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Hagman, R. S.

1977 *Nama Hottentot Grammar*. Bloomington: Indiana University Press.

Heikkinen, T.

n.d. Hai||'om and !Xû stories from north Namibia. Unpublished manuscript.

Levinson, St. C.

1983 *Pragmatics*. (Cambridge Textbooks in Linguistics.) Cambridge: Cambridge University Press.

Palmer, F. R.

1986 *Mood and Modality*. (Cambridge Textbooks in Linguistics.) Cambridge: Cambridge University Press.

Rust, F.

1969 *Nama Wörterbuch*: J. G. Krönlein's Wortschatz der Khoi-Khoin, überarbeitet und ergänzt von F. Rust. Pietermaritzburg: University of Natal Press.

Strecker, I.

1988 *The Social Practice of Symbolization: An Anthropological Analysis*. London: Athlone Press.

Sugawara, K.

1990 Interactional aspects of the body in co-presence: observations on the central Kalahari San. In: M. MOERMAN & M. NOMURA (eds.), *Culture Embodied*. (Senri Ethnological Studies, 27.) Osaka: National Museum of Ethnology, pp. 79-122.

Trask, R.

1993 *A Dictionary of Grammatical Terms in Linguistics*. London: Routledge.

Static Spatial Relations in SheNgologa (SheKgalagadi)*

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1 Introduction

This paper is based on data collected in SheNgologa (jeŋoloxa), a variety of SheKgalagadi (jeKxalaxari) as spoken in Hukuntsi (Kgalagadi District, Botswana). SheKgalagadi is a Bantu language which, according to DOKE (1967), belongs to the Sotho group of the South-Eastern Bantu zone. GUTHRIE (1948) classified it as part of the Sotho-Tswana group of his geographic Zone S. Kgalagadi is a cover term applied to a number of different varieties such as Ngologa, Kgwatheng, Phaleng, Bolaongwe, Shaga, Pedi, Sita, Rwane, Kgalagadi, Koma, Kuwe, Kenye, Lala, and possibly others.

The purpose of this paper is to describe static spatial relations in SheNgologa. The elicitation tool for the language data gathered on these spatial relations was mainly a series of 60 drawings by BOWERMAN called the "on picture series". These drawings were developed for the elicitation of topological and other, non-topological spatial relations (e.g. 'under', 'in front'). The drawings contain different situation types such as *ON* use types, *IN* use types and "Body parts" of *GROUND OBJECT* types. These types are further subdivided into, e.g., Marks-on-a-surface, Envelopment, Living-creature-on-a-(nonhorizontal)-surface.

Though originally designed for use with young children, according to BOWERMAN (1992: 23), the drawings work better with adults. I showed all the pictures to four speakers between 20 and 50 years of age. They were then asked to describe the relation of one highlighted object to another object in the different drawings, e.g. "a cup on a table", "an apple in a bowl", "a man on a ladder". In addition, several people were asked to describe similar

relations of objects outside the framework of the elicitation tool and also to describe a few of the drawings.

With some pictures the interpretation was a problem with regard to elderly people who have not been to school. Those elderly people speak SheNgologa and SeTswana only, while the younger ones speak English, too.

In this paper I will discuss the locative expressions as they appear in sentences elicited with the help of the "on-pictures". These sentences are also most frequently used for expressing specific spatial relations outside the framework of the elicitation procedure in complex social interaction. Little reference is made to other ways of expressing spatial relations such as other locative prefixes and locative nouns. They will be discussed in my forthcoming Ph.D. thesis on space and spatial reference in SheNgologa.

In the SheNgologa sentences elicited there are four functional parts which encode semantic spatial notions:

- ◇ locative (pre-)prefixes (*mo-* or *ha-*) and a locative suffix *-ŋ* (velar nasal) affixed to a non-locative noun,
- ◇ nouns of one of the locative classes with a locative (pre-)prefix but without the locative suffix,
- ◇ the locative prefix *i-*, prefixed to either of the two above-mentioned constructions,
- ◇ verbs.

2 Locative (pre-)prefixes and the locative *-ŋ* suffixed to a non-locative noun

2.1 The locative (pre-)prefix *mo-*

The most often used pattern in the description of the drawings *XCX-mo-Y-ng* (*XCX-V mo-Y-ng*)¹ requires always that the noun, in this case the Figure² X and the Ground, noun Y, show the feature [+ contact] in the pictures (i.e. Figure and Ground are actually touching each other). The relation

of Figure and Ground [+ contact] is referred to by the locative (pre-)prefix *mo-*, which always requires the locative suffix *-ŋ* when *mo-* is prefixed to a non-locative noun. In contrast *-ŋ* can never be suffixed to a locative noun.

mo- is always dropped before the noun class prefixes 6 *ma-* and 1,3,18 *mo-* and sometimes before 14 *bo-*.

