DEIXIS AND GRAMMAR IN MARORI

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Abstract

This paper provides the first description of deixis in Marori (language isolate, Papuan, Merauke-Indonesia, highly endangered). It discusses how the deictic system is tied to the larger system in the grammar. It highlights the significance of the deictic data with respect to syntactic theory and typology of agreement and feature structures.

1   Introduction[*]

This paper discusses the intricacies and significance of the deictic system in Marori[1], a language isolate from Trans New Guinea, Papua (Ross 2005).

It will be demonstrated that Marori shows a quite complex deictic system. Temporal and spatial deixis is intertwined as part of the grammar, encoded across lexical as well as functional categories (pronouns, verbs, demonstratives, locative nominals, and relativisers). At the heart of the formal coding of deixis is the verbal system structured around paradigm classes where tense-aspect-mood (TAM) and number constraints are imposed by the grammatical-semantic agreement system of the language. Complexities arise due to the fact that there is no one-to-one relationship between formal paradigm classes and the deictic spatio-temporal anchoring. Marori data poses a descriptive challenge (i.e., providing an accurate description of the properties of the complex deictic system including its uses) as well a theoretical-typological challenge (i.e., providing an explicit analysis of the interface

[1] Alternative names are Morori, Moaraeri, Moraori, and Morari.

between morphosyntax and semantic/pragmatics that can accounts for not only the system in Marori but also similar/different systems in other languages).

The paper is structured as follows. First, I will provide some background of this language in section 2. Then, I will outline the basic facts about how deixis is manifested in the grammar of this language in section 3. After an overview of deixis in 3.1, I will show the manifestations of person deixis in its pronominal system (3.2), temporal deixis in verbs (3.3) and then spatial deixis in verbs (3.4.1), determiners (3.4.2), relativisers (3.4.3) and locatives (3.4.4). The anaphoric use of deitic items will be discussed in 3.5. Section 4 provides final remarks, highlighting the significance of Marori data on deixis with respect to larger issues in the theory and typology of agreement and feature structures.

2   Marori: some background

It's spoken by the Marori people in Kampung Wasur, around 15 kilometres east of Merauke, Papua, Indonesia.

Marori is under-documented. Previous publications mentioning this language (Boelaars 1950; Wurm 1954) have mainly originated from the work of the Dutch missionary Father P. Drabbe, who has also published his own work on the languages of southern New Guinea (Drabbe 1954, 1955). Mark Donohue has collected a word list and has also produced a picture dictionary (Gebze and Donohue 1998). A sociolinguistic survey was undertaken by SIL (Sohn, Lebold, and Kriens 2009) on languages around Merauke including Marori.

Marori is a highly endangered language. There are only 52 Marori families remaining (119 people) of which not all are fluent speakers. Marori people typically have mixed marriages with Marind and non-Papuan Indonesians such as the Tanimbar people and recently the Javanese.[2] The sociolinguistic survey carried out in 2000 (Sohn, Lebold, and Kriens 2009) reports the precarious nature of the language, which I have reconfirmed with my fieldwork in 2008 and 2009. Young Maroris no longer actively speak their langauge. They may, however, still have passive competence to varying degrees. Almost all of them speak Indonesian (or the local variety of Indonesian/Malay) as well as Marind.

3   Deixis in Marori

3.1   What is deixis?

The term *deixis* generally refers to interpreting grammatical and lexical items (or categories) depending on the spatio-temporal context. There have been a lot of studies on deixis (Levinson 1983; Anderson and Keenan 1985; Senft 1997a, 1997b; Levinson 2003, among others), with current studies also focussing on social deixis (Manning 2001).

Central to deixis is the notion of 'deictic centre'. The deictic centre shifts depending on the context, and therefore the 'meaning' of a deictic item changes as the deictic centre shifts. Pure deitic items have the speaker as the deictic centre; hence the interpretation of *I* or *you*

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[2] Most of the Javanese people coming to west Papua were originally part of the transmigration program sponsored by the government. They are now the first or second generation born in Merauke. They call themselves Jamer (Jawa Merauke).

shifts as the speaker shifts. Likewise, spatial deictic 'here' and 'this' or temporal deixis with 'now' can only be properly understood in relation to the place and time of an utterance.

Social deixis reflects context-dependent social relations between speaker, addressee and the thing talked about. Social deictic items are therefore typically tied to (im)politeness as they may encode speaker's deliberate use of resources to imply deference when they speak.

