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ASPECTS OF SPATIAL EXPRESSIONS IN MURSI

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Abstract

Mursi is a Nilo-Saharan language spoken in the south-west of Ethiopia. This paper presents some of the spatial-relations features found in Mursi, such as demonstrative deictics, locative deictics and directional deictics. The paper explores functions of the two-way deictic contrast found in demonstrative deictics in exophoric as well as anaphoric use. Some space is devoted to the interaction of demonstratives with the case system of the language, as this occasionally creates ambiguity in noun phrase constituents. Locative deictics are divided into two types: locative demonstratives and relator nouns. Locative demonstratives function as tools to specify a particular location in relation to the deictic reference point. Additionally, the strong relationship between locative demonstratives and the demonstrative construction is presented. Relator nouns function as tools to specify the relation of one entity to another or to specify a particular location in relation to the deictic reference point. The source of these relator nouns are inherent parts of wholes, namely body part terms and terms referring to domains of the universe (e.g. 'sky', 'ground', 'border'), whose function is to relate one entity to another. As for the verb system, Mursi marks spatial relations via directional deictics. It appears that Mursi has only a ventive but no itive suffix, the latter direction being assumed when the motion verb is unmarked. It is further shown that direction can also be expressed through the use of verbs with inherent directionality. Occasionally throughout this paper, spatial expressions in Mursi are compared with other Surmic languages to show whether or not Mursi constructions are typical of the family.

Keywords: Mursi, Nilo-Saharan, locative demonstratives, deictic reference point, relator nouns, directional deictics, nominal deictics, verbal deictics, exophoric, anaphoric, motion

1. Introduction

Mursi [muz][1] is classified as part of the Surmic group of languages spoken in southwest Ethiopia within the Eastern Sudanic branch of the Nilo-Saharan family (Dimmendaal, 1998; Bender, 1983). Mursi is part of the Chai-Tirma-Mursi (CTM) language cluster within the Southeastern branch of the Surmic languages; Me'en is its closest relative outside the cluster (Unseth 1988: 152; Mütze 2014: 14-20). The following figure (Figure 1) is based on Dimmendaal (1998: 13). I have modified it to reflect the connection between CTM and Me'en at a lower level than the Southeast node, as described by Unseth (ibid.) and graphically suggested by Smith (2018: 3). I have further changed the positions of Chai and Tirmaga to represent the closer relationship between Mursi and Chai versus Mursi and Tirmaga, showing Chai as Mursi's closest relative within the cluster. Lastly, I have changed the term "Tirma" to "Tirmaga" as proposed by Bryant (1999: 3, 10), as it is the speakers' self-name.

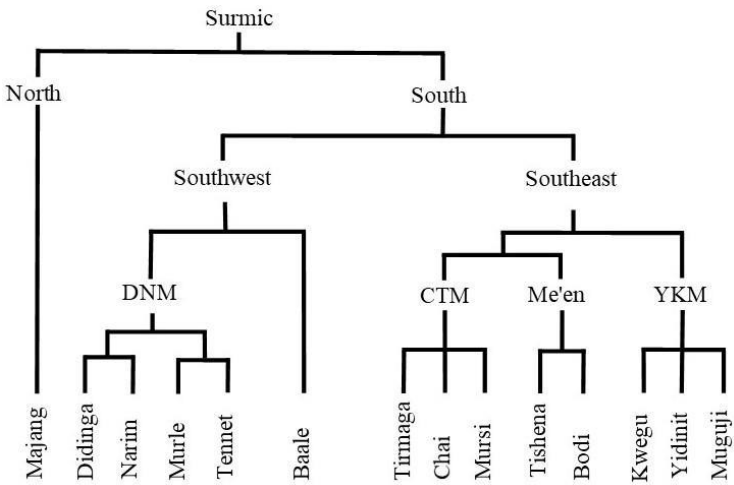

Figure 1. The Surmic branch of Nilo-Saharan (based on Dimmendaal 1998: 13 and Unseth 1988: 152)

Until recently, Mursi has remained a largely undescribed language. The most comprehensive description was by the author (Mütze 2014; Mütze & Ahland 2023). Prior to that, the most widely quoted source was a short description of the language mainly based on an anthropologist's ability to speak Mursi (Turton & Bender 1976) (cf. Mütze 2014: 21). This description

1 ISO-639-3 language code.

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mentions some ‘relational concepts’ (1976: 542) as well as the existence of ‘definiteness’ (1976: 545).

The Mursi data in this paper was gathered during several visits to the Mursi area, mainly between the years 2009 and 2013 when the author intermittently lived among the Mursi in an area called Makki. Initially, all of the available language assistants were monolingual. Playmobil figures[2] were used to represent intended situations which were outside of the daily context, and became a vital help in the data-collecting process. In later years, at times Mursi students became available for short periods, allowing more abstract data work, a better annotation of a few short texts as well as clarification of glosses through the students’ growing ability to speak a second language. The data is mainly elicited, often prompted by situations occurring in daily life and then expanding on the features observed. There is certainly a limitation to this data as abstract and structured patterning as well as thorough glossing remained a challenge throughout the time, especially in the area of verb morphology (see Mütze 2014: 23-24).

This paper does not aim to be an exhaustive study of the topic of spatial relations in Mursi, but rather a contribution to what is currently available in order to lay a foundation on which others can build.

All examples in this paper are transcribed using the International Phonetic Alphabet (IPA) including tone marking. The convention v́[3] is used for high tone and v̀ for low tone. If no tone is marked, this indicates that the underlying tone is unknown.

The paper is divided into four sections. The first one is the above brief introduction. Section two shapes the bulk of this paper and discusses the structure of demonstrative deictics, presenting their various functions as well as the interaction of demonstrative constructions with case. Section three then presents locative deictics in the form of: locative demonstratives denoting location in relation to the deictic reference point, and relator nouns marking vertical and horizontal space or the containment relation. Lastly, section four presents some directional deictics, discussing the evidence of a directional suffix and the use of inherently directional verbs.

2. Demonstrative Deictics

Demonstrative deictics are expressions which point to a specific entity and refer directly to spatial characteristics of the speech situation, the meaning of which is thus relative to that situation and/or the discourse itself (Crystal

2 Toy product by Brandstätter GmbH & Co KG, Zirndorf, Germany.

3 V indicates any tone bearing unit.

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2008: 133, 135). They are used both in the physical/geographical realm as well as within discourse contexts.

