemes, syllable structure, stress and metathesis are discussed. Paragraph 4.2 contains an account of several Amarasi word classes and derivational processes. In paragraph 4.3 the basics of Amarasi syntax are presented.

Most examples are taken from my own data. Data examples from Edwards are marked. They are taken from Toolbox files, of which the utterances are cited phonemically. The glosses and translations are my own responsibility. Except for the paragraph about phonology, all examples are given phonemically and not phonetically. Phonetic transcriptions are between square brackets.

4.1 Phonology

This paragraph contains a brief discussion of the phonology of Amarasi, as far as is relevant for this thesis. It presents the Amarasi phonemes and briefly discusses the topics of possible syllable structures, stress and metathesis. For an in-depth discussion of the Amarasi phonology the reader is referred to Edwards (in prep.).

4.1.1 Phonemes

The phonemic consonants of Amarasi are listed below in table 1.



Table 1: Phonemic Consonants

The two phonemes in brackets (d₃) and (g) are found only in loanwords, exemplified in (39):

(39) *d*gari 'become' ← from Malay *jadi tunguru* 'teacher' ← from Malay *tuan* + *guru*

The sounds /g/ and $/d_3/$ however do occur as allophones, most notably in the definite article enclitic =*e*, as is shown in (40) and (41):

(40) <i>asu</i> 'dog'	(41) <i>fai</i> 'night'
$/asu/ + /=e/ \rightarrow [ausgw3]$	/fai/ + /=e/ → [fadz3]
'the dog'	'the night'

All other phonemic consonants occur both in syllable-initial and syllable-final position. Examples for four consonants are shown in (42):

(42) b are?	'place (N)'	иа b	'speech'
masa?	'market'	nii m	'five'
h ini	'know'	ana h	'child'
r uman	'empty'	naskoo r	'study (V)'

Roots with an initial glottal can be contrasted with roots with an initial vowel when a prefix is added to the roots. A minimal pair taken from Edwards is shown in (43) below:

(43) $/n-/ + /ain/ \rightarrow /nain/ ['nejn]$ 'before' $/n-/ + /2ain/ \rightarrow /n?ain/ [n'?ejn]$ 'heads towards' (Edwards in prep: 40)

The phonemic vowels of Amarasi are listed below in table 2.





Vowel length has phonemic significance in Amarasi. A minimal pair for the vowel [e] is shown in (44):

(44) (a) *ne* 3SG.NOM (b) *nee* 'six'

The possible combinations of vowels are shown below in table 3.

Table 3: Possible Vowel Combinations

	a	i	e	u	0
a	-	aina 'mother'	<i>bijae 'cow'</i>	hau 'wood'	hao 'feed'
i	<i>ia</i> 'this'	-	Х	kius 'see-M'	Х
e	<i>tea</i> 'until'	neis 'exceed'	-	teun 'three'	<i>рео</i> 'talk (V)'
u	buan 'gather'	<i>т</i> иі п 'last.M'	Х	-	Х
0	koa? 'call'	oin 'bee-M'	noe 'river'	<i>soup</i> 'finish-м'	-

All phonemic consonants occur in clusters (though not in all possible combinations). This happens only syllable-initially. Examples containing some of the possible clusters are shown in (45):

(45) kr ei	'week'	mf aun	'many'
kn afo	'rat'	ku tr u?u	'owl'
s k ora	'study (V)'	?m ui?	'exist'
?r aru	'play.crazy'	msa?	'also'

4.1.2 Stress and syllable structure

Stress in Amarasi falls on the penultimate vowel of words, as is exemplified in (46):

(46)	'mee	'where'
	'ko re?	'short'
	ma? 'fe na	'hard'
	narek 're ko	'well'

With the consonant (C) combinations analyzed as clusters and diphthongs analyzed as one vowel (V), the available syllable structures are as shown below:

V	00	question particle
VC	es	'one'
CV	no	'time'
CVC	sin	3pl.nom
CCV	nfee	'to give'
CCVC	mfaun	'many'

4.1.3 Metathesis

Metathesis is the changing of the position of phonemes within a word. The basic process in Amarasi involves the exchanging of places of the final CV of a word (Edwards in prep.). In this paragraph, an example of metathesis is shown for some of the word sorts of Amarasi. Nouns and verbs always have a metathesis value. Henceforth, they are glossed either (.M) or (.U) if their metathesis value is known.

For an in-depth discussion of subjects such as phoneme deletion or insertion, assimilation and dissimilation, the conditions needed for metathesis and the specific phonemes it affects, the reader is referred to Edwards (in prep.).

On nouns, the use of the definite article =e triggers metathesis of the noun, as shown in (47):

(47)	kreso?	\rightarrow kreos	=e
	frog.U	frog.M	DEF
	'frog'	'the frog	g'

Even proper nouns can be metathesized, as exemplified with the family name Bani:

(48)	Ba ni	→ Bain	mone
	Bani.U	Bani.M	man.U
	'Bani'	'male B	ani people'

An example of a metathesized verb is shown in (49):

(49) <i>meup</i>	→ ?-me pu
work	1sg-work.M
'work'	'I work'

For an in-depth analysis of Amarasi metathesis, the reader is referred to Edwards (in prep).

4.2 Morphology

This paragraph presents a sketch of word classes and derivational processes.

4.2.1 Word classes

This paragraph discusses properties of the following word classes: nouns, determiners, pronouns, verbs and numerals.

Nouns

Amarasi nouns come in two types: alienable nouns and inalienable nouns. Inalienable nouns (mostly kinship terms and body part terms) obligatorily have a suffix denoting the possessor. An example is shown in (50):

(50) *au kaan-k ii* 1SG name.M-**1SG.POSS** DET 'my name'

The full paradigm for suffixes on inalienable nouns is as follows (Edwards, p.c.):

	SG.POSS	PL.POSS
1	- <i>k</i>	<i>-m</i>
1,2		- <i>k</i>
2	-m	<i>-m</i>
3	- <i>n</i>	- <i>k</i>
0	-	f

When an inalienable noun is unpossessed, the suffix -f is used. An example is shown in (51):

(51) *Bare re? ia ruman, ka t-iit fa tua-f,* place.U REL NEARS empty.U NEG 0-see.M NEG self-0POSS 'This place was empty, there were no people' [Edwards:History.007-008]

Nouns can be modified by a following adjective:

(52) *too mfaun* people.U many 'many people'

Nouns can carry plural meaning without any morphological change in the word, as can be seen in (53):

(53) Onai te oin =e nak hai ka m-iit ee fa like.that ENDT bee.M DET say 1EXCL NEG 2-see 3SG.ACC NEG 'Well, the bees said: "We have not seen him".' [frog story.014]

That the word *oin* has plural reference in this context can be inferred from the use of the corresponding plural pronoun *hai*.

Determiners

Determiners occur after the noun in a noun phrase.

The definite article is [=e]. That this is truly an enclitic (forming one word with the nominal root) is shown by the movement of stress to the penultimate syllable in (54):

- (54) *'kreso?* \rightarrow *kre* '*os*=*e*
 - frog.U frog.M=DEF 'frog' 'the frog'

The determiner *ii* seems to be a definite marker too (Edwards, p.c.).

(55) *au kaan-k ii Oma* 1SG.NOM name.M **DET** NPROP 'My name [is] 'Oma'.'

Numeral es 'one' can function as a determiner too:

(56) *fai* es night.U one 'one night'

Pronouns

Pronominals occur both as free and as bound morphemes. The paradigm of the free pronouns has two cases: nominative and accusative. The use of these cases is related to subject and object roles respectively. An example is shown in (57):

(57) Sin ka niit ee fa **3PL.NOM** NEG 3-see.M **3SG.ACC** NEG 'They do not see him.' [Frog_story.007]

The full paradigm of free pronouns is as follows:

	SG			PL	
	NOM	ACC		NOM	ACC
1	аи	kau	INC.	hit	kit
			EXC.	hai	kai
2	ho	ko		hi	ki
3	in	<i>ne</i> (human) <i>ee</i> (non-human)		sin	eni

There are two paradigms for the bound pronouns: one prefixed to what Edwards (in prep.) calls vocalic verbs and one for what he calls consonant verbs, henceforth v1 and v2 respectively. Free and bound pronominal markers may co-occur, matching in person and number, as exemplified in (58):

(58) Knaof =e n-ak hai ka mi-teef rat.M DEF 3-say.U **1EXC.NOM** NEG **1EXC**-meet 'The rats say: "We have not met [him]". [Frog_story.017]

The full paradigm for pronominal prefixes for both verb types is as follows (Edwards, p.c.):

	v1		v2	
	SG	PL	SG	PL
1	и-	mi-	2-	<i>m</i> -
1,2		ta-		t-
2	ти-	mi-	<i>m</i> -	<i>m</i> -
3	na-		n-	
0	ta-		t-	

Another form of the 3^{rd} person prefix for v2 is *an*.