The study of deixis is often regarded as being within the domain of pragmatics, but the deictic system is, as we shall see in Marori, tightly intertwined with the grammatical system – for instance in constraining the agreement system (which itself is linked to paradigm classes in this language); see subsection 3.3.

3.2   Person deixis

Marori has an obligatory verbal agreement system that expresses a three-way number distinction between singular (SG), dual (DU) and plural (PU). It also has a non-obligatory free pronominal system that only expresses a two-way number distinction between SG and non-singular (NSG).

(1).   Marori free pronouns

	SG	NSG
1	*na/nawa*	*nie*
2	*ka*	*kie*
3	*efi*	*emnde/eme*

The Marori free pronouns are typically non-obligatory, but the verb obligatorily carries person/number/tense agreement morphology in the form of a prefix and/or a suffix. This morphology also encodes the role of the participants involved. Table 11 shows the pronominal prefixes associated with intransitive subject or transitive undergoer participants. These prefixes function as verbal (anaphoric) agreement. The formatives *ar-/or-* encode a tense distinction with number agreement; not discussed here).

Table 1. Pronominal prefixes: intransitive subject/
transitive undergoer participants in Marori

PERSON:	1	2	3
SG	*i-/y-*	*k-*	$\varnothing$-
NSG	*yar-~yor-*	*kar-~kor-*	$\varnothing$-

As well as the pronominal prefix, the verb also takes a pronominal suffix. The pronominal suffix on the verb is associated with the transitive actor and also intransitive subject. The choice reflects paradigm classes associated with tenses in Marori. The suffixes (shown in Figure 2) will be discussed further in relation to temporal deixis below.

3.3   Temporal deixis

In this section, I outline how the tense system in Marori works, reflecting the anchoring of events in different temporal points relative to the speech time ('now').

Marori has grammatical tense, in the sense that there is formal a morphosyntactic opposition that shows distinct temporal anchoring of events and that such morphosyntactic coding is obligatory. The tense builds around paradigm classes where other related information such as person and number is important. The pronominal suffixes and the associated paradigm classes are given in Figure 1 below.

At the broadest level, the forms reflect an opposition between irrealis (IRR) and realis (REAL). The IRR form is used for future events or unrealised events (in the future or in the past). REALIS forms are used for non-future events, including habitual ones. Future, present and past events are encoded by different paradigm classes marked by the pronominal suffixes.

However, the relationship between paradigmatic forms and time-anchoring is not one-to-one relationship. The complexities arise because, in addition to time anchoring, aspectual properties such as whether an event is telic, spontaneous, or atelic or extended over a period of time are important. For example, paradigms 3A/4A typically encode extended or atelic events whereas 3B/4B encode completive or telic events. However, while Paradigm 3B is used for a completive near past event, such an event is not necessarily encoded by Paradigm 3B. Paradigm 2 can be used with a near past temporal adjunct (e.g. 'yesterday'). That there is no one-to-one relationship between paradigm class and temporal anchoring is further discussed below in relation to Figure 3.

PARADIGM CLASSES	TNS/ FEATURES		1	2	3
IRREALIS (1)	FUTURE	SG	-ru	-Ø	-Ø
		DU	-ren	(n-) -Ø	-Ø
		PL	-men	(n-) -(ri)m	-(ri)m
REALIS: (2)	PRESENT	SG	-du	-Ø	-Ø
		DU	-den	(n-) -Ø	-Ø
		PL	-men	(n-) -Ø	-Ø
(3A)	NRPAST [-TELIC] (EXTENDED)	SG	-men/-mon	-m	-m
		DU	-men/-mon	(n-) -m	-m
		PL	-ben/-bon	(n-) -b/im	-b/im
(3B)	NRPAST ([+TELIC] /COMPLTED)	SG	-ben	-f	-f
		DU	-ben	n- -f	(n) -f
		PL	-freben	n- -f	(n)- (fre)-f
(4A)	RMPAST	SG	-maf/-mof	-maf/mof	-maf/-mof
		DU	-maf/-mof	(n-) -maf/mof	-mof/-mof
		PL	-baf/-bof -bi	(n-) -baf/-bof -bi	-baf/-bof
(4B)	REMOTE PAST	SG	-fori/feri	...fi/fi	-fi
		DU	-fori/meferi	(n-) ... fi/fi	-fi
		PL	-mbrofori/mbreferi	(n-) mbrofi/mbrefi	-mbrofi/mbrefi