In the physical realm, demonstrative deictics are used with reference to entities in the speech situation, serving to orient the hearer in the outside world (exophoric function). When used in a discourse context, they refer to elements of the ongoing discourse and are coreferential with a prior noun or noun phrase. While interacting with other tracking devices, these demonstratives keep track of discourse participants introduced in the preceding discourse (anaphoric function) (cf. Diessel 1999: 93-96). I expect that demonstrative deictics can be used cataphorically as well, but this is not attested in my corpus of discourse data.

Mursi makes no functional difference between nouns that represent material as well as immaterial entities, and between visible and non-visible referents, when using demonstrative deictics.

2.1 Basic structure of Mursi demonstratives

Mursi demonstratives are complex constructions consisting of a prefix and a suffix attaching to the head noun. Mursi exhibits a two-way deictic contrast in demonstratives—one for referents that are near to the speaker (proximal), and one for those that are far from the speaker (distal). They are always speaker-centered. For both near and far, the prefix *ŋà-* marks the demonstrative function (DEM). The suffixes following the noun specify the distance: *-a* for proximal (PRX), and *-unu* for distal (DST).[4] There is no third degree of distance in Mursi as proposed by Lucassen (1994: 49) for the closely related Chai language. Demonstratives are not marked for number or gender.[5] The nominal feature of number remains merely marked on the head noun itself.

The demonstrative construction can be characterized as follows (Figure 2):

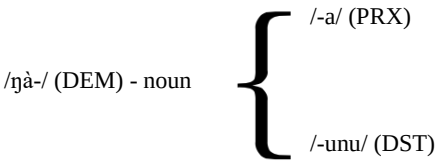

Figure 2. Mursi demonstrative construction

4 The underlying tone of the suffixes and its allomorphs are unclear.

5 Gender has not been attested on Mursi nouns.

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Example 1 gives the noun ‘moon/month’ in the demonstrative construction; (1a) is the proximal demonstrative and (1b) is the distal demonstrative. Example (2a) shows the singular noun ‘vegetarian’ versus its plural counterpart (2b) both as proximal demonstratives.

(1)	a.	*ŋà-tágís-á* DEM-moon.SG-PRX ‘this moon/month’	b.	*ŋà-tágís-únù* DEM-moon.SG-DST ‘that moon/month’
(2)	a.	*ŋà-àmsà-à* DEM-vegetarian.SG-PRX ‘this vegetarian’	b.	*ŋà-àmsén-à* DEM-vegetarian.PL-PRX ‘these vegetarians’

In the presence of other modifiers such as those indicating possession (3) or a relator noun specifying the spatial relation to another noun (4) (cf. §3.2), the demonstrative prefix as well as the suffix remain on the head noun only.

(3)	*ŋà-òlìŋá-ínù*	*gèɲè*
	DEM-bull.PL-DST	PSD.PL:POSS.3SG
	‘Those bulls of his’	

(4)	*lìwá*	*él*	*ŋà-ùlmèn-á*	*tójé*
	sorghum.PL	to.be.3PL	DEM-grain.storage.bin.pl-PRX	in.OBL
	‘The sorghum is in these grain storages’			

The proximal morpheme *-a* has *-ta* and *-na* as allomorphs; the distal morpheme *-unu* has *-inu*, *-tunu* and *-nunu* as allomorphs. The occurrence of these allomorphs seems to be phonologically motivated, though some exceptions are found.[6] Nouns ending in /i/ epenthesize /-t-/ (5a, 6b), whereas nouns ending in non-alveolar nasals epenthesize the alveolar nasal (5b,6c). Plural nouns ending in vowels other than /i/ take *-inu* to indicate distal (6a) (cf. Mütze 2014: 69).

(5)	a.	*ŋà-zìní-tà* DEM-thief.SG-PRX ‘this thief’	b.	*ŋà-rúm-nà* DEM-cloth.SG-PRX ‘this cloth’
(6)	a.	*ŋà-zìníŋá-ínù* DEM-thief.PL-DST ‘those thieves’	b.	*ŋà-kúléí-tùnù* DEM-spirit.SG-DST ‘that spirit’

6 Exceptions: in (9b) a noun ending in the alveolar nasal takes [-inu], in (11) a noun ending in /o/ takes [-unu] for the distal, and in (12, 17, 18) a noun ending in the velar plosive epenthesizes /t/.

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c. *ŋà-rúm-nùnù*
DEM-cloth.SG-DST
'that cloth'

While similar basic structures of demonstratives are described within the CTM cluster—namely for Tirmaga (Bryant 2013: 46) and Chai (Last & Lucassen 1998: 400-403), the use of a prefix along with a suffix seems to be uncommon within the Surmic family. Rather, it is common to use a single suffix, as in Me'en (Will 1989: 131), or a separate word following the noun they modify, as in Kwegu (Hieda 1998: 350) and Baale (Moges & Dimmendaal 1998: 295).

2.1.1 Demonstratives in exophoric function

Mursi demonstratives are equally used with nouns that represent material entities (7)-(8) as well as immaterial entities (9)-(10).

(7) a. *ŋà-gàʃàŋà-à*
DEM-bush.PL-PRX
'these bushes'

b. *ŋà-gàʃàŋà-ìnù*
DEM-bush.PL-DST
'those bushes'

(8) a. *ŋà-kísì-tá*
DEM-dikdik.SG-PRX
'this dikdik'

b. *ŋà-kísì-túnù*
DEM-dikdik.SG-DST
'that dikdik'

(9) a. *ŋà-ŋɔ̀tɛ̀n-á*
DEM-wind.PL-PRX
'these winds'

b. *ŋà-ŋɔ̀tɛ̀n-ínù*
DEM-wind.PL-DST
'those winds'

(10) a. *ŋà-kúléí-tà*
DEM-spirit.SG-PRX
'this spirit'

b. *ŋà-kúléí-tùnù*
DEM-spirit.SG-DST
'that spirit'

Both visible and non-visible referents are marked by the same construction. In the following example (11), the referent is not seen by the speaker at the time of speaking. The speaker does however know what he is referring to—children in this instance—by having seen the children walk inside the house earlier, or by judging from their noises. In example (12), the referents are not visible to the speaker at the time of speaking; the information shared has been seen at an earlier point in time.