The vowel [o] of the locative prefix is dropped before the labiodental fricative [f] and the bilabial plosives [b] and [p] in stem- or morpheme-initial position.

- (1) *pikt/fará e-mó-lo-bócane-ŋ*
 9N C9-mo-11-S-ŋ
 picture it-mo-wall-ŋ
 'the picture is on the wall'

2.2 The locative (pre-)prefix *ha-*

Parallel to the construction in 2.1 a sentence *XCX-ha-Y-ng* (*XCX-V ha-Y-ng*) is used (but very rarely with the "on-pictures", and never consistently for one picture throughout all speakers). The locative morpheme *ha-* can be employed referring to the Path either with Figure and Ground [+ contact] or [- contact], thus forming a kind of continuum with the locative prefix *mo-*, although this construction with *ha-* is most frequently used for [- contact] / [+ adjacency] spatial relations. It cannot be used for relations with the Figure lower than the Ground, enclosure and encirclement.

Like *mo-*, *ha-* requires the locative suffix *-ŋ* when prefixed to a non-locative noun.

- (2) *fe-thare fe-ha-i-tu-ŋ*
 7-S C7-ha-9-S-ŋ
 tree it-ha-house-ŋ
 'the tree is next to the house'

2.3 Relations with a multiplex Ground

Relations with a multiplex Ground change classes of the nouns for Figure and Ground, but not the locative morphemes *mo-* or *ha-*, e.g. for classes 7/8 and 9/10:

- | | |
|--|---|
| (3) 7-X C7-LOC-9-Y- η
<i>fe-thare fe-ha-i-tu-η</i>
7-S C7-ha-9-S- η
'the tree is next to the house' | (5) 8X C8-LOC-9-Y- η
<i>bi-thare bi-ha-i-tu-η</i>
8-S C8-ha-9-S- η
'the trees are next to the house' |
| (4) 7-X C7-LOC-10-Y- η
<i>fe-thare fe-ha-ri-tu-η</i>
7-S C7-ha-10-S- η
'the tree is next to the houses' | (6) 8X C8-LOC-10-Y- η
<i>bi-thare bi-ha-ri-tu-η</i>
8-S C8-ha-10-S- η
'the trees are next to the houses' |

3 Nouns of one of the locative classes with a locative (pre-)prefix and without the locative suffix

The relations of Figure and Ground can further be expressed with nouns of the locative classes 16 (*ha-*), 17 (*xo-*), 18 (*mo-*), *qa-* and ZERO. In the sentences elicited with the help of the "on-pictures" these nouns require a pre-prefixed locative prefix but not the locative suffix *- η* to express the spatial relation of Figure and Ground. Locative class nouns plus a locative prefix refer to the Path followed by Figure relative to the Ground. Locative class nouns without a locative prefix, which were not elicited with the help of the "on-pictures", refer to the Ground only.

All the nouns of the locative classes mentioned below determine the same form of locative class concords (with or without locative [pre-]prefix).³

3.1 Constructions with the noun *mo-tye η*

X Cx-mo-tye η (xa-Y), (*X Cx-V mo-tye η (xa-Y)*), *xa-* being the possessive concord for all locatives in the examples given by the language consultants, but with *mo-tye η* the Ground does not need to be further specified. The construction is used mainly to refer to [+ complete containment] relations but can also be used for [+ partial containment] relations.

On the surface there is no locative prefix on the locative noun *mo-tye η* since the preprefix *mo-* is dropped before the noun class prefix *mo-* (cf. 2.1).

- | | |
|--|-------------------------------------|
| (7) <i>bókósi e-mo-tyeη</i>
9N C9-mo-tye η
box it-inside
'the box is inside the bag' | <i>xa-béke</i>
Poss-9N
of-bag |
|--|-------------------------------------|

3.2.1 Constructions with the noun *xo-rímo*

X Cx-ha-xo-rímo xa-Y (*X Cx-V ha-xo-rímo xa-Y*) is obligatory when the Figure is above the Ground ([– contact]), e.g. a bird over a house. The Ground needs to be raised above the floor.

The construction is most typical when the Figure is higher than the horizontal Ground which is raised above the floor in [+ contact] situations (see (8) below). Less often it is used when the Figure is higher than the Ground and the Ground is not clearly horizontal (e.g. a roof).

- | | |
|---|---------------------|
| (8) <i>buka e-ha-xo-rímo xa-táfole</i>
9N C9-ha-xo-rímo
book it-on top
'the book is on top of the table' | Poss-9N
of-table |
|---|---------------------|

3.2.2 Constructions with the noun *datshé*

X CX-qa-datshé xa-Y (X CX-V qa-datshé xa-Y). *datshé* is a noun of the locative class which employs no prefix. When this construction is used the Figure is always lower than the Ground. It is obligatory when Figure and Ground are not touching as in 3.2.1.