Figure 1. Pronominal suffix on the verb and paradigm classes in Marori

Figure 2 provides a summary of the paradigm classes in Marori and the labelling of the associated tenses. The arrows indicate typical derivational morphological relatedness between the paradigm classes. For example, the verb that gets marked as belonging to paradigm 1 (IRR/FUT) will have its NrPST form belonging to paradigm class 3B (as indicated by the red arrow). This will be exemplified further below.
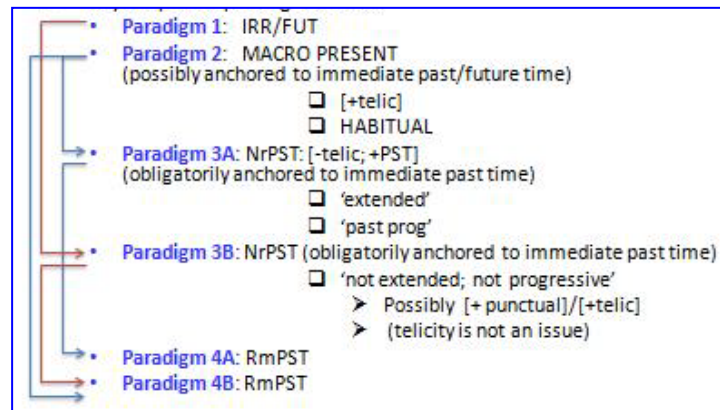

Figure 2 Paradigm classes in Marori

As mentioned earlier, there is no one-to-one relation between forms (i.e. paradigm classes) and temporal points. This can be shown in Figure 3 below. I follow the convention of S (speech event), E (event time), and R (reference time) to capture complex conceptual temporal properties of tense. The numbers (1)-(4B) on the right side next to IRR and REAL refer to paradigm classes in Figure 3. The double-arrow line means timeline with S being the deictic centre. Vertical lines indicate language specific semantic-grammatical categories relevant to tense distinctions, where RmPST is conceptualised from the day before yesterday (i.e. to the left).

As noted, the event taking place at the moment (S, R, E) (*tanamba* 'now') is expressed by paradigm class 2 (REAL), but paradigm class 2 is not solely associated with events anchored to the moment of speaking 'now'. For example, *-du* is the 1SG.REAL suffix for paradigm 2 but in sentence (2) below it is possible used with *fis* 'yesterday' (meaning near past time) or with *pamnggu* 'tomorrow' (near future time).

(2). *na   umo-n-du*   {*pamnggu | fis*}
    FUT   1SG-come-HITHER-1SG.REAL   tomorrow yesterday
     {'I will come tomorrow.' | I came yesterday.}

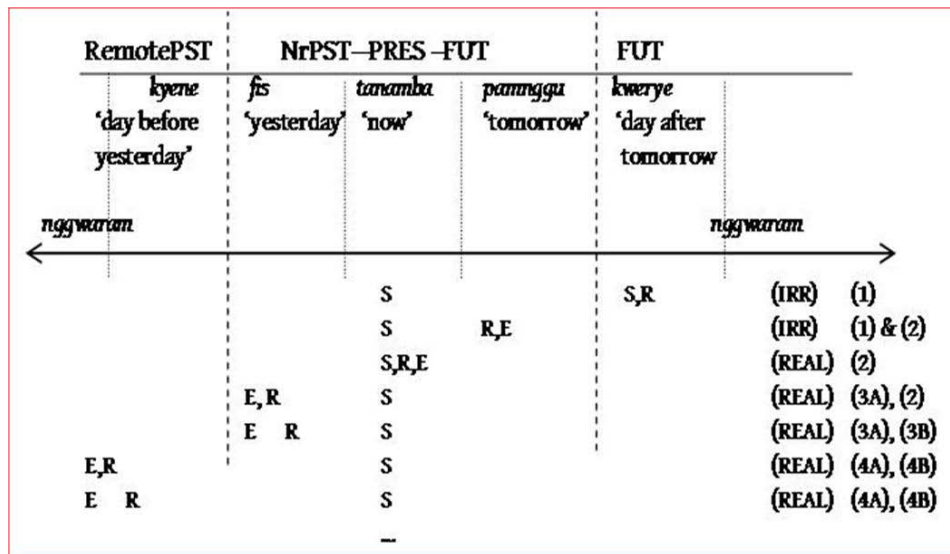| RemotePST	NrPST—PRES—FUT			FUT		
kyene 'day before yesterday'	*fis* 'yesterday'	*tanamba* 'now'	*pannggu* 'tomorrow'	*kwerye* 'day after tomorrow'		
nggwaram				*nggwaram*		
		S		S,R	(IRR)	(1)
		S	R,E		(IRR)	(1) & (2)
		S,R,E			(REAL)	(2)
	E,R	S			(REAL)	(3A), (2)
	E R	S			(REAL)	(3A), (3B)
E,R		S			(REAL)	(4A), (4B)
E R		S			(REAL)	(4A), (4B)
		—				