Numerals

Amarasi numerals follow a ten-number system. The cardinal numbers up to ten are:

1	es	6	nee
2	пиа	7	hitu?
3	tenu	8	fanu
4	haa	9	seo
5	niim	10	bo?es

Numerals above ten are formed by combining *bo?* 'ten' with the decimal, as exemplified in (59):

(59) *Bo? fanu-m nee* Ten eight.U-CONJ six.U 'eighty-six'

Numerals follow the noun they modify. The cardinal numbers are metathesized, following an unmetathesized noun, as in (60):

(60) Hai tuaf faun
1EXC.NOM person.U eight.M
'We eight people' [Akila-Cerita.004]

Ordinals are formed with reversed metathesis, with unmetathesized numerals following a metathesized noun, as in (61):

(61) *fuun hitu?* month.M seven.U 'the seventh month (i.e. July)' [Edwerds:Oma-2.011]

However, the ordinal for number one is verbal in Amarasi:

(62) anah uhunchild.U be.first.M'the first child' [Akila-Cerita.005]

Verbs

Finite verbs consist of a root combined at least with a prefix denoting the subject. Additional affixes include transitive suffix -b, passive marker -ma- and plural suffix -(a)n (denoting a plural subject); see examples below:

(63) Onaim, sin na-kana-b bare ia Haar?oo. and.so 3PL.NOM 3-to.name.U-TRANS place.U NEAR.S NPROP 'And so, they named this place Haar'oo.' [Edwards:History.011]
(64) n-ma-reek-n 3-PASS-command.M-PL

'they were commanded' [Edwards:History.020]

Verbs in the 2^{nd} person can have imperative or adhortative meaning, as in (65):

(65) *Onai* fa, te oin n-ak hai ka m-iit =eee like.that ENDT bee.M DEF 3-say 1EXC.NOM NEG 1EXC-see.M **3SG.ACC NEG** m-nao mi-taan meu knafo. 2-go 2PL-ask DAT rat.U 'Then the bees say: "We have not seen him, go ask the rats." [Frog_Story.014]

Expressing wishes is possible with verb *he* (IRR):

(66) Au he u-toon ki IRR 1SG-tell.M 2PL.ACC 1SG.NOM *?-mui?* na?o tuaf au nua, 1sg.nom 1sg-have.M brother.of.woman self-0gen two 'I want to tell you [that] I have two brothers' [Brother.001]

Amarasi has no class of adpositions. Functions normally pertaining to adpositions are carried out by verbs in Amarasi. An example is shown in (67):

Location and motion are also codified by verbs, as exemplified in (68):

(68) Fai es ate ia kreos =e n-poi na-?ko in bare tua. Night.U one ENDT NEARS frog.M DEF 3-exit.U 3-from 3SG place.U yes 'One night, the frog exits the place where he sleeps.' [Frog_Story.004]

Other examples of location/motion verbs include *bi* (LOCATIVE) and *tea* (until).

4.2.2 Derivational processes

This paragraph discusses two important derivational processes of Amarasi: nominalization and reduplication. Nominalization of verbs is done by circumfixing the root with a-...-t. An example is shown in (69):

(69) muni → ?a-muin-t
be.at.back.U
'be last'
'the last one' [Brother.003]

Nominalization of adjectives is done with just the prefixing part of the circumfix, i.e. with *?a-:*

(70) *?a-mnas-nais?* NMLZ-RED-old.M 'the old' [Edwards:History.111]

There does not seem to be an overt verbalization affix. There are some root forms however that can take verbal morphology while the bare root is a noun. An example is shown in (71):

(71) <i>a</i>) <i>biru</i>	b) au	2-biur
work.U	1sg.nom	1sg.nom-work.m
'work'	'I work'	

Full reduplication on nouns has pluralization function. Consider the following example:

(72) *Neno - neno te sin n-koa? kau bi Oma.* **RED - day.**U ENDT 3PL.NOM 3-call 1SG.ACC Mrs. Oma 'Usually, they call me Oma.' [Yedida-Mama.002]

The meaning 'usually' is related to the plural notion of 'day': 'many days'→ 'usually'. Other examples are *bare-bare* (RED-place.u) 'everywhere' [Edwards.History-010], *huma?-huma?* (RED-kind), 'various kinds of' [Edwards.History 032] *sin es-es* (3PL RED-one) 'each of them' [Edwards.History.034]

Reduplication on verbs seems to have repetitive or intensifying function. It is used on the verb in (73) for two characters (a boy and his dog) searching for a lost frog everywhere and calling for it repeatedly:

(73) Sin n-ko?a-ko?a kreso? ia ...
3PL.NOM 3SG-RED-call frog.U NEARS
'They call this frog...' [Frog_Story.011]

Partial reduplication on adjectives has intensifying function: *aan-ana*? (RED-small) 'very small'; *un-unu*? (RED-earlier) 'long ago' [Edwards.History.080].

4.3 Syntax

4.3.1 Structure of possessive noun phrase

Possessive noun phrases in Amarasi are constructed with a so-called 'reversed genitive' (Blust 2013), a feature shared by languages east of what is called the 'Brandes Line' after Brandes (1884). Most Austronesian languages put the possessor last, as in Malay *ekor babi* (tail pig) 'tail of a pig' (Blust 2013: 88). Amarasi however has the reverse order, with the

possessor first. An example with an inalienable noun is shown in (74), with an alienable noun in (75):

- (74) *Oma in ama-f.* Oma 3SG.NOM father.U-0POSS 'Oma's father'. [Akila.013]
- (75) *hai kuan* 1EXC.NOM village.U 'our village'[brother.004]

In (74), the possessor *Oma in* is a proper noun with a corresponding third person pronoun in the nominative. The possessor can also be denoted by a pronoun only, as in (75). The pronoun denoting the possessor is always in nominative case.

A conjunction of two nouns can also be a possessive construction, as in (76):

(76) An-tea-n kutru? =e baer =e te...
3-until-PL owl.M DEF place.M DEF ENDT
'They reach the owl's place...' [Frog_Story.018]

4.3.2 Basic sentence structure

In nominal sentences the predicate directly follows the subject, as can be seen in (77):

(77) <i>Au</i>	aina-?	in	kaan-n	=e	Sara	Ora.
1sg	mother -POSS	3sg.nom	name.M-3POSS	DET	Sara	Ora
'My mother's name [is] Sara Ora.' [Akila-Cerita.001]						

Every inflected verb constitutes a potentially complete verbal sentence. An example is shown in (78):

(78) Na-heun.3SG-be.full.M'It is full.' [Timotius-1]

The standard word order in Amarasi is SVO, which is normal in Austronesian languages in the area (Blust 2013: 468). An example sentence can be seen in (79):

(79) Sin namin re? kreso? re? ia 3PL.NOM 3-search-PL REL frog.U REL NEARS 'they search this frog...' [Frog_Story.006]

In (79), the subject slot is filled by a free pronoun. However, subject and object slot can also be filled by a noun phrase. Additional phrases containing temporal information can be fronted, as can be seen in (80):

(80) *Krei* es ate in biasa an-es?em?es ai telpon kau week.U one ENDT 3sg.nom usually 3sG-text or call 1.SG.ACC ai no no es пиа. time.U one or time.U two.U 'Usually he texts or calls me once or twice a week' [Brother.011]

Elision of the object is possible when the object is clear from context. The following example is taken from a conversion about a cow, and although the verb *nhao* is not followed by an object noun, it is clear the speaker means the cow to be the object:

(81) Ro he neem he n-hao very IRR 3.come.M IRR 3-feed
'He should come [and] feed [the cow].' [Edwards:PencurianSapi.007]

A question sentence has standard word order, but is marked use of pitch and optionally by a question particle:

(82) Ho m-iitt kreas =e, oo?
2SG.NOM 2SG-see frog.M DEF QPRT
'Have you seen the frog?' [Frog_Story.013]

Question words are put in phrase-final position:

(83) Ho et mee?
2SG.NOM LOC where
'Where are you?' [Frog_Story.002]

Negation of statements (i.e. of verbs) is done with markers ka and fa and variations of both. The basic format of statement negation is: ka - V - fa - (O):

(84) ... mes sin ka n-iit fa re? kreso? ia. but 3PL.NOM NEG 3SG-see.M NEG REL frog.U NEARS '...but they do not see the frog.' [Frog_Story.006]

The object (whether it is a noun phrase or pronominal) can be inserted in the negation construction after the verb (*ka-V-O-fa*):

(85) Onai te, kuan, Haar?oo re? ka ma-senu? kana-f fa fe? then village.U NPROP REL NEG PASS-replace.U name.U-0POSS NEG still 'And then the village of Haar?oo which hadn't yet changed its name...' [Edwards:History.027]

A relative clause is introduced by relativizer re?, as shown in (86):

(86) In n-jair, tua-f re? bisa n-fee haan fainekat
3SG.NOM 3-become.M self-OPOSS REL able 3-give voice.M advice.U
'He became a person who could give advice.' [Edwards:History.031]

Amarasi sentences frequently contain sequences of verbs (serial verb constructions). Two examples are given in (87) (note that all verbs in such a construction need to be inflected):

(87) Papa, ho mu-reta? m-iit kau dad 2SG.NOM 2SG-tell.story.U 2-try.M 1SG.ACC an-ma-toom n-ok nehh, biku
3-RECIP-about.M 3-with ERR curse.U 'umm, tell me about, "Biku".'