(11) *ŋà-ɛ́rró-ùnù* *ɛ́l* *dórí* *tójé*
DEM-child.PL-DST be.3PL.SBJ.IPFV house in.OBL
ɔ́ɔ́g-ɛ̀ *háŋ*
make.noise- IPFV-3PL.SBJ.IPFV emph
'Those children in the house really make a lot of noise'

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(12) *ŋà-zùk-tùnù* *él* *kídʻó* *tánnɔ́-ŋà*
DEM-people-DST be.3PL.SBJ.IPFV river on.the.other.side-EMPH
á *kùcùmbà* *kàrì*
COP.3SG/PL highlander.PL all
'Those people that are on the other side of the river are all Highlanders'

2.1.2 Demonstratives in anaphoric function

One of the anaphoric functions of demonstratives in Mursi discourse is the use of the distal demonstrative to refer back to a participant or event that was introduced earlier.

It appears that the demonstrative serves to reactivate a participant, and likely also to create emphasis on the participant at that particular point in the story. The present small corpus of discourse data is insufficient to further verify these claims but illustrates the anaphoric function all the same.

The following examples are taken from a short story[7] in which a woman accidentally burns the grain storages of numerous other people when she sets her own field on fire in order to burn down the cut trees.

The woman is first mentioned with the unmodified noun 'woman' in the title line (13):

(13) *a* *lɔg-a* ***mugaj-a*** *aɟ-a* *guɲa* *go*
COP.3SG/PL.IPFV issue-CF woman-NM give-?? field.PL fire
'This is the issue/story of the/a woman who set the fields on fire.'

From the available data, it appears that in Mursi it is possible to use the title line to set the context of what or who the story is going to be about. The woman is then referenced to in the first line of the story itself (14) by the use of the simple pronoun immediately followed by the noun:

(14) ***nɔŋ*** ***mugaj*** *aɟɛ* *go-a* *nɛnɛ* *go*
3SG woman give.3SG.SBJ fire-CF 3SG.GEN.SGPOSS fire
'**This woman (lit. she woman)** set her field on fire [for the fire to burn off the cut trees].'

In line 5 of the story (15), the distal demonstrative is then used to refer back to the woman from line 1.

(15) *na* *hulli* *ɓaa* *liwa* *na* *uʃíŋana-je* *zuwa-a*
CN when eat.NM sorghum CN it.is.finished-**SC** people-CF
liw-aŋ *jɔg* *tɛhɛn-ɛ* ***ŋa-mugaj-tunu*** *kɔɗaa*

7 Because of adverse circumstances this story was transcribed without tone marking.

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sorghum-GEN 3PL want-PFV-3PL.PFV DEM-woman-DST kill.NM
'After the fire had burned up (eaten) the grain, the people [owners] of the grain [of the burned grain storages] they wanted to kill **that woman**.'

Up to then, the woman had not been mentioned explicitly, but had been understood as being part of what happened when the fire spread further than planned and destroyed the grain storages of many people. In this short story the demonstrative here functions to reactivate the participant (the woman) and likely also places emphasis on the participant who is being referred back to.

A similar use of the distal demonstrative is found in another short traditional story which was presented without a title line. The participants (eight Chai people) are introduced in the first line (16). Then they are only tracked by the mandatory personal pronoun marking on the verb. They are then referred back to in line 7 (17) by a noun marked as distal in the demonstrative construction.

The demonstrative noun occurs in a background clause, which does not move the story line forward but provides explanatory background information on the participant, which is essential to understand the rest of the story. Also in this case, the distal demonstrative is found on a topical participant, and the story continues with the details of what happened to these people because of their lack of knowledge about cattle.

(16) *be sabɔ kiŋiŋ* *zugti* *ko* *issej* *a* *caj*
long time ago people which is eight COP.3SG/PL.IPFV Chai[8]
hɛj *gaʃ-ɔ*
go.3PL.SBJ bush-OBL
'In the beginning **eight Chai people** went into the bush.'

(17) *na* ***ŋa-zuk-tunu*** *bio* *imag-ɛ-ɔ*
CN **DEM-people-DST** COW.PL not.know-3PL.SBJ-CFS
'**THOSE people** did not know cows.'

When referring to other short texts, it appears that the proximal demonstrative construction has a function to finalize a certain part of a story before moving on to the next part or to summarize the conclusion or moral of a story. Example (18) is taken from the middle of a story in which a long meeting is held. The utterance ends the description of the discussion among one group of participants before the story then moves on to another group of participants. Example (19) points towards a similar function. This excerpt is taken from the end of another story in which it summarizes the presented

8 The Chai are the neighbouring people.

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issue. After that, the narrator changes the theme from description to advising his audience regarding future behaviour.

(18) *tii* *al-ɛ* ***ŋa-lɔg-ta***
long.time discuss-3PL.SBJ **DEM-issue-PRX**
'They were discussing this issue for a long time.'

(19) *na* ***ŋa-dami-ta*** *a* *gɛrs-i*
CN **DEM-tradition-PRX** COP.3SG/PL.IPFV bad-NM
'This tradition is bad.'

2.2 The demonstrative-pronoun construction

Structurally, the demonstrative pronoun is similar to the demonstrative construction for nouns in that the demonstrative pronouns, *ìn* for singular and *ìgɛ̀* for plural, replace the head noun. These function as bound roots. The widespread Nilo-Saharan pattern of number marking in which *n* represents the singular and *g* the plural (Bryan 1968; Last 1995: 49) is still preserved in this demonstrative pronoun construction, and is also attested in some Mursi personal pronouns (see Mütze 2014: 73-74). The demonstrative pronoun constructions in Mursi are given in Table 1.