Figure 3: Significant temporal points in Marori and related tenses

The following illustrate the point that different first person suffixes are used because of the differences in temporal anchoring and aspects of the events: *-du* in the present progressive (3)a, *-ru* in future/irrealis (3)b, *-ben* in immediate past completive (3)c.

(3). a. *Na   tanamba roti=i   kef-ri-du.*
      1SG now   bread=U consume-ATELIC.3SG.U-1SG.A.REAL
      'I am eating a piece of bread now (it's in my mouth)'

   b. *Na   roti=i   kefe-ru.*
      1SG bread=U consume-1SG.A.IRR
      'I will eat a piece of bread.'

   c. *Na   fis   monjundu roti   kefe-ben.*
      1SG yesterday little   bread consume-1SG.A.NrPST
      'I ate some bread (one or two pieces) yesterday.'

Note that for the progressive meaning in (3)a the plural/atelic *–ri* must be also used. The verb may also come with a deictic suffix indicating telicity (towards the speaker); to be discussed in subsection 3.4.1 below.

3.4   Spatial deixis

3.4.1   Verb of motion/transfer

Motion toward the speaker is marked by *–n* whereas away from the speaker is not marked. Thus, we have contrast in forms for verbs like 'come' vs. 'go', 'return (here)' vs. 'return (there)', 'bring X here' vs. 'take X there' with the former getting *-n* before the actor suffix. The deictic difference may lead to a difference in the paradigm class. For example, 'come' towards the speaker is necessary temporally bounded (telic) taking paradigm class 2

whereas 'go away' is temporally conceptually unbounded taking paradigm class 1. The following examples show future anchoring of the events:

(4). a. *mundo   el   minggu   di   **kunonjo-ru**   Australi   mbe.*
next   day   Sunday   FUT   return-1SG.IRR   Australia   to
'I will return to Australia next Sunday.'

b. ***Na   pa**   kunonjo-n-**du**   Bali   mbe.*
1SG   soon   NPL.return-HITHER-1SG.REAL.PRES   Bali   to
'**I** will soon come back to Bali.'

The following show the anchoring to immediate past:

(5). a *Na   fis   Jakarta   mbe   kunonjo-**bon**.*   (3B)
1SG   yesterday   Jakarta   to   return-1NPL.NrPST
'I returned to Jakarta yesterday'

b. *Na   fis   Jakarta   ngge   kunonjo-n-**du**.*   (2)
1SG   yesterday   Jakarta   from   return-HITHER-1SG.REAL.PRES
'I returned from Jakarta yesterday.'

3.4.2   Relative distance: demonstratives

There are three points of relative distance in Marori: 'proximal' ('this'), 'semi-distal', and 'distal' cross cutting number distinction of singular vs. non-singular, with proximal being deictically associated with either speaker (SPKR) or addressee (ADDRS). This is shown in Figure 4.
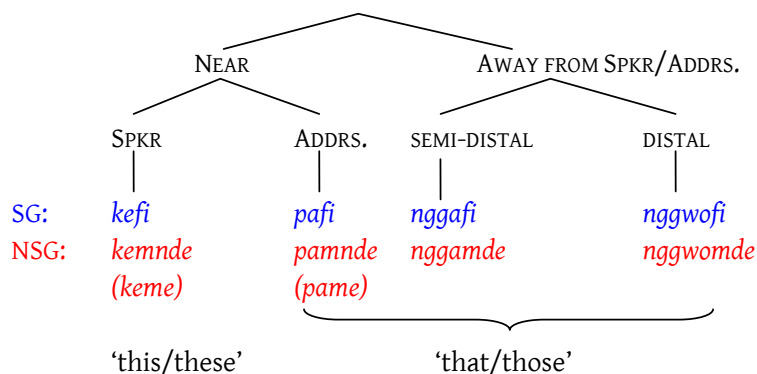