5 Amarasi demonstratives

This chapter presents the forms, meanings and functions of the Amarasi nominal demonstratives *ia*, *naan*, and *ne*. In 5.1, their forms are given and their morphosyntactic behavior is described. In 5.2, their semantics are discussed, and in 5.3 their endophoric functions.

5.1 Form

The Amarasi nominal demonstratives have the forms *ia*, *naan* and *ne*, exemplified below:

- re? ia. (88) Warna haa et botor colour four LOC bottle.U REL DEM '[There are] four colours on this bottle.' [Wilhelmince] (89) Kreni re? naan warna emas. REL **DEM** colour yellow ring.U 'This ring is yellow.' [Evrince] (90) Tas re? **ne** in muti?. warna bag REL DEM 3SG.NOM colour white
- 'That bag is white.' [Ester]

The third form is interesting since it has the same form as third person pronoun *ne* (3SG.ACC.HUMAN). It is widely acknowledged in the literature that demonstratives and third person pronouns are functionally similar and that the second can diachronically evolve from the first (Himmelmann 1996) (Diessel 1999) (Dixon 2003).

In my data, the form *naan* is the only one undergoing metathesis, as for example happens in the fixed expression *on nana te* 'like that'. The three demonstratives occur pronominally, adnominally and adverbially. Diessel (1999:88) mentions 'identificational context' as a fourth syntactic type. However, the distinction between pronominal and identificational demonstratives has no relevance in Amarasi, since it seems to be impossible to have pronominal demonstratives in other than copular (i.e. verbal) clauses. Pronominal demonstrative *ia* in (91) is syntactically similar to pronominal *au* in (92):

- (91) Ia kaan-n =e botor
 DEM name.M-3 DEF bottle.U
 'This [has] the name 'botor'.'
- (92) *au kaan-k ii Oma* **1SG.NOM** name.M DET NPROP 'I [have] the name 'Oma'.'

Demonstratives can also be used adnominally, as a determiner, as in (93):

(93) *Botor ia ruman* bottle.U **DEM** empty.U 'This bottle is empty.'

Frequently, the relativizer *re*? is inserted before an adnominal demonstrative:

(94) Botor re? ia ruman. Bottle.U rel DEM empty 'This bottle is empty.'

Then, *re? ia* is a mini relative clause modifying the noun. Demonstratives functioning as a determiner can co-occur with other determiners. Then, the demonstrative is put before the noun, as shown in (95) with an alienable noun and in (96) with an inalienable noun:

(95) ia kreos =e DEM frog.M DEF 'this frog' [Frog story.004]
(96) ia aam baab-f =e DEM father.M parent's.opposite.sex.sibling.M-0POSS DEF 'this uncle' [Edwards:biku.087]

When an adnominal demonstratives co-occurs with a possessed alienable noun, the relativizer re? is used:

(97) *kuan ii es re? ia,* village.u det one rel dem 'this one village' [Edwards:History.206]

Adverbial demonstratives come in two forms: as local adverbials and as manner adverbials (Diessel 1999). Amarasi local adverbials have the forms *ia*, *naa* and *nee* respectively. Local adverbials are usually preceded by a locational or directional verb. An example is shown in (98):

(98) In noeb-n =e et naa fe?. 3SG.NOM tracks.M-3SG.POSS DEF LOC DEM.LOC still 'His tracks are still there.' [Edwards:KusnawiBani-2.065]

Note that local adverbial *ia* 'here' has the same form as the nominal demonstrative.

(99) Hai ima m-tea ia
1EXC.NOM 1EXC.come.U 1EXC-until DEM.LOC
'we come here' [Edwards:CeritaTtgFinalCheck.007]

Demonstratives can function as manner adverbial when combined with on (re?) 'like':

(100) *fee* mnais? = e na-suun ma n-moe? **on re?** *ia*, woman old.M DEF 3-spin.thread.M and 3-do.M **like NEARS** 'The old woman spun thread and did it like this.' [Edwards:KusnawiBani-1.005]

Amarasi has no verbal demonstratives. Since the demonstratives in pronominal and adnominal context are not formally distinguished, I call them all *nominal demonstratives*. The local adverbials have a different form, so I call them (*demonstrative*) local adverbs. They are listed below:

	Nominal	Local
	demonstrative	adverb
DEM1 (near speaker)	ia	ia
DEM2 (near addressee)	naan	naa
DEM3 (distal)	ne	nee

According to Dixon (2003), a demonstrative paradigm often has some resemblance to the interrogative paradigm. The Amarasi interrogative *mee* (where) resembles distal local adverb *nee* (there). From *mee* (where) two other interrogatives are derived: *on* (*re?*) *mee* (how) and *on mee* (why). There is also a manner adverb *maan* which means 'like that' resembling the (anaphoric) manner adverbial clause *on re? naan* (like that).

(101) *Hai maan mi-poi-n ee tua te,* 1EXC **like.that** 1EXC-make.exit-PL 3SG.ACC yes top 'We sent him off like that...' [Edwards:biku.086]

Interrogative *mee* can also be used as a relativizer to introduce a relative clause:

(102)Sin Koor?oot re? neem na-tua es oras 3PL.NOM 3.come.M 3-live NPROP.M one REL time.U ta-hiin mee ka t-ana f where NEG 0-know.M 0-get.U NEG came to live in Koor?oto at a time 'They which is unknown.' [Edwards:History.053]

5.2 Meaning

The results of the elicitations using The '1999 Demonstrative Questionnaire' (Wilkins 1999) for Amarasi nominal demonstratives *ia*, *naan* and *ne* are shown in table 4. The numbers

below the scene illustrations refer to the number of the scene from the questionnaire³. In

Appendix A additional information about the results of each scene can be found. This appendix contains glossed example utterances for each of the demonstratives used per scene.

The distance parameter plays an important role in Amarasi demonstratives. The scenes grouped in the first column all involve referent objects close to the speaker: his own body part (1), or an object right next to (6,8) right in front of (7,19) or right behind (11) the speaker. All these scenes trigger the use of *ia*, which is therefor the most proximal demonstrative.

The scenes in the seventh column all involve referent objects relatively far away from the speaker. The object is at the other end of a large cleared space (13,15) or far away in large-scale geography (24,25). Since *ne* is the only demonstrative used in these scenes, *ne* is the most distal demonstrative.

The third demonstrative, *naan*, is never used exclusively: i.e. there is no scene where all consultants used *naan* and no other demonstrative. Two of the seven consultants did not use *naan* at all. All others except one used it less often than the either *ia* or *ne*. The scenes where *naan* is used all involve a referent object that is either closer to the addressee than to the speaker (2, 9 and 16) or equidistant from both (20, 22, 23). In the scene mentioned above in Chapter 4 (examples (31)-(35)), scenes 6-10 were elicited. These are shown schematically below in figure 4.



Figure 4: Sketch Demonstrative Elicitation Scenes 6-10

 $^{^3}$ Three scene numbers are missing in the first colon. Due to circumstantial problems I was not able to obtain any results for these three scenes (3,4 and 5), which involve a movable object in contact with the speaker's or the addressee's body (e.g. an insect).

ia ne & ia ia, ne &naan naan & ne ne & naan ia & naan naan & ia ne SPKR ADDR SPKR ADDR SPKR \cap O **6** • SPKR 2 10 6 ADDR ADDR 13 SPKR 12 16 23 22 × 8 9 7 8 17 14 ADDR O SPKE 24 ∞ ADDR SPKR 20 11 19 ADDR 21 25 < ----- [ia]----- > <-----[ia]-----> _____ ---[naan]-----> < -----[*ne*]-----> < ------Near-S only Near-S All three used Near-A Distal Distal Near-A Distal only preferred, preferred, preferred, preferred, preferred, some use some use some use some use some use Distal Near-A Near-S Near-A near-S

Table 4: Results Demonstrative Questionnaire



The results for scenes 6-10 for consultant E. are shown below in Figure 5.