Table 1. Mursi demonstrative pronoun constructions

	Proximal		**Distal**	
Singular	*ŋà-ìn-à*	'this'	*ŋà-ìn-ùnù*	'that'
Plural	*ŋà-ìgɛ̀-à*	'these'	*ŋà-ìgɛ̀-nù*	'those'

In addition, the bound roots *kei* 'thing' and its plural counterpart *gal* 'things' can be interchanged with the demonstrative pronouns in a demonstrative pronoun construction (20)-(21):

(20) a. *ŋà-kêi-tá* b. *ŋà-kêi-túnù*
DEM-thing-PRX DEM-thing-DST
'this thing' 'that thing'

(21) a. *ŋà-gál-à* b. *ŋà-gál-ùnù*
DEM-thing.PL-PRX DEM-thing.PL-DST
'these things' 'those things'

2.3 Demonstratives and case

Mursi nouns exhibit three distinct case forms: nominative (NOM), genitive (GEN) and oblique (OBL) case. Nominative case is marked only in a non-canonical (OVS/VS) word order and provides emphasis on the S/A argument

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(see Mütze 2014: 55-58; Mütze and Ahland 2023). However, a noun in a demonstrative construction cannot be marked for case.

Examples (22)-(27) demonstrate how the post-verbal nominative case marking is deleted, if the post-verbal noun is modified with a demonstrative. As the noun modified with a demonstrative then lacks its case marking, it is mainly the person marking on the verb (23)-(25), as well as the context (25) or the semantic logic of the utterance (27) which clarifies the role of the argument in demonstrative case.

(22) *àŋè* *ɗág-áŋ-Ø* *híré-ɔ́*
1SG beat-1SG.OBJ-3SG.SBJ man-NOM
'It is **the man**, who beat me.'

(23) *àŋè* *ɗág-áŋ-Ø* ***ŋà-hír-únú***
1SG beat-**1SG.OBJ-3SG.SBJ** DEM-man-DST
'It is **that man**, who beat me.'

(24) *érmì* *tɔ́n-á* *òlìŋá-ù* *ɓój*
child stab.PFV-**3PL.SBJ.**PFV bull.PL-NOM completely
'It was **the bulls** who stabbed the child completely (dead).'

(25) *érmì* *tɔ́n-á* ***ŋà-òlìŋá-à*** *ɓój*
child stab.PFV-**3PL.SBJ.**PFV DEM-bull.PL-PRX completely
'It was **these bulls** who stabbed the child completely (dead).'

(26) *àcùgènná* *ɓág-é* ***rɔ̀ssí-ù***
meat.PL eat.IPFV-**3PL.SBJ**.IPFV dog.PL.- NOM
'It is **the dogs** that have eaten the meat.'

(27) *àcùgènná* *ɓág-é* ***ŋà-rɔ̀ssì-tá***
meat.PL eat.IPFV-**3PL.SBJ**.IPFV DEM-dog.PL.-PRX
'It is **these dogs** that have eaten the meat.'

Because case is not marked in the demonstrative construction, ambiguity is created post-verbally when S/A and O occur in the same person-marking on the verb (28)-(29), and when neither the semantics of the verb nor the context clarify the roles. In most instances, however, case roles are clarified by the wider context.

(28) *hírí* *ɗág-Ø* ***ŋà-lúsí-tá***
man beat-3SG.SBJ **DEM**-boy-**PRX**
'It is **this boy** who beats the man' or
'The man beats **this (specific) boy**'

(29) *gùʃùrènná* *ɓág-é* ***ŋà-rɔ̀ssì-tá***
hyena.PL eat-3PL.IPFV **DEM**-dog.PL-**PRX**
'The hyenas bit/ate **these dogs**' or 'It was **these dogs** that bit/ate the hyenas'

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Morphologically the nominative case suffix *-u* for plural nouns shows some similarity to the distal suffix *-unu*. For certain languages of Ethiopia, it has been suggested that case historically arises from demonstratives (Ahland 2019). However, in Mursi no similarity is found between the nominative case suffixes *-ɔ*, *-j* for singular nouns (see Mütze 2014: 55-57; Mütze and Ahland 2023) and the proximal suffix *-a* with its allomorphs (see §2.1).[9]

As for the genitive case, the Mursi genitive case is part of a noun modification construction (NMC). Mursi NMCs involve a head noun and a modifier which can be a simple noun (30), a derived noun, or a clause. The head noun must always be in its construct form marked by *-a* in order to be modified, leading to a construction which exhibits both a construct form (head-marking) and a case form (dependent-marking) (cf. Creissel 2009: 75-76). The construction can be characterized as shown in Figure 3 (cf. Mütze 2014: 62-67; Mütze and Ahland 2023).

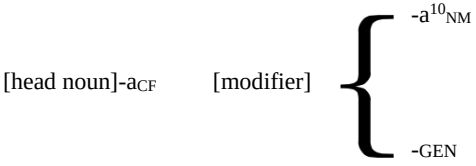

Figure 3. Mursi noun modification construction

Example (30) provides a basic form of a head noun in construct form (CF) and the modifier in genitive case form. In example (31) it can be seen how the modifier drops its case form when being modified itself with a demonstrative, while the head noun remains in construct form.

(30)	*ŋà-tánn-ùnù*	*á*	***gúŋá-à***	***zùw-òŋ***
	DEM-other.side-DST	to.be.3.PL	fields-**CF**	people-**GEN**
	‘Over there on the other side (of the river) are **the people’s fields**’			
(31)	*ŋà-tánn-ùnù*	*á*	***gúŋá-à***	***ŋà-zúk-túnú***
	DEM-other.side-DST	to.be.3.PL	fields-**CF**	**DEM**-people-**DST**
	‘Over there on the other side (of the river) are **those people’s fields**’			

In NMCs in which both the head noun and the modifier are in a demonstrative construction, the modifier takes additional marking (32). This marker has otherwise only been attested as marking the ending of a

9 The unmarked accusative case in Mursi (see Mütze 2014: 104-105) also does not give evidence for such a historical connection.

10 /-o/ for very few words (*bo* ‘big’; *tino* ‘small’; *baseno* ‘easy’).

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subordinate clause (SC). It is glossed here as SC, but it is not clear whether this is another use of the same marker or a coincidental homophony.[11] This is striking as this is the only incident where additional marking co-occurring on nouns modified with a demonstrative is found. If this really does provide an example of demonstrative marking and case form occurring together in NMCs, such a construction needs to be verified by further studies.