Figure 4. Demonstratives in Marori

These forms appear to be historically derived from the third person pronouns *efi* and *emnde* with formatives *ke-, pa-, ngga-* and *nggwo-*. Since they carry number features, they impose agreement constraints. For example, certain qualities such as 'good' must have NUM markers of *–on* 'SG'/*-(n)de* 'NSG'. Different agreement suffixes must be used in relation to the verb as well as the demonstrative as seen in the following sentences:

(6). a. *kefi   buku   wonnggo-won   te.*
PROX.SG book   good-SG   AUX.PRES.NPL
'This book is good.'

b. *kemde   buku   yanadu   wonnggo-nde=te.*
PROX.NSG book   two   good-NSG=AUX.PRES.NPL
'These two books are good.'

c. *kemde   buku   usindu   wonngo-nde=te-re.*
PROX.NSG   book   many   good-NSG=AUX.PRES-PL.
'These many books are good.'

The following are more examples:

(7).   *tok=efi   botol   reruwo   rowae   kuya-maf.*
frog=this   bottle   jar   inside   BE.2/3NPL -2/3.PST
'…the frog stayed inside the jar/bottle.' (FrogStory_Paskalis.005)

(8).   *Ngwofi gunung   timo famndu=e-te.*
that   mountain   far   very=EPHEN-AUX.PRES.NPL
'The mountain is far away.'

3.4.3   Proximal demonstratives as relativisers

The proximals *kefi* and *kemde* are used in relative clauses in Marori. Examples:

(9). a. *pa=nawa   yofo-ru   emde   ujif=i*
soon=1SG   see -1SG.FUT   PROX.NSG   bird –U

[*keme=di   keyi-m*]
REL.NSG=soon   NSG.U.bring –NrPST
'I will see the birds which they will bring.'

b. *pa=na   efi   ujif=i   ife-ru*
soon=1SG PROX.SG   bird –U   3SG.U.see-1SG.FUT

[*kefi   fis   togu   rafon=ngg-rin*]
REL.SG   yesterday   leg   broken=AUX.3DU.PST
'I will see a bird whose feet are broken.'

3.4.4   Locatives

Marori has realis (REAL) and irrealis (IRR) forms for locatives meaning 'here' and 'there'. The locatives, like the demonstratives in 3.4.2, also show speaker/addressee locations as the relevant deictic centres. The locatives are shown in Table 2 below.

	Spkr's Loc 'here'	Addr's Loc 'there'	Non Spkr/Non-Addr's Loc 'there'	
	'proximal'	'proximal'	'semi-distal'	'distal'
REAL	*keke*	*pake*	*mbeke*	*nggwoke*
IRREALIS	*koku*	*paku*	*mbe(e)ku*	*nggwoku*

Table 2: Deictic Locatives in Marori

The following examples show that the locatives must agree with the mood (IRR/REAL) of the verbs:

(10). a. *pa   pamnggu   yafa nofo   koku   /*keke*
FUT tomorrow   rain AUX.IRR here.IRR here.REAL
'It's going to rain here tomorrow.'

b. *Keke/*koku   tanamba yafa   naf-ra / *nofo*
here.REAL   now   rain   AUX-ATELIC.REAL
'It's raining here now'

In negative sentences, as expected the IRR locatives must be used as seen by the following contrast:

(11). a. *fis   keke   yafa   naf-ra-m*
yesterday here.REAL. rain   AUX-ATELIC-m
'It was raining here yesterday.'

b. *Maar koku/* keke   yafa   naf-ra-m*
NEG   here.REAL   rain   AUX-ATELIC-PST
'It didn't rain here.'

(12). a. *Pak Wayan, mba pake   yafa naf-ra?*
Pak Wayan Q   there.REAL rain rain-ATELIC?
'Pak Wayan, is it raining there?'