Figure 5: Results Elicitation Scenes 6-10 Consultant E.

Note that the glass object on the table between 7 and 10 has no scene number. Object 6 was a bag next to the sofa on the ground. The objects closest to the speaker (6 and 7) are referred to with *ia*, the objects closest to the addressee (9 and 10) with *naan*. This shows that *naan* is in fact used for reference near the addressee, and that *ia* does not simply mean 'proximal' but 'near-speaker'.

Object 8 is right in the middle between speaker and addressee. Here near-speaker term *ia* is preferred above near-addressee term *naan*. This tendency to use either *ia* or distal *ne* instead of addressee-based *naan* holds for all scenes were the object is equidistant from both (e.g. 12,14 and 20). The only anomaly is scene 23, were the object is equidistant from both but *naan* is used most often. This is probably because the data sample is small and statistic evidence is therefore unclear. The numerical difference between scene 22 and 23 is so small that it probably has no statistical value either.

There are some other anomalies in the results. Object 16 is more distant than object 12, yet scene 16 did not yield distal term *ne* but scene 12 did. This can be explained by the relativity of distance and perhaps by some muddling influence of contrastive reference. This is also shown by the fact that all three demonstratives were used in scene 17. The object is equidistant from both, but out of reach. The choice for the near-speaker term vs. the distal term is influenced by the relativity of distance, and the use of the near-addressee term by contrastive reference (it was closer to the addressee than another object discussed just before).

The relevance of the visibility parameter for distal objects was tested in scene pairs 13-15 and 24-25. From the fact that all four scenes trigger the unequivocal use of *ne*, it can be inferred that visibility distinctions do not have any contrastive function for distal *ne*. The same holds for of near-speaker *ia*, which can be used when the referent is visible (8, 9) but also when it is invisible (11).

However, visibility is relevant for the use of addressee-based *naan*. This is exemplified by the scene discussed below. A scene snapshot with consultant T. is shown in Figure 5. Two bottles used as referent objects are present in this setting, but invisible in the snapshot. One is next to the addressee on the ground (scene 10); one is in front of the speaker (scene 7). Functioning as addressee (A), I had asked the speaker (S) to state which bottle in the room was the biggest and whether it was full or empty. The answer and the following conversation are shown in (103)-(106):



Figure 6: Demonstrative elicitation scene 10

(103) T: Botor re? ia ka t-iit fa oa.
bottle.U REL DEM NEG 1PL.INCL-see NEG water
This bottle does not have water. (points index finger at bottle 7)

	Me:	Ah.	Dan	Botol	ini	penuh	atau	tidak?
		inter	j and	bottle	DEM.PRX	full	or	empty
		'Ah.	And this	bottle, is	it full or en	npty?' (p	oints p	en at bottle 10)
		(Con	sultant lo	ooks conf	used, bystar	nders say	[rumc	<i>un</i>])
(104)	T:	Boto	r re?	ne m.	sa? ruman			
		bottl	e.U rel	DEM al	so empty			
		'Tha	t bottle is	also emp	pty.' (points	index fir	nger at	bottle 10)
		(Add	lressee ta	kes bottle	e in right ha	nd)		
(105)	T:	Rum	an.					
		empt	y					
		'Emp	oty.'					
	Me:	Rum	an. Botor	· re?	ne ruma	n?		
		empt	y bottl	e.U REL	DEM empt	y		
		'Tha	t bottle is	also emp	pty.' (Trying	g to repea	t corr	ectly)
(106)	T:	(nod	s, points	index fin	ger at bottle	10)		
		Boto	r re?	naan	ruman.			
		Bottl	e.U rel	DEM	empty			
		'Tha	t bottle is	empty.'	[Timotius-0	Ques-Part	1. 06:	03-06:28]

During the utterances shown in (103) and (104), the bottle is invisible for the consultant, since it is on the ground right beside the addressee's chair (see topmost picture in figure 6). The consultant refers to it using distal demonstrative *ne*. After the utterance in (104) the bottle is picked up (see second picture in figure 6) and becomes visible. Now demonstrative *naan* is used in (106). This example shows that addressee-based *naan* is only used when the referent is visible, and that invisibility of the referent triggers the use of distal *ne*.

The influence of social space as a parameter was tested in scenes 19-23, where speaker, addressee or object were outside the house. These scenes produced results that can be fully explained by the distance parameter (proximal vs. distal) and reference to the addressee. Therefore, this research did not show any influence of social space in the exophoric use of demonstratives.

The questionnaire was designed to differentiate and compare speaker-anchored vs. addressee-anchored terms, distance distinctions and distinctions of visibility vs. non-visibility (Wilkins 1999: 1). A schematic summary of these semantic values of Amarasi nominal demonstratives are shown below:

Demonstrative	Basic meaning	Visibility value
ia	Near-speaker	-
naan	Near-addressee	Obligatorily visible
ne	Distal	-

5.3 Discourse function

Amarasi demonstratives can serve different pragmatic functions: what is called exophoric or situational function and endophoric or language-internal function (Himmelmann 1996) (Diessel 1999). Place deixis, as part of the exophoric function of demonstratives, was explored in the paragraph above. However, exophoric demonstratives can also have temporal reference. Near-speaker term *ia* is associated with the present, as in (107):

(107) Nai? El oras ia nmeup et pah es.....
Mr. El time.U NEARS 3SG-work LOC land.U one
'El now works now in some place [far away from our village].' [Brother.004]

Demonstratives are also used to refer to more abstract entities. The local adverbs can be combined with a proper noun, as in (108) and (109):

(108)	Nekmese	re?	ia				
	NPROP	REL	LOC.	NEAR	5		
	'this Nekm	ese he	ere' [E	Edward	ls:Oma-1	.004]	
(109)	Hai	kuan		re?	Kairaen	re?	nee
	1exc.nom	villag	ge.U	REL	NPROP	REL	LOC.DIST
	'our village Kairaen over there' [Edwards:biku.105]				iku.105]		

Demonstratives can be used contrastively. There are two types of contrastive uses of demonstratives. The first can be exemplified by the English phrase *I want this one, not that one.* Here, there are two entities present in the speech situation. The contrast between *this* and *that* here is not distance-related. The other type of contrastive use is often found in narratives. This type of contrastive use does not involve any two specific entities, but together refer to a whole set of entities of this type. For this in-narrative type of contrastive use, the near-speaker and distal term are used, as exemplified in (110):

(110)He kais na-mnau n-ak. neno naan sin n-fua-n IRR PROH 3-remember 3-say day.U ANPH 3PL.NOM 3-worship-PL n-bi-n usi-f usi-f uis, ia nee king.M king.M-0POSS NEARS king.M-0POSS 3-loc-pl DIST 'They don't want to remember those days (when) they worshipped kings, this king, that king...' [Edwards:History.104]

Note that the forms used here are place adverbs, not nominal demonstratives.

There are two types of anaphoric reference: reference to previous noun phrases (anaphoric or tracking reference) and reference to preceding chunks of discourse (anaphoric discourse deictic reference) (Himmelmann 1996) (Diessel 1999). In Amarasi, anaphoric tracking reference can be done with a 3^{rd} person pronoun or with addressee-based demonstrative form *naan*. This is exemplified below:

(111)	R.:	ahh papa, ho	mu-reta?	m-iit k	саи	
		ahh dad 2sG	2sG-tell.story.U	2-try.м 1	SG.ACC	
		an-ma-toom	n-ok nehh,	biku		
		3-PASS-about.M	3-with ERR	curse.U		
		'uuhm, tell me	about, "Biku".'			
(112)	M.:	Rasi biuk	gui , kalau, he	e ta?uab	ee	papa te,
		issue.U curse.M	IDET if IR	R speak.u	J 3SG.AC	Cdad PRT
		'Well, the subject	t [of] Biku, to tall	k about it		
(113)		rasi biku	naan sebenar	nya		
		issue.U curse.U	ANPH actually			
		´that [biku] issue	e, actually' [Ed	wards:biku	.008 - 013]	

In (112), the noun phrase *rasi biuk gui* is referred to by pronominal *ee*; and in (113) by demonstrative *naan* in noun phrase *rasi biku naan*.