In contrast to *X CX-ha-xo-rimo xa-Y*, *datshé* refers mostly to non-contact relations, where the Ground is raised above the floor (e.g. table), since this is not a usual support for Figures lower than the Ground. But also unlike *X CX-ha-xo-rimo xa-Y*, *X CX-qa-datshé xa-Y* does not require that the Ground is raised above the floor (e.g. a spider under a mat), expressing then a [+ contact] situation.

- (9) *katse e-qá-datshé xa-táfole*
 9N C9-qa-datshé Poss-9N
 cat it-underneath of-table
 'the cat is under the table'

3.3.1 Constructions with the noun *pele*

X CX-ha-pele xa-Y (X CX-V ha-pele xa-Y). *pele*, like *datshé*, is a noun of a locative class which uses no prefix. It is rarely used in the examples and never consistently throughout all the speakers consulted. It was only employed spontaneously for [– contact] situations but this feature does not seem to be obligatory (cf. 2.2). It is used to refer to relations where the Figure is closer to the speaker than the Ground when the Ground is bigger than the Figure ("Face-to-Face") (the Figure could not be visible if it were behind the Ground). It is used to encode relations of the Figure being further away from the speaker than the Ground if the Figure can still be seen ("Alignment"). If the Ground is featured and has a clear front, e.g. a chair, it refers to the intrinsic front of the Ground. As a rule the above description accounts only

for non-visible relations. For visible relations of Figure and Ground the reverse is always also possible except for a featured Ground.

- (10) *e-cwá e-ha-pele xa-i-tu*
 9-S C9-ha-pele Poss-9-S
 dog it-in front of-house
 'the dog is in front of the house'

3.3.2. Constructions with the noun *mo-3wa*

X CX-qa-mo-jwa xa-Y (X CX-V qa-mo-jwa xa-Y). *mo-3wa*, like *pele*, was only used spontaneously in the pictures when Figure and Ground were not touching but the feature [– contact] is not obligatory.

X CX-qa-mo-jwa xa-Y is used when the Figure is closer to the speaker than the Ground ("Alignment") but the reverse is true when the Ground, is especially big (e.g. a mountain). Then it is employed to encode relations where the Figure is further away from the speaker than the Ground, thus being not visible ("Face-to-Face"). This — as with *ha-pele* — counts normally only for non-visible spatial relations. If this relation is visible the reverse is also acceptable except for a featured Ground where *qa-mo-3wa* is assigned to what is identified as the Ground's back.

- (11) *mo-sárí o-qá-mo-3wá xa-fe-thare*
 1-S C1-qa-mo-3wa Poss-7-S
 woman she-behind of-tree
 'the woman is behind the tree'

3.4 Relations with a multiplex Ground

As in 3.3 relations with a multiplex Ground change classes of the nouns for Figure and Ground but not the locative morphemes or locative nouns, e.g. class 9/10 and *ha-pele xa-*:

- (12) *e-cwá e-ha-pele xa-i-tu*
 9-X C9-ha-pele xa-9-Y
 9-S C9-ha-pele POSS-9-S
 'the dog is in front of the house'

- (13) *e-cwá e-ha-pele xa-ri-tu*
 9-X C9-ha-pele xa-10-Y
 9-S C9-ha-pele POSS-10-S
 'the dog is in front of the houses'

- (14) *ri-cwá ri-ha-pele xa-i-tu*
 10X C10-ha-pele xa-9-Y
 10-S C10-ha-pele POSS-9-S
 'the dogs are in front of the house'

- (15) *ri-cwá ri-ha-pele xa-ri-tu*
 10X C10-ha-pele xa-10-Y
 10-S C10-ha-pele POSS-10-S
 'the dogs are in front of the houses'

4 The locative prefix *i-*

The relations expressed in the constructions as described in 2 and 3 can be further stressed by adding a prefix *i-*.⁴ But the prefix *i-* restricts the possible semantic content if the situation is not visible as described below. *i-* cannot be attached to verbs.

- (16) *mo-tsókó w-í-mo-lɔmo-ŋ*
 3-S C3-i-3-S-ŋ
 cigarette/tobacco it-i-(mo-)mouth-ŋ
 'a cigarette/tobacco in the mouth'

If the situation of the relation of Figure and Ground is not visible, the sentence would be interpreted as the tobacco being in the mouth (cf. 4.1 for the use of *mo-*; note that the locative *mo-* is dropped before the noun class prefixes *mo-*). If the sentence refers to a visible cigarette in a mouth it is also acceptable, thus stressing where the cigarette is.

i- can be employed with objects only (and not, e.g., a hole in a towel).