(32) *ŋà-tánn-ùnù* *á* ***ŋà-gúɲá-à***
DEM-other.side-DST to.be.3.PL **DEM**-fields-**PRX**
ŋà-zúk-túnú-jè
DEM-people-**DST-SC**
'Over there on the other side of the river are **these fields of these people**.'

The Mursi oblique case suffix *-ɔ* and its allomorphs *-je*, *-e* and *-i*[12] attach to non-core constituents and mark instrumental (33) as well as locative (34)-(36) semantics. In its locative function, oblique case marks the noun as Ground, to which the motion or path is relative (Talmy 2000: 25). In other words, the noun in oblique case binds the trajectory of the moving entity to a reference point, either a source or a goal (Jackendoff 1983: 65). If there is no motion (36), the noun in oblique case simply provides the Ground with respect to which the entity is placed.

Compare example (34)-(36), in which the speaker refers to the settlement marked with oblique case in three different ways – the settlement as goal (34), as source (35), and as place (36). The specific direction of the path is in this case clarified by the verbs carrying inherent direction.

(33) *bàrtènò* *kéɗ-ú* *jààrí* *bàŋkâ-**jé***
Barteno cut.PV-3SG.SBJ.PV foot machete-**OBL**
'Barteno cut his foot with the machete'

(34) *kɔ́ɔ̀j* *ɔ́r-**ɔ́***
go.1SG.SBJ settlement-**OBL**
'I **go to** the settlement'

(35) *kúúní* *ɔ́r-**ɔ́***
come.1SG.SBJ settlement-**OBL**
'I **come from** the settlement'

(36) *k-íh-í* *ɔ́r-**ɔ́***
1SBJ-be.exist-1SG.SBJ.IPFV settlement-**OBL**

11 An example of the use of SC in a text is shown in example (15).

12 /-ɔ/ following consonant final nouns, /-je/ following all vowels, /-e/ following nouns with final alveolar nasal causing it to geminate, /-i/ following vowel-final plural nouns (cf. Mütze 2014: 54-55).

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'I **am in** the settlement'

When the noun serving as Ground is modified with a demonstrative, it again becomes unable to take the oblique case suffix. Compare (34) and (35) with (37) and (38).

(37) a. *kɔ̀ɔ̀j* ***ŋà-ɔ́r-á***
go.1SG.SBJ **DEM**-settlement-**PRX**
'I go to this settlement'

b. **kɔɔj* *ŋa-ɔr-a-ɔ*
*go.1SG.SBJ DEM-settlement-PRX-OBL
'I go to this settlement'

(38) a. *kúúní* ***ŋà-ɔ́r-ùnù***
go.1SG.SBJ **DEM**-settlement-**DST**
'I come from this settlement'

b. **kuuni* *ŋa-ɔr-unu-ɔ*
*come.1SG.SBJ DEM-settlement-DST-OBL
'I come from this settlement'

A similar case suffix occurs in Tirmaga (Bryant 2013: 44). For the closely related Chai language a locative suffix *-o* has been described by Lucassen (Lucassen 1994: 76) which has a function similar to the Mursi oblique suffix. Dimmendaal also describes a similar case suffix for the Eastern Sudanic language Nyimang spoken in Sudan (2011: 101). While the absence of a locative case suffix marking direction seems to be common within the languages of the CTM cluster, the closest Southeast Surmic language Me'en does differentiate between ablative and allative case suffixes (Diehl 2008: 61).

3. Locative Deictics

Mursi locative deictics express locational meaning of an action in relation to the deictic centre or of an entity in relation to another entity within the clause (cf. Crystal 2011: 288). Mursi utilizes two types of locative deictics: locative demonstratives and relator nouns.

3.1 Locative demonstratives

Locative demonstratives are demonstrative nouns that denote location in relation to the deictic reference point. From the available data, all locative demonstratives in Mursi are speaker-centered. Though locative demonstratives are free and unchangeable words, their relation to the demonstrative construction can be seen by the presence of an initial *ŋà* in

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these words which is similar to the prefix *ŋà-* of the demonstrative construction. In addition, the presence of the sounds /a/ and /unu/ at the end of the locative demonstratives suggests a strong relation to the demonstrative construction. Two frequently used ones are *ŋàà* 'here' (PROX) (39) and, *ŋàɓúnú* 'there' (DIST)(40).

(39) *lúsì* *àìwò* ***ŋáá***
boy come.IMP **here**
'Boy come here!'

(40) ***ŋàɓúnú*** *wà* *kún-í* *mènáŋ*?
there RP come-2SG.SBJ when
'When did you come from there?'

The locational expressions *ŋàtánná* - 'on my side of something' (e.g. a river) (41) and *ŋàtànnùnù* 'on the other side of something' (42) have been grouped here as locational demonstratives, as the root *tann*, which is a bound-root expression, takes demonstrative marking just like the locational demonstratives above. The root *tann* is also found as part of a relator noun (cf. Table 2).

(41) *túrúmél* *ʃíl-Ø* ***ŋà-tánn-á***
car stand-3SG.SBJ **DEM-other.side-PRX**
'The car is parked on this side (of the river)'

(42) *lúsì* *ók-ú* ***ŋà-tànn-ùnù***
boy go.PFV-3SG.SBJ.PFV **DEM-other.side-DST**
'The boy went over there'

3.2. Relator nouns

Relator nouns are nouns which further specify the location of a referent in relation to another referent (43).

(43) *lúkój* *í-Ø* *bì* ***sábɔ̀***
chicken to.be-3SG.SBJ.IPFV cow head.OBL
'The chicken is in front of the cow (lit. at the head)'

The structure of Mursi relator nouns derives from certain nouns in oblique case, where the basic noun represents either a body part or a domain of the universe (earth, sky). In addition to their nominal function, these nouns can relate one entity spatially with regard to another. It is mainly their function in certain constructions which makes them relational nouns, where, for example, not the body part itself but the relational position between entities becomes the primary sense of the word.

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For most of the relator nouns, the basic noun can still be clearly traced back. However, their morphology slightly differs from a clear noun + OBL construction in that the usual allomorphy rules are not followed and final vowels of the noun are elided in some instances. Relator nouns (including those arising from body parts) and their basic nouns (where known) are given in Table 2.