Sometimes, *naan* is used to refer back to a noun phrase in an asymmetric way, not denoting any specific entity but its sort or kind. An example of this type of anaphor is given in (115), where *naan baer es* referring back to *baer* (place) in (114) is translatable with 'such a place':

(114)	he na-tua te he baer mainuan, IRR 3-live TOP IRR place.M open
	na-tua te he baer ko?u,
	3-live TOP IRR place.M big.U
	'He would have to live out in an open place, live in a big place'
(115)	ahirnya, ah, naim naan baer es
	in.the.end ERR 3-search.M ANPH place.M one
	'In the end, he looked for such a place [and stayed at the top of Smara'].'
	[Edwards:Kusnawi-Bani-2.020-23]

Possibly, the co-occurrence of determiner *es* (one) is obligatory for this type of anaphor. Further research could clarify this point.

Addressee-based *naan* is also the anaphoric discourse deictic demonstrative, used to refer back to entire chunks of discourse. The example below is taken from a narrative about the village history. The narrator tells that people used to worship the sun and lords in rocks and trees etc., but that when the church came those things were stopped:

(116) *mi-snasa-b re? ein naan* 1EXC-stop.U-TR REL **3PL.ACC ANPH** 'we stop those things' [Edwards:History.098] In (116), *naan* is used as a discourse deictic referring back to every part of the preceding narrative concerning the aforementioned worship practices. Discourse deictic *naan* usually occurs in a noun phrase together with a temporal term such as *oras* 'time', *neno* 'day' or *waktu* 'time', as exemplified in (117):

(117) *N-murai* oras naan, sin nai? Ora es na-?naak.
3-start time.U ANPH 3PL.NOM Mr. NPROP-U one 3-head.M
'Starting from then, the Ora's were the ones who led.' [Edwards: History.070]

Then, the referent is the chunk of the narrative just preceding the clause containing *naan*. Less often, local adverbial *naa* is used instead of the nominal form.

Discourse deictic *naan* is used in the fixed expression with which a narration is usually concluded, shown in (118):

(118) On re? naan tua like ANPH just 'Just like that.'

The referent of *naan* is then the entire preceding narrative. Similar phrases occur for example in Pileni (Naess 2003: 83) and Taba (Bowden 2014: 96). Other expressions containing *naan* are *on nana te* 'like that' and *es nana te* 'therefore'.

It seems clear that addressee-based *naan* is the anaphoric demonstrative in Amarasi, used for both types of anaphor (tracking and discourse deictic). However, in the spontaneous data some preceding noun phrases are referred to with speaker-based *ia*. An example is shown below:

- (119) *Neot es ate, sin n-took na-mfa-faun ate koor es an-kae* time one TOP 3PL.NOM 3-sit.M 3-RED-many TOP **bird.M one** 3-cry 'One time while they were all sitting together a bird cried.'
- (120) koro ia nkae t nak: "Koor?oot, Koor?oot, Koor?oot."
 bird.U ANPH 3-cry TOP 3-say This bird cried: "Koor?oot, koor?oot, koor?oot." [Edwards:History.039-40]

Here, the bird is introduced in (119) with es (one), and anaphored in (120) with ia.

Ia can also be used as anaphoric discourse deictic. The example in (121) is taken from the same historical narrative as example (116). The narrator has just stated that, to stop the worship practices, objects related to the traditional religion were burned.

(121) henati?, n-paek re? cara re? ia,
IRR 3-use.M REL method REL ANPH
'They wanted to use this method.' [Edwards:History.102]

Although speaker-based *ia* may be used as anaphoric marker, I maintain that the basic anaphoric marker in Amarasi is addressee-based *naan*, based on the following two arguments.

Firstly, it seems anaphoric *naan* occurs far more often than anaphoric *ia*. In the narrative about *biku* 'cursing' there are 15 occurrences of *ia*-anaphora, and 40 occurrences of *naan*-anaphora (either tracking or discourse deictic ones). This data set is too small for any definitive statistical evidence, but the data suggests a preference for anaphoric *naan* above anaphoric *ia*. Note that in the consulted parts of the Bible translation⁴, the demonstrative tracking marker is always addressee-based *naan*. This suggests that speakers have the opinion that *naan* is the most preferable tracking marker to choose.

Secondly, the use of *ia* as anaphoric marker seems to be restricted in two ways. Firstly, *ia* is used only for discourse referents that are in some way important in the narrative and thus have high topicality. Consider again example (120) about the bird. This part of the narrative explains that the village name *Koor?otos* is derived from the sound the bird made. This bird is therefore an important character in this part of the story, being in the story for several clauses. To contrast this with a low topicality anaphor, remember that tracking marker *naan* in *naan baer es* (ANPH place.M one) 'one such place' (see (115)) refers to a place the main character is looking for to live in. The main character has high topicality, but the place is relatively unimportant and has low topicality. After the clauses cited there is no further mention of *bare* (place).

Secondly, discourse deictic anaphor *ia* is only used together with 'manner' nouns like *cara* 'method' or *ranan* 'road' (see (121)). Temporal nouns like *oras* 'time', *neno* 'day' or *waktu* 'time' are used together with *naan*, but never with *ia*. A phrase like *oras ia* (time.U NEAR.S) 'this time, now' is interpreted exophorically instead of anaphorically. Moreover, *naan* can be used with the manner type of noun, as exemplified from the same text in (122), where *naan* refers to the main topic of *biku* 'cursing':

(122) *karna mo?at naan ka reko fa.* because **do.U-NMLZ ANPH** NEG good.U NEG 'because that practice isn't good [Edwards:biku.161]

Aside from anaphoric function, discourse deictics can also have cataphoric function. Cleary-Kemp (2007: 335) states that a 'common function of proximal demonstratives [in the sample languages Taba, Tukang Besi, Ambon Malay and Kambera] is to introduce direct speech.' This is a type of cataphor which also occurs in the related language Amarasi, where

⁴ i.e. Markus 1-3:6 and Genesis 1-5.

near-speaker *ia* can be used cataphorically to refer to a following chunk of discourse. This is exemplified in (123), where *ia* is used to introduce direct speech:

(123)	Onaim	аи	u?-uab	on re?	ia	te:
	and.so	1sg.nom	1sG-speak.м	like	СТРН	TOP
	'And se	o I say this:	' [Edwards:b	iku.186]		

The last type of endophoric use is recognitional. Recognitional demonstratives introduce a referent into the discourse that is known to the hearer (Diessel 1999) (Himmelmann 1996). In Amarasi, new characters and discourse participants are usually introduced with a noun phrase containing a determiner. There is one first mention of a character occurring with a demonstrative, shown in (124):

(124)	re? k	auna?	ia	in n-	-monin
	REL SI	nake.U	NEAI	RS 3SG.NOM 3	-live.U
	n-bi	oe	=e	naan-n	ii,
	3-loc	water	DEF	inside.M-3SG.	GEN DET
	'This sı	nake live	d insid	e the water'	[Edwards:KusnawiBani-2.010]

The snake is the main character in the following narrative. The narrator was asked to tell the story of this snake, so the audience is familiar with the story as well as with the snake (Edwards p.c.). The referent is thus 'discourse new [but] hearer old' which Diessel (1999: 106) identifies as a feature of recognitional use. However, this is hardly definitive evidence. Since the hearers asked for the story (Edwards p.c.), the referent is not entirely 'discourse new'. The use of *ia* here can thus also be interpreted as tracking anaphoric with the referent having high topicality. I have not found any other occurrence of a demonstrative that can be interpreted as being recognitional. With this relatively small dataset, it is not possible to either support or challenge Himmelmann's proposition of this use being universal.

Notably, distal *ne* has no specific endophoric function. Moreover, addressee-based *naan* is used exophorically less often than either *ia* or *ne*. There are two possible explanations for this phenomenon. It may be that *naan* is losing its exophoric reference in a diachronic process where it is becoming only an anaphoric marker, as presumably has happened in the Oceanic language Takia (Ross 2004). Another explanation can be drawn from the way a deictic system manages conflicting parameters. Imai (2003: 161) presents a list of parameter hierarchies which are potentially universal. One of these is that 'the speaker's direct [contact/control] overrides the addressee's direct [contact/control].' (Note that Imai analyzes the parameters of 'contact' and 'control' as more relevant than mere distance.) Apparently, there is a tendency of the addressee-based term to be overruled by reference to the speaker.

This analysis explains why an object right between speaker and addressee is more likely to be referred to with *ia* or *ne* than with *naan*, as is the case for scenes 8 and 22. It is also possible that both of these processes are at work in the Amarasi deictic system. Further research could clarify the point of diachronic change.