In imperatives, the IRR locative must be used whereas in questions the REAL ones are used; we have the following contrast:

(13). a. ***paku** /*pake ka=mi!*
there.IRR   2SG=sit.IRR
'(You) sit there!'

b. *Kie   yanadu, **pake** /*paku mbe   norowe   ai?*
2NSG   two   there.REAL PROG 2DU.sit.REAL Q
'Are you two sitting there?'

3.5   Anaphora

The pronouns *efi* 'SG' and *emnde* 'NSG' are used anaphorically, glossed here as DEF.SG and DEF.NSG respectively. In (14), for example, the second mention of the noun 'child' takes *efi*, whereas in the first line the noun *maipur* shows up as a bare noun.

9

(14). *sokodu   sajer   maipur   koro=fi   tok   sokodu*
       one   day   child   dog=with   frog   one
       'One day there was a child with his dog and frog.'

       maipur   efi   naw   Thomas   kuya-maf
       child   DEF.SG   name   Thomas   BE.2/3NPL -2/3.RmPST
       'The child's name was Thomas.'

(15). *tok=efi   botol   reruwo   rowae   kuya-maf*
       frog=DEF.SG   bottle   jar   inside   BE.2/3NPL -2/3.PST
       '…the frog stayed inside the jar/bottle.' (FrogStory_Paskalis.005)

(16). *Na   warngg-fori   bosik=i   yanadu   paya=ke   kyene*
       1SG   catch-1SG.RmPST   pig=U   two   forest=LOC   2.days.ago
       'I caught two pigs in the forest two days ago.'

       Emnde   bosiki   tanamba   tamba   piangg-ra-bon   sour   pen=ku
       DEF.NSG   pig=U   now   PERF   put-PL-1NrPST   house   behind=LOC
       'I have put them behind the house.'

4   Concluding remarks

Deixis in Marori is manifested in different domains of its grammar and lexicon. This paper has outlined person, temporal and spatial deixis in Marori pronouns, verbs, determiners and locatives.

There are at least two points worth noting from data on deixis in Marori; one empirical and the other typological-theoretical.

Empirically, deixis in Marori exhibits evidence that there is a tight link between deictic items (lexicon) and the grammatical system. Person deixis, for example, is reflected in free pronouns (having a two-way number distinction: singular/non-singular) as well as verbal morphology (having a three-way number distinction: singular/dual/plural). Importantly, the more complex distinction, i.e. the three-way distinction, is available for the deictic centre only, namely the first person (cf. Figure 2).

In addition, the pronominal system is tightly linked to the temporal deictic centre as well. That is, the complex three-way number distinction is associated with present time anchoring (*tananmba* 'now') (more correctly 'non-past') and verbal morphology (paradigms 1 and 2). The paradigm classes show complex aspectual semantics, in which the person and temporal information is intertwined.

Paradigm classes also encode information pertaining to argument roles in the predicate-argument structure, transitivity and argument/grammatical relations. The verbal morphology therefore imposes strict morphosyntactic agreement in syntax.

Of particular typological interest in the Marori agreement system and paradigm classes is the mood distinction of REAL vs. IRR. As noted in 3.4.4, locative deictic items in this language exhibit the REAL/IRR distinction. Consequently, the morphosyntactic agreement in Marori is perhaps typologically unusual in that it gives rise to not only predicate-argument agreement (common across languages) but also predicate-adjunct agreement (cross-linguistically unusual).

The deictic data calls for a more sophisticated theorising in linguistic modelling than currently conceived especially in syntactic theory. The aim of such a theory is to capture the tight and complex linking of morphosyntax and context. For example, one of the challenges is to capture the constraints of demonstratives outlined in 3.4.2. On one hand, it shows a three-way distinction of relative distance (proximal, semi-distal and distal) with respect to the speaker as the deictic centre. On the other hand, it also shows a four-way distinction when the addressee figures out as a deictic centre: near-speaker, near-addressee, far, very far.

Typically, one way of handling the complex agreement is to introduce features as part of the feature bundles within a unification-based system of grammar such as LFG (Bresnan 2001; Dalrymple 2001; Falk 2001). Such features are lexically listed as part of the information in the lexical entries of deictic items. While discrete number information such as singular, dual or plural can be straightforwardly captured in features, it remains unclear how the notion of relative proximity such as 'semi-distal' can be precisely captured in features. Discussing of this and its formalisation in depth to show the precise analysis of deixis in the interface between morphosyntax and pragmatics is beyond the scope of this paper.

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