Table 2. Mursi relator nouns and their basic nouns

Indicated relation		**Relator noun**	**Basic noun**
vertical space	above, on top	*tùnnɔ́*	??
	below, on the ground	*bàj*	*bà* 'earth, ground'
	up	*tùmɔ́*	*tùmù* 'sky'
	under, bottom	*súgúmɔ́*	??
horizontal space	front, facing	*mùmɔ̀*	*mùmɔ̀* 'forehead'
	front, first	*sábɔ̀*	*sábá* 'head'
	back	*ɓùgùj*	*ɓùgùj* 'back'
	center	*kérgénɔ̀*	??
	peripheral, side	*ròɲɔ́ɔ̀*	*ròòɲój* (sg.), *ròòɲá* (pl.) 'rib'
		ŋèréɔ̀	*ŋèréj* 'border'
	on the other side	*tànnɔ̀*	??
containment relation	inside	*tójé*	??
	outside	*ɓɔ́*	??

When the construction functions to relate two items in relation to each other, it cannot be pluralized. Number is only marked on the head noun and on the verb. Compare example (43) and (44).

(44) *lúkó-ɲá* *él* *bìò* ***sábɔ̀***
chicken-PL to.be.3PL.SBJ.IPFV cow.PL **head.OBL**
'The chickens are in front of the cows'

For those reasons mentioned above, I have interpreted these nouns as relator nouns, rather than as nouns in oblique case, even though their grammaticalization is not far advanced. Grammaticalization of body-part terms in order to indicate spatial relations is common throughout Africa (Heine 2012: 44ff).

In Mursi, the relator noun is typically clause-final as shown in examples (44) and (45); in non-canonical word order the oblique argument plus relator noun can also occur clause-initially (46).

(45) *tɔ̀ŋɔ̀* *í-Ø* *òlé* ***rɔ̀ɲɔ̂***
goat to.be-3SG.SBJ.IPFV bull **rib.OBL**
'The goat is next to the bull (lit. at the ribs of the bull)'

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(46) *òlé* ***mùm-ɔ̀*** *ʃĭl-Ø* *hírɛ́-ɔ́*
bull **forehead.OBL** stand-3SG.SBJ.IPFV man-NOM
'There is a man in front of the bull'

Oblique arguments (47) can optionally be followed by relator nouns, further specifying the spatial relation (48). If the oblique argument is followed by a relator noun, the case marking is then attached to the final element only. In this construction, the oblique argument and the relator noun form a unit as seen in example (48). Relator nouns often form a unit with another noun, but also occur independently as seen in example (49) and (50).[13]

(47) *k-úŋús-í* ***dórî-jé***
1SBJ-sleep-1SG.SBJ.IPFV house-OBL
'I sleep (in the) house'

(48) *k-úŋús-í* ***dórí*** ***tójé***
1SBJ-sleep-1SG.SBJ.IPFV house in.OBL
'I sleep inside the house'

(49) *k-úŋús-í* ***tójé***
1SBJ-sleep-1SG.SBJ.IPFV in.OBL
'I sleep inside'

(50) *k-úŋús-í* ***bàj***
1SBJ-sleep-1SG.SBJ.IPFV ground.OBL
'I sleep on the ground'

Alternatively, the specific location of a referent can be indicated by a body-part term within a NMC (51).

(51) *bì* *í-Ø* ***ɓùgùj-á*** ***ŋákàrùŋ-í***
cow to.be-3SG.SBJ.IPFV back-CF **Ngakaruny-GEN**
'The cow is behind Ngakaruny (lit. Ngakaruny's back)'

4. Directional Deictics

In addition to expressing spatial relations via nominal constructions as presented above, Mursi can also indicate spatial relations in verbal constructions, namely directional deictics.

Mursi directional deictics can be expressed with either a directional suffix on the verb or with the use of lexical verbs that have inherent direction.

13 Because a third noun is not specified in examples (49-50), these relator nouns appear to form part of their own category under locational deictics.

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With motion verbs that do not have inherent direction as part of their semantics, relator nouns, by marking Ground, add direction to the trajectory of the motion.

4.1. The directional suffix

The directional suffix *-an(a)*[14] adds a ventive (VEN) component to the semantics of the verb. The deictic reference point towards which the movement takes place is usually the speaker.[15]

This ventive suffix is *-ana* for 1PL (INCL.) and 3SG, and *-an* for all others (see Table 3). The suffix follows the verb root and precedes the subject suffix. When the ventive is marked, the 1/2SG subject suffix cannot be used simultaneously. The ventive has the variant *-on(o)* (57, 59), with unclear distribution.[16]

Table 3. Mursi ventive suffix (imperfective aspect)

	Singular	**Plural**
1	*-an-/-on-*	*-an-/-on-* (EXCL)
		-ana-/-ono- (INCL)
2	*-an-/-on-*	*-an-/-on-*
3	*-ana-/-ono-*	*-an-/-on-*

Directional markers are common in Surmic languages, typically occurring in pairs of ventive and itive (Dimmendaal 1998: 49). In the available Mursi data no morphological marking for itive is found, rather it seems that the unmarked motion verb assumes motion away from the deictic centre as in example (52) and (54).

(52) *nɔ̀ŋ* *ŋés-Ø-ɔ̀*
3SG run-3SG.IPFV-CFS
'S/he flees' (runs away)

Compare example (53) with (54). In (53) the verb marked with the directional suffix *-ana* shows movement towards the deictic centre (the speaker), away from the fire. In example (54) the same verb is seen without the directional suffix, and the direction of the motion is reversed (itive).

(53) *nɔ̀ŋ* *ŋés-áná-Ø* *gò-jé*
3SG run/flee-VEN-3SG.IPFV fire-OBL
'S/he is running away from the fire' (towards the speaker)

14 The underlying tone of the suffix is unclear.
15 See example (58) for an instance of a displaced deictic centre.
16 For the related Tirmaga language a distribution based on traces of ATR vowel harmony has been suggested (Bryant 2013: 72).

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(54) *nɔ̀ŋ* *ŋé*[17]*-Ø* *gò-jé*
3SG run/flee-3SG.IPFV fire-OBL
'S/he is running to the fire' (away from the speaker)

In example (55) the specific direction of the motion 'jump' is clarified by the combination of the verb's semantics and the relator noun (cf. §3.2) *tùmɔ́* which derives from the noun 'sky' in oblique case as goal. The motion verb itself remains unmarked. In (56) the same relator noun 'sky' occurs as the source, but here, the verb carries the directional suffix, indicating the direction of motion (down) towards the speaker (ventive).