A schematic summary of the discourse functions of Amarasi demonstratives is shown below:

	Place deixis	Tracking / NP- anaphoric	Discourse deictic
ia	Near speaker	Only for referents with high topicality	Only for referents with high topicality / manner of events
naa(n) ne(e)	Near addressee Distal	Yes No	Yes No

6 Summary and conclusions

The previous chapters discuss theoretical background information, methodology and results of fieldwork data on demonstratives of the Amarasi language spoken in Timor.

Chapter 2 presented the theoretical background about demonstratives crosslinguistically and in Austronesian languages specifically. Austronesian demonstrative systems use distance, visibility, reference to addressee and geography for deictic reference. Spatial reference is highly important in Austronesian languages.

Chapter 3 presented the research methodology for the collection of spontaneous data and of specific demonstrative questionnaire data. The quality of the research was influenced by some practical problems and more importantly by linguistic problems. These relate to the influence of Malay due to early bilingualism of the consultants and to the artificial nature of the questionnaire elicitation sessions encouraging the use of code-switches and backtranslating.

Chapter 4 presented a short sketch of the Amarasi language. Amarasi is an SVO language, in which metathesis is an important phonological process. Pronouns come in nominative and accusative case.

Chapter 5 presented a sketch of the Amarasi demonstrative system. Amarasi was shown to have a demonstrative system similar to other Austronesian languages. The two qualities of demonstrative systems that Blust mentions as most pervasive in Austronesian languages are also sufficient to explain the Amarasi system: '1) degrees of distance in relation to speaker or hearer, [and] 2) visibility' (2013: 308). A difference with other Austronesian languages is that Amarasi does not distinguish between pronominal and adnominal demonstratives, and that adnominal demonstratives are not marked for case, person, number or gender.

In conclusion, Amarasi nominal demonstratives *ia*, *naan* and *ne* are used both pro- and adnominally to refer to objects and entities in the speech situation, with *ia* being used for near-speaker reference, *naan* being the near-addressee term for visible referents and *ne* being used for distal reference. The terms *ia* and *ne* are visibility-neutral. The nominal demonstratives can be used pronominally in copular clauses to identify referents in the speech situation. In adnominal form, they can co-occur with other determiners in a noun phrase. The corresponding local adverbs are *ia*, *naa* and *nee* respectively. Both *ia* and *naan* can be used for endophoric reference. Addressee-based *naan* is used anaphorically to refer back to preceding noun phrases and preceding chunks of discourse. The cataphoric demonstrative is

ia, used to introduce direct speech. Speaker-based *ia* can only be used for anaphoric reference when the referent has high topicality.

Though this research gives insight in the Amarasi demonstrative system, some things still remain unclear. Further research could answer the following questions:

- Can pronominal demonstratives function in any other syntactic context then as subjects in copular clauses?

- Can near-speaker term *ia* be used for temporal reference in past and/or future, and is it possible to use distal term *ne* for temporal reference?

- Can Amarasi demonstratives be used contrastively in an exophoric context?

- Is there a difference in markedness for the Amarasi demonstratives, and if so, which one is the unmarked demonstrative?

- Which is the Amarasi recognitional demonstrative?

This research has focused on Amarasi demonstratives and their deictic features. Further research on social deixis in the language, the influence of geographical landmarks and cardinal directions and on locational and directional verbs could give a broader view on the Amarasi deictic system as a whole.

References

- Adelaar, K. A. (1997). An Exploration of Directional Systems in West Indonesia and Madagascar. In Gunter Senft (ed), *Referring to Space: Studies in Austronesian and Papuan Languages* (pp. 53-81). Oxford: Clarendon Press.
- Arka, I. W. (2004). Referring to space in Balinese and Rongga: its linguistic and cultural significance. Workshop on spatial expressions, at Linguistics Department, the ANU.

Austen, Jane. (1853) Pride and Prejudice. London

- Berg, R. v. (1989). A grammar of the Muna language. *Vol. 139*. Dordrecht: The Netherlands: Foris Publications.
- Berg, R. v. (1997). Spatial Deixis in Muna (Sulawesi). In Gunter Senft (ed.), *Referring to Space: Studies in Austronesian and Papuan Languages* (pp. 197-220). Oxford: Clarendon Press.
- Blust, R. A. (1997). Semantic Change and the Conceptualization of Spatial Relationships in Austronesian Languages. In Gunter Senft (ed), *Referring to Space: Studies in Austronesian* and Papuan Languages (pp. 39-51). Oxford: Clarendon Press.
- Blust, R. A. (2013). The Austronesian Languages. Canberra: The Australian National University.
- Bowden, J. (1997). The Meanings of Directionals in Taba. In Gunter Senft (ed.), *Referring to Space: Studies in Austronesian and Papuan Languages* (pp. 251-268). Oxford: Clarendon Press.
- Bowden, J. (2005). Taba. In Adelaar & Himmelmann (eds.) *The Austronesian languages of Asia and Madagascar* (pp. 769-792). London & New York: Routledge.
- Bowden, J. (2014). Mental Deixis in Taba. *NUSA: Linguistic studies of languages in and around Indonesia 56*, 79-100.
- Brandes, J. L. (1884). Bijdrage tot de vergelijkende klankleer der westerse afdeeling van de Maleisch-Polynesische taalfamilie. Utrecht: P.W. van de Weijer.
- Bril, I. (2003). Deixis in Nêlêmwa (New Caledonia). In Gunter Senft (ed.),
- Broschart, J. (1997). Locative Classifiers in Tongan. In Gunter Senft (ed.), *Referring to Space: Studies in Austronesian and Papuan Languages* (pp. 287-315). Oxford: Clarendon Press.
- Brown, L. (2005). Nias. In Adelaar & Himmelmann (eds.), *The austronesian languages of asia and madagascar. Adelaar & Himmelmann (eds.)* (pp. 562-589). London & New York: Routledge.
- Chang, A. H.-c. (2006). A reference grammar of Paiwan.
- Cleary-Kemp, J. (2007). Universal uses of demonstratives: evidence from four Malayo-Polynesian languages. *Oceanic Linguistics*, 325-347.
- De Busser, R. L. (2009). Towards a grammar of Takivatan Bunun. Melbourne: La Trobe University.
- Denny, J. P. (1982). Semantics of the Inuktitut (Eskimo) spatial deictics. *International Journal of American Linguistics* 48.4, 359-384.
- Diessel, H. (1999). Demonstratives: form, function and grammaticalization. *Vol. 42*. John Benjamins Publishing.

Dixon, R. M. (2003). Demonstratives: A cross-linguistic typology. Studies in Language 27:1, 61–112.

Edwards, O. (2016). Amarasi. Journal of the International Phonetic Association, 46, 113-125.

Edwards, O. (in prep.). Metathesis in Amarasi.

- Engelenhoven, Aone van & Willams-van Klinken, Catharina. (2005). Tetun and Leti. IIn Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar* (pp. 735-768). London & New York: Routledge.
- Errington, J. J. (1985). On the nature of the sociolinguistic sign: Describing the Javanese speech levels. In *Semiotic mediation* 287310.
- Ewing, M. C. (2005). Colloquial Indonesian. In Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar* (pp. 227-258). London & New York: Routledge.
- Fillmore, C. J. (1982). Towards a Descriptive Framework for Spatial Deixis. In R. J. (eds.), *Speech, Place and Action* (pp. 31-59). Chichester: John Wiley.
- Fincke, S. (1995). Accord, discord and deixis in Tagalog demonstratives. Annual Meeting of the Berkeley Linguistics Society. Vol. 21. No. 2., (pp. 83-94).
- Florey, M. a. (2002). Spatial reference in Alune. In e. Giovanni Bennardo, *Representing space in Oceania: culture in language and mind* (pp. 11-46). Canberra: Pacific Linguistics.
- Foley, W. A. (1997). Anthropological Linguistics: An Introduction. Sydney: Blackwell Publishers.
- Grondona, V. (1998). Location and Direction in Waikurúan Languages. *Annual Meeting of the Berkeley Linguistics Society. Vol. 24. No. 1.*, 106-116.
- Gundel, J. K. (1993). Cognitive status and the form of referring expressions in discourse. *Language*, *Vol. 69, No. 2*, 274-307.
- Haun, D. B. (2011). Plasticity of human spatial cognition: Spatial language and cognition covary across cultures. *Cognition 119.1*, 70-80.
- Heuvel, W. v. (2006). Biak, description of an Austronesian language of Papua. Netherlands Graduate School of Linguistics.
- Hill, D. (1997). Finding Your Way in Longgu: Geographical Reference in a Solomon Islands Language. In In Gunter Senft (ed.), *Referring to Space: Studies in Austronesian and Papuan* Languages (pp. 101-126). Oxford: Clarendon Press.

Himmelmann, N. P. (1996). A Taxonomy of Universal Uses. Studies in anaphora 33, 205-254.