(55) *bɔ̀rɔ̀t-ù* *tùmɔ́*
jump-3SG.SBJ.PFV sky.OBL
'S/he jumped up (lit. towards the sky)' (away from the speaker)

(56) *mùŋúŋ-à* *nɔ̀j-án-é* *tùmɔ́*
star-PL move-VEN-3PL.SBJ sky.OBL
'The stars are falling from the sky' (towards the speaker)

Example (57) was elicited in the context of a story of a cultural ceremony regarding a spiritually powerful boat, protecting the people from the crocodiles in the river. At the end of the ceremony the boat is taken out of the water to be with the people. Again, the directional suffix on the verb adds the ventive component to the movement: however, as this is part of a narrative, the speaker is setting up the scene to show that the people are pulling the boat towards himself/herself (the speaker), out of the water.

(57) *zùwò* *gúrt-ón-é* *gɔ̀ŋúl* *mà* *tójé*
people pull-VEN-3PL.SBJ.IPFV boat water in.OBL
'The people are pulling the boat out of the river (lit. the water)'

Furthermore, the directional suffix is found on dynamic non-translational motion verbs, as in example (58) and (59).

(58) *hírí* *ɔ́g-ánà* *mɔ̌r* *kìɔ̀*
man untie-VEN calf tree
'The man unties the calf from the tree'

(59) *éɗ-ón-é* *kìnɔ́ì*
pick-VEN-3PL.SBJ.IPFV greens
'They pick greens'

From the available data there is evidence that the directional suffix results in associated motion of the object when used with non-translational

17 *s* → Ø/_# (cf. Mütze 2014: 28).

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motion verbs (cf. Payne & Otero 2016; Bekaldi 2015). In example (58) the calf moves towards the speaker and away from the tree (after having been untied). There is also evidence that the deictic reference point can be other than the speaker. In example (59), the greens that are being picked move towards the people.[18] However, examples of change of deictic reference point and/or associated motion are sparse and do not constitute a regular pattern thus far in the Mursi data available.

For the related Tirmaga language, the suffix *-an/-ana* has been analysed as 'motion towards', and a suffix *-ɛn/-sɛn* as 'motion away from' (Bryant 2013: 72). Bryant however notes that the *-ɛn/-sɛn* suffix only rarely occurs and that the absence of a suffix assumes the action to be away from the scene of the action (ibid.).

Morphological directional marking enabling non-translational motion verbs to become directional have been described for other Surmic languages such as Majang (Joswig 2019). In fact, these directional morphemes are quite common across the related Nilotic family (Mietzner 2012). In my current data no further evidence of these could be found for Mursi.

4.2 Inherently directional verbs ('come' and 'go')

The Mursi verbs 'come' and 'go' clarify the direction of the movement in Mursi solely by their lexical semantics without the use of the directional suffix *-ana* on the verb nor any other marking for the path on the noun. For this reason, I have labeled them 'inherently directional verbs'.

'Come' and 'go' are both irregular verbs. The imperfective forms are given in Table 4 together with the noun *ɔ́rɔ́*, 'settlement' in oblique case.[19]

Table 4. The verbs 'come' and 'go' (IPFV)

	'come'		**'go'**	
	SG	**PL**	**SG**	**PL**
1	*kúúni ɔ́rɔ́*	*kóhóŋó ɔ́rɔ́* (EXCL) *kòhòŋ ɔ́rɔ́* (INCL)	*kɔ́ɔ́ì ɔ́rɔ́*	*kéhéú* (EXCL) *ɔ́rɔ́* *kèhéí* (INCL) *ɔ́rɔ́*
2	*kúní ɔ́rɔ́*	*hóŋó ɔ́rɔ́*	*kɔ́ì ɔ́rɔ́*	*héú ɔ́rɔ́*
3	*kún ɔ́rɔ́*	*hóŋ ɔ́rɔ́*	*kɔ́í ɔ́rɔ́*	*héí ɔ́rɔ́*

18 It is uncertain whether example (59) functions as an example of associated motion; the greens, of course, move as they are the object of the verb 'pick'. However, neither does the ventive mark motion toward the speaker. In the very least, the deictic reference point has changed in this example.

19 The verb forms are given preceding the noun "settlement" in oblique case in order to avoid the phrase final suffix /-ɔ/ attaching to the verb when the verb is the last constituent in the phrase (cf. Mütze 2014: 82).

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The Mursi singular verb forms for 'come' suggest a possible frozen ventive marking when compared to other Nilotic languages; for example, Turkana (E.Nilotic) exhibits a ventive suffix *ònɪ̰* (Dimmendaal 1983: 109), Kony (S.Nilotic) a ventive suffix *-u* (Mietzner 2012: 7), Teso (E.Nilotic) *-un* (Otaala 1981: 98), Maasai (E.Nilotic) *-ʊ(n)* (Payne and Otero 2016). However, Dimmendaal notes that although some of the verbal valency markers in Nilotic have cognates in Surmic, the ventive and itive do not appear to be cognates with those synchronically found in the Surmic family (Dimmendaal 1998: 50).

As stated previously, deixis is speaker-centered in Mursi. In example (60), the directional verb is 'come'. Thus, the origin is some place away from the speaker and the destination is the speaker. Examples (60) and (61) demonstrate how the origin changes and thereby how the choice of directional verb changes: In example (60) the speaker is standing at a gate calling for someone to move towards him, using the directional verb 'come'. In example (61) the speaker is the person then approaching the gate in order to open it, hence in Mursi the directional verb changes to 'go'.

(60)	*áíwó*	*nà*	*òí*	*dórí*
	come.IMP.SG	and	open	door/house
	'**Come** and open the door!'			

(61)	*aínú*	*kɔ́ɔ̀gɔ̀-jè*
	inceptive	**go**.1SG.SBJ-??
	'I am going-**there**'	

In example (62) the speaker is still somewhere else, planning to later go to the settlement of the person he is talking to. Hence the verb 'go' is used in Mursi.