Imai, S. (2003). Spatial deixis. PhD Thesis. UMI Ann Arbor.

- Jiang, H. (2006). Spatial Conceptualizations in Kavalan *MA Thesis*. Taipei: National Taiwan University.
- Jiang, H. (2009). Three Dichotomies in the Kavalan Demonstrative System. Rice University Linguistics Colloquium.
- Jukes, A. (2005). Makassar. In Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia* and Madagascar (pp. 649-682). London & New York: Routledge.

- Jun, A. (2005). Sama (Bajau). In Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar* (pp. 377-396). London & New York: Routledge.
- Keesing, R. M. (1997). Constructing Space in Kwaio (Solomon Islands). In Gunter Senft (ed.), *Referring to Space: Studies in Austronesian and Papuan Languages* (pp. 127-141). Oxford: Clarendon Press.
- Klamer, M. A. F. (1998). A Grammar of Kambera. New York, Berlin: Mouton de Gruyter.
- Klamer, M. A. F. (2005). Kambera. In Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar* (pp. 709-734). London & New York: Routledge.
- Koentjaraningrat. (1985). Javanese culture. Issued under the auspices of the Southeast Asian Studies Program, Institute of Southeast Asian Studies [by] Oxford University Press.
- Levinson, S. C. (1996). Language and space. Annual review of Anthropology, 353-382.
- Levinson, S. C. (1997). Language and cognition: The cognitive consequences of spatial description in Guugu Yimithirr. *Journal of Linguistic Anthropology* 7.1, 98-131.
- Levinson, S. C. (2003). Space in language and cognition: Explorations in cognitive diversity. *Vol. 5.* . Cambridge University Press.
- Lewis, M. P. (2015). Ethnologue: Languages of the World, *Eighteenth edition*. Dallas, Texas: SIL International.
- Lyons, J. (1977). Deixis, space and time. In J. Lyons, *Semantics* (pp. 636-724). Cambridge: Cambridge University Press.
- Margetts, A. (2004). Spatial Deictics in Saliba. In Gunter Senft (ed.), *Deixis and demonstratives in Oceanic languages* (pp. 37-57). Canberra: Pacific Linguistics.
- Mayer, M. (1969). Frog, where are you? New York: Dial Press.
- McKenzie, R. (1997). Downstream to Here: Geographically Determined Spatial Deictics in Aralle-Tabulahan (Sulawesi). In Gunter Senft (ed.), *Referring to Space: Studies in Austronesian and Papuan Languages* (pp. 221-249). Oxford: Clarendon Press.
- Mead, D. (2005). Mori Bawah. In Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia* and Madagascar. (pp. 683-708). London & New York: Routledge.
- Meira, S. (2003). 'Addressee effects' in demonstrative systems: The cases of Tiriyó and Brazilian Portugese. In F. (. Lenz, *Deictic Conceptualisation of Space, Time and Person* (pp. 3-11). John Benjamins Publishing Company.
- Mosel, U. (2004). Demonstratives in Samoan. In Gunter Senft (ed.), *Deixis and demonstratives in Oceanic Languages* (pp. 141-174). Canberra: Pacific Linguistics.
- Naess, A. (2003). Spatial Deixis in Pileni. In Gunter Senft (ed.), *Deixis and Demonstratives in Oceanic Languages* (pp. 81-97).
- Ottino, P. (1982). Myth and history: the Malagasy andriambahoaka and the Indonesian legacy. *History in Africa 9*, 221-250.

- Ozanne-Rivierre, F. (1997). Spatial References in New Caledonian Languages. In e. Gunter Senft, *Referring to Space: Studies in Austronesian and Papuan Languages* (pp. 83-100). Oxford: Clarendon Press.
- Ozanne-Rivierre, F. (2004). Spatial Deixis in Iaai (Loyalty Islands). In Gunter Senft (ed.), *Deixis and Demonstratives in Oceanic Languages* (pp. 129-139). Canberra: Pacific Linguistics.
- Rasoloson, J. &. (2005). Malagasy. In Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar* (pp. 465-488). London & New York: Routledge.
- Redden, J. E. (1979). A descriptive grammar of Ewondo. *No. 4*. Dept. of Linguistics, Southern Illinois University.
- Ross, M. D. (2004). Aspects of Deixis in Takia.. In Gunter Senft (ed.), *Deixis and Demonstratives in Oceanic Languages* (pp. 15-36). Canberra: Pacific Linguistics.
- Ross, M. D. (2004). Demonstratives, local nouns and directionals in Oceanic languages: a diachronic perspective. In Gunter Senft (ed.), *Deixis ans demonstratives in Oceanic languages* (pp. 175-204). Canberra: Pacific Linguistics.
- Rubino, C. (2005). Iloko. In Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar* (pp. 326-349). London & New York: Routledge.
- Schachter and Otanes, P. a. (1982). Tagalog reference grammar. Univ of California Press.
- Schachter and Reid, P. a. (2008). Tagalog.
- Senft, G. (1997). Introduction. In Gunter Senft (ed.), *Referring to Space: Studies in Austronesian and Papuan Languages* (pp. 1-38). Oxford: Clarendon Press.
- Senft, G. (2003). Aspects of Spatial Deixis in Kilivila.. In Gunter Senft In Gunter Senft (ed.), *Deixis* and Demonstratives in Oceanic Languages, 59-80
- Steinhauer, H. (2005). Biak. In Adelaar & Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar* (pp. 793-823). London & New York: Routledge.
- Wald, B. (1983). Referents and topic within and across discourse units: Observations from current vernacular English. *Discourse-Perspectives on Syntax*, 91-116.
- Wilkins, D. (1995). Expanding the traditional category of deictic elements: interjections as deictic. InG. A. Judith F. Duchan, *Deixis in narrative: A Cognitive Science Perspective* (pp. 359-386).Hillsdale: Lawrence Erlbaum Associates.
- Wilkins, D. (1999). The 1999 demonstrative questionnaire: "this" and "that" in comparative perspective. In *Manual for the field season 2001* (pp. 1-24). Nijmegen: Max Planck Institute for Psycholinguistics.
- Zobel, E. (2005). Buol. In Adelaar & Himmelmann (eds.), *The austronesian languages of asia and madagascar*. (pp. 625-648). London& New York: Routledge.

Appendices

Appendix A: List of Results Demonstrative Questionnaire

NB: -Numbers in the first column refer to the corresponding scene from the questionnaire (Wilkins 1999). Three scene numbers are missing (3,4 and 5). I was not able to obtain any results for these three scenes, which involve a movable object in contact with the speaker's or the addressee's body.

-Below each scene illustration in the second column it is mentioned whether the scene involves a referent near the speaker (Near S), near the addressee (Near A) or relatively distal from both (Distal).

-In the third column the preferred demonstrative is shown. Scenes where more than half of the consultants agree are marked with bold type. The number between square brackets refers to the amount of speakers which used the demonstrative in the specific scene. Sometimes the total number is less than 7, indicating not all consultants used a demonstrative in the scene.

-An example utterance for each demonstrative used in the scene is shown in the last column. Information about gesture is given in italics between brackets.

	Scene	Preferred dem.	Example
1	Near S	ia [5]	<i>Ia</i> au kruur aan es re? <i>ia</i> tua. DEM1SG finger.M small one REL DEM yes 'This is my little finger.' [Ester] (touches own little finger saying first ia)
2	SPKR ADDR	ia [3] naan [2]	Au kruur aina-nre? iaespendek.1SG finger.M mother-3SG.POSS REL DEM one short'This one, this finger, is short.' [Wilhelmince](touches Addressee's thumb)Kreni re? naan warna emas.ring .U REL DEM colour yellow'This ring is yellow.' [Evrince]
6	seer S	ia [7]	Sobe re? ia au. hat REL DEM 1SG 'This hat is mine.' [Timotius]
7	Sear S	ia [7]	Ia ibu Nelly ini. DEM Mrs. Nelly POSS.M 'This is Nelly's.' [Agus]