(62)	*hàlì*	*kɔ́ɔ̀i*	*ɔ́rɔ́*	*nà*	*ká-ɓág-í*	*tílá*
	later	**go**.1SG.SBJ	settlement	CN	1SBJ-eat-1SG.SBJ	food
	'Later I will **go** to your[20] settlement and eat food'					

The speaker changes the directional verb when the action changes in relation to him. In example (63) the speaker is standing somewhere in between the two places referred to. The first movement is towards him, using the verb root 'come', while the second movement then is away from him, using the verb root 'go'. Both verbs have the applicative suffix *-é́* (COM) attached, which increases the valence of the verb by adding an argument with

20 Implied in the context.

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the semantic role of comitative (see Mütze 2014: 101), hence the translations ‘bring’ and ‘take’.

(63) *nɔ̀ŋ* *kún-Ø-é* *érmí* *míss-ɔ́* *nà*
3SG **come.**IPFV-3SG.SBJ-COM child grazing land-OBL CN
kɔ́-é *mákô-jé*
go-COM Makki-OBL
‘He brings the child from the grazing lands and takes it to Makki’

The destination of these directional verbs can be specified using a demonstrative construction (64), (66), (67) (cf. §2.1), a locative demonstrative (65) (cf. §3.1) or a relator noun (cf. §3.2).

As expected, no co-occurrence restriction is found between these inherently directional verbs ‘come’ and ‘go’ and proximal versus distal deictics. Examples (64) and (65) both use the verb ‘come’ referring to places that are near (64) as well as far (65), while examples (66) and (67) demonstrate the same with the verb ‘go’.

(64) *ólìkɔ́rɔ́* ***kún-Ø*** *ŋà-bíó-á*
name **come**.IPFV-3SG.SBJ DEM-COW.PL-**PRX**
‘Olikoro comes from these cows’

(65) *ólìkɔ́rɔ́* ***kún-Ø*** *cúg* ***rɛ̀nà*** ***ŋàbúnnú***
name **come**.IPFV-3SG.SBJ all.the.way **far** **over.there**
‘Olikoro comes all the way from over there’

(66) *ólìkɔ́rɔ́* ***kɔ́j*** *ŋà-kíɗɔ́-á*
name **go**.IPFV.3SG.SBJ DEM-river-**PRX**
‘Olikoro goes to this river’

(67) *ólìkɔ́rɔ́* ***kɔ́j*** *ŋà-ɔ́r-únú*
name **go**.IPFV.3SG.SBJ DEM-settlement-**DST**
‘Olikoro goes to that settlement’

5. Conclusion

This brief description presents various ways in which Mursi expresses spatial relations. Mursi utilizes nominal deictics as well as verbal deictics. Among the nominal deictics are demonstrative deictics, locative demonstratives (which show traces of the latter), and relator nouns. Among the verbal deictics are directional deictics, as well as inherently directional verbs.

It has been shown that Mursi has a speaker-centered proximal versus distal division in demonstratives. In the physical realm, demonstratives function to orient the hearer in its environment while in discourse they

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reactivate and refer back to previously introduced participants or events, creating emphasis or summarizing an important episode. Mursi does not distinguish grammatically between material and immaterial entities, nor between visible and non-visible referents. In the presence of other modifiers, the demonstrative prefix and suffix remain on the modified head noun. The demonstrative pronoun construction is similar to the demonstrative construction, except that the demonstrative pronouns used in place of the head noun are bound roots.

In the interaction of demonstratives and case, it has been shown that a noun in a demonstrative construction becomes unable to take any case marking, leaving it to the person marking on the verb, the context or the semantics of the utterance to clarify its role, with the possibility of ambiguity being created in the utterance due to the lack of case marking. The Mursi oblique case has been demonstrated as limiting the path of the motion itself by 'binding' it to a goal or source of the motion, while not giving any information about the path itself.

Two types of locative deictics have been shown, locative demonstratives and relator nouns. Mursi locative demonstratives indicate a location in relation to the deictic reference point, and though they are free and unchangeable words they show obvious traces of the demonstrative construction. In addition, the Mursi language utilizes relator nouns to specify the location of a referent in relation to another referent. The relator nouns trace back to nouns in oblique case, of which a number represent body parts and some domains of the universe. While the grammaticalization of these is still considerably limited, their inability to pluralize and irregular formation with the oblique has been noted. It has also been shown that relator nouns are further used to clarify or emphasize a motion or place. When further specifying the spatial relations following an oblique argument, they form a unit with the latter.

Concerning directional deictics, a ventive suffix is added to indicate motion towards the speaker. Contrary to the common Surmic pattern of directional markers occurring in pairs of ventive and itive, no morphological marking for itive was found. Rather, the unmarked form of motion verbs seems to assume motion away from the speaker. Directional marking on non-translational motion verbs suggests the marking of associated motion and/or change in deictic reference point, though the data is limited and needs to be verified by further studies.

The verbs 'come' and 'go' have been shown as inherently directional verbs, suggesting a possible frozen ventive marking in some of the forms. The movement of the referent of these verbs are speaker centered, including direction of motion changing in relation to the speaker during an utterance.

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Most spatial relations show similarity in structure to the closely related languages of the CTM cluster, but differ in structure to other Surmic languages. While case marking in itself is a common feature of Surmic languages, the Southeastern representatives do not appear to exhibit such extended systems. Moreover, in Mursi it is seen that the demonstrative deictic does not co-occur with case, leading to some possible ambiguity.

Abbreviations

´	high tone	IPA	International Phonetic Alphabet
`	low tone	IPFV	imperfective
Ø	zero morpheme	NMC	noun modification construction
1	first person	NM	nominalizer
2	second person	NOM	nominative
3	third person	OBJ	object, for nominal case and bound pronominals
CF	construct form	OBL	oblique marker
CFS	clause-final suffix	PFV	perfective
CN	connector	PL	plural
COM	comitative/reason	PRX	proximal in demonstrative function
COP	copula	RP	recent past
CTM	Chai-Tirmaga-Mursi	SBJ	subject
DEM	demonstrative	SC	subordinate clause
DST	distal in demonstrative function	SG	singular
EMPH	emphasis	SGPOSS	singular possession
GEN	genitive	VEN	ventive
IMP	imperative	??	unknown morpheme

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