8	Between S&A	ia [2]	Plastikiainwarnamutih.Plastic.bagDEM3SG.NOMcolourwhite'This plastic bagis white.'[Akila]
9	SYR A ADDR	<i>ia</i> [4] naan [1]	Botor re? ia ho. Bottle.U REL DEM 2SG.NOM 'This bottle is yours.' [Agus] Botor naan ruman. Bottle.U DEM empty 'This bottle [is] empty '[Evrince]
10	Inter A	ia [3x] naan [3x] ne [2x]	Warna haa et botor re? ia. colour four LOC bottle.U REL DEM [There are] four colours on this bottle. [Wilhelmince] Reek naan warna me?e. thing DEM colour red 'This thing is red.' [Evrince] Tas re? ne in warna muti?. bag REL DEM 3SG.NOM colour white 'That bag is white.' [Ester]
11	ADDR O O SPKR Near S	<i>ia</i> [1x]	<i>Plastik ia warna muti.</i> Plastic.bag DEM colour white 'This plastic bag is white.' [Wilhelmince]
12	SPKR ADDR	<i>ne</i> [5x] <i>ia</i> [2x]	Ptoko?re?nePtoko?plastik.chair.UREL3SGchair.Uplastic'That chair [is a] plastic chair.' [Evrince]Fotore?iaauuup-faaphotoRELDEM1SG.NOM1SG.NOMgrandchild.U-OPOSSDET'This photoismygrandchild.' [Timotius]
13	Distal	ne [4x]	<i>Umi re?</i> ne pak Jonahga in uim-aa. house.U REL DEM Mr. NPROP 3SG.NOM house.M-POSS 'That house is Mr. Jonahga's house.'[points] [Timotius]

14	SPKR ADDR	<i>ne</i> [3x]	sepatu-n re? ne ka bi Oma fa
		<i>ia</i> [1x]	shoe- PL REL DEM NEG Mrs. Oma NEG
			Those shoes are not Oma's. [Akiia]
			Handuk re? ia in ka bi Oma iin=e fa.
	Distal		Towel REL DEM 3SG.NOM NEG Mrs. NPROP POSS.U=DET NEG
			'This towel is not Oma's.'[Akila]
15	SPKR ADDR	ne [1]	Re? ne bukan bi Oma ka iin=e fa.
			REL DEM NEG Mrs. NPROP NEG POSS.M=DET. NEG
			That is not Oma's.
	Distal		
16	SPKR	naan [3x]	Botor naan ibu ho ini.
		<i>ia</i> [1x]	bottle.u DEM Mrs. 2SG.NOM POSS.U
			'This bottle is yours.' [Wilhelmince]
	Near A		Hau la in kaan=e gameriin. Tree DEM 3SG NOM name M-DET NPROP
			'This tree is named 'gameriin' [touches tree] [Akila]
17	SPKR O O	<i>ia</i> [1x]	Tas naan ibu Nelly iin tas.
		<i>ne</i> [1x]	bag DEM Mrs. NPROP POSS.M bag
		naan [1x]	'This bag is ibu Nelly's bag.'
			Songtun nol no bi Europeinin
	Between		separan rez ne di Erna inin. shoe-pi rei dem Mrs NPROP POSS
	S&A		Those shoes are Erna's. [Akila]
			Tas mutih re? ia ibu Nelly ho ho ini.
			Bag white REL DEM mrs. NPROP 2SG.NOM 2SG.NOM POSS
10		· [2]	"This white bag is Nelly's, is, is yours." [Wilhelmince]
19		la [2X]	<i>I as mutin rer la ibu Nelly no no ini.</i> Bag white REL DEM mrs NPROP 2SG NOM 2SG NOM POSS
			'This white bag is Nelly's, is, is yours.' [Wilhelmince]
	T		
20	Iveal S	<i>ia</i> [5x]	Eh a?tu?i re? ia hiru
20		naan [1x]	ERR pen.U REL DEM blue
			'This pen is blue.' [pointing] [Timotius]
	ADDR SPLA		
	INCAI S&A		Sandal in naan warna coklat n-ok metan.
			'Those shoes are brown and black '[Evrince]
21		<i>ne</i> [2x]	Tas re? ne mutih
		<i>ia</i> [1x]	bag REL DEM white
			'That bag is white.'
	Distal		
19 20 21	Near S Near S Near S&A	<i>ia</i> [2x] <i>ia</i> [5x] <i>naan</i> [1x] <i>ne</i> [2x] <i>ia</i> [1x]	Tas mutih re? ia ibu Nelly hohoini.Bag white REL DEM mrs. NPROP 2SG.NOM 2SG.NOM POSS'This white bag is Nelly's, is, is yours.' [Wilhelmince]Tas mutih re? ia ibu Nelly hohoBag white REL DEM mrs. NPROP 2SG.NOM 2SG.NOM POSS'This white bag is Nelly's, is, is yours.' [Wilhelmince]Eh, a?tu?i re? ia biru.ERR pen.UREL DEM blue'This pen is blue.' [pointing] [Timotius]Sandal innaan warna coklat n-ok metan.Shoes 3SG.NOM DEM colorbrown 3-with black'Those shoes are brown and black.'[Evrince]Tas re? nemutih'That bag is white.'

22	Between	ne / naan [1x]	Botor re? ne ibu Nelly in oe. bottle.U REL DEM Mrs NPROP 3SG.NOM water 'That bottle of Mrs. Nelly has water.' Plastik re? naan ibu Nelly ini
	S&A		Plastic.bag.U REL DEM Mrs. NPROP POSS .M 'That plastic bag is Mrs. Nelly's.'
23	Between S&A	naan [4x] ne [2x]	<i>Ptoko?</i> naan au. Chair.U DEM 1SG.NOM 'This chair is mine.'
24	Distal	<i>ne</i> [4x]	<i>penpene</i> ne <i>mme?e muti</i> flag DEM red white 'That flag is red and white.' [pointing] [Timotius]
25	Distal	ne [3x]	<i>Tasi re?</i> ne ko?u tua. Sea.U REL DEM big yes 'That sea is big.' [Sara]
Appendix B: List of Data Recorded

NB:

-The code of each recording is built up as follows: Ethnologue language code name (aaz) – Date (JJJJMMDD) – Place of recording – First Name Consultant – Contents.

e.g. [brother.004]

- Shorted references to recordings in this thesis are built up as follows:

For spontaneous data: [abbreviation of recording name.number of line in gloss]

For questionnaire data: [abbreviation of recording name-number of specific scene-time range of quote] e.g. [Timotius-1:00:34-1:43]

-Information on non-usable recordings is left out of this table. These were excluded due to factors as low recording quality and lack of sufficient linguistic information.

No	Code	Abbreviation	Consultant	Type of content	Length	Comments					
		used in thesis			(minutes)						
Spontaneous data											
1	aaz-20150310-kupang-yedida-mama	Mama.	Y.R.O. (f, 25)	Narrative about relative	2:23						
2	aaz-20150311-kupang-yedida-brother	Brother.	Y.R.O. (f, 25)	Narrative about relative	1:29						
3	aaz-20150311-kupang-yedida-frog_story	Frog_Story.	Y.R.O. (f, 25)	Frog Story narrative	4:08						
4	aaz-20150311-kupang-yedida-grandmother		Y.R.O. (f, 25)	Narrative about relative	1:46						
5	aaz-20150321-nekmese-agus-cerita		A. O. (f, 27)	Narrative	2:12						
6	aaz-20150325-kupang-akila-cerita	Akila.	A.P.T.O. (f, 51)	Narrative about	5:16						
				relatives							
7	aaz-20150325-kupang-akila-yedida-		A.P.T.O. (f, 51)	Conversation	5:23						
	conversation		Y.R.O. (f, 25)								
Demonstrative questionnaire data											
8	aaz-20150403-kupang-yedida-keluarga		Y.R.O. (f, 25)	Questions and answers	18:09	Part of					
						preparation					
						Dem. Quest.					
9	aaz-20150404-kupang-yedida-testquestions		Y.R.O. (f, 25)	Questions and answers	7:16	Part of					
					10:53	preparation					
						Dem. Quest.					

10	aaz-20150407-nekmese-sara-ques		S.R.O (f, 27)	Dem. Quest.	13:08,	
					4 scenes	
11	aaz-20150408-nekmese-ester-ques		E.M.O.O.	Dem. Quest.	20:28,	
			(f, 59)		10 scenes	
12	aaz-20150408-nekmese-john-ques		J.B. (m, 40)	Dem. Quest.	17:31,	
					7 scenes	
13	aaz-20150408-nekmese-agus-ques		A. O. (f, 27)	Dem. Quest.	14:22	
					3 scenes	
14	aaz-20150409-nekmese-timotius-ques		T.T. (m, 75)	Dem. Quest.	28:35,	
					5 scenes	
15	aaz-20150409-nekmese-wilhelmince-ques		W.O.D. (f,35)	Dem. Quest.	25:01,	
					8 scenes	
16	aaz-20150412-kupang-akila-quest		A.P.T.O. (f,51)	Dem. Quest.	28:28,	
					8 scenes	
17	aaz-20150412-kupang-evrince-quest	[Evrince-1:	E.B. (f, 39)	Dem. Quest.	11:09,	Unfinished due
		00:34-1:43]			4 scenes	to recording
						problems