4.1 *i-* prefixed to *mo-Y-ng* constructions

X Cx-i-mo-Y-ng can only be used to refer to non-visible relations of Figure and Ground if the Ground contains the Figure or only, if containment is absolutely not possible, when the Figure is higher than the Ground and touching it.

- (17) *je-témpe fi-í-mo-envelópu-ŋ*
 7-S C7-i-mo-9N-ŋ
 stamp it-i-mo-envelope-ŋ
 'the stamp is in the envelope' (and not on it)

- (18) *katse i-í-m-mete-ŋ*
 9N C9-i-mo-9N-ŋ
 cat it-i-mo-mat-ŋ
 'the cat is (wrapped) in the mat'

4.2 *i-* prefixed to *ha-Y-ng* constructions

X Cx-i-ha-Y-ng can only be used to refer to non visible relations of Figure and Ground when they are in an adjacency relation.

- (19) *katse i-i-ha-mete-ŋ*
 9N C9-i-ha-9N-ŋ
 cat it-i-ha-mat-ŋ
 'the cat is next to the mat'

4.3 *i-* prefixed to locative nouns

i- is added to the locative noun constructions *X Cx-mo-tyeng xa-Y*, *X Cx-ha-xo-rimo xa-Y*, *X Cx-qa-datshe xa-Y*, *X Cx-ha-pele xa-Y*, *X Cx-qa-mojwa xa-Y* only to stress the relations of Figure and Ground as described above.

5 Verbs

Many of the sentences which were used to express the relations of Figure and Ground in the pictures contained a verb but it is possible to describe all relations, except for encirclement (without contact of Figure and Ground), without the verb. In contrast to the constructions in 1-3 which refer to "topological" notions, verbs are used more often to describe "geometrical" notions.

Verbs are either added to a construction expressing a locative relation, specifying it, or this relation is expressed by the verb only. They are mainly used in the perfect when referring to the pictures and are often passivized. Most often Motion Verbs encoding either Path, Manner or Cause were used to describe the relations in the pictures. On Motion + Manner Verbs the

applicative *-El-* is usually added to describe the Path together with the locative prefix and the locative suffix on the noun referring to the Ground.

5.1 Motion + Path verbs

-bapa 'be next to'

-bapa is often followed by the conjunctive formative *le-* and used to refer to adjacency relations. Adjacency relations can also be described with *X Cx-ha-Y-ng* constructions but constructions with *-bapa* are most common.

-rikuloxa 'be around' - *-putyuloxa* 'be around'

are used for encirclement, contact of Figure and Ground is optional. Neither the beginning nor the end of the Path is encoded in *-rikuloxa* and *-putyuloxa*.

-phunya 'pin, pierce'

expresses piercing both of the object being pierced and the object piercing.

-paxáma 'move up'

Neither the beginning nor the end of the Path are anchored in *-paxáma*. It is used for motion from a lower to a higher level on the vertical plane.

-ŋapára 'stick to'

is only employed when the Figure stays in contact with the Ground by sticking adhesion.

-háŋara 'hang up' - *-péxa* 'hang up'

are used when the Figure is supported by hanging from the Ground.

- (20) *fe-thare* *fe-bap-ílé* *lé-kereke*
 7-S C7-V-PERF CONJ-9N
 tree it-be next to-church
 'the tree is next to the church'

5.2 Motion + Manner verbs

-xotféla 'tie' - *-bóha* 'tie' - *-tsapóxa* 'sparkle'
 manner of spreading of, e.g., water drops or sparks of a fire.

- (21) *balúní* *e-bób-él-w-é* *mo-lo-xópe-η*
 9N C9-S-APPL-PASS-PERF mo-11-S-η
 balloon it-tie-APPL-PASS-PERF mo-stick-η
 'the balloon has been tied to the stick'

5.3 Motion + Cause verb

-báya 'put'

- (22) *buka* *e-bé-w-é* *há-xo-rímó* *xa-kabote*
 9N C9-S-PASS-PERF ha-17-S POSS-9N
 book it-put-PASS-PERF on top of-shelf
 'the book has been put on top of the shelf'

5.4 Others

- rwála* 'to wear on the extremities of the body'
 only for, e.g., shoes, gloves, jewellery, hat, bandanna.
-í-panta 'tie belt'
-í-phíra 'to hide oneself'
-kxabá 'to look nice'
kxabá is always used with the causative *-is-*.

6 Summary

The following table tries to summarize the features defining the constructions mentioned in 2 and 3. I abbreviate the sentences but these abbreviations still refer to the whole constructions as described above. o signifies optional feature, + necessary feature, - incompatible feature.

	<i>mo-Y-ng</i>	<i>ha-Y-ng</i>	<i>mo-tyeng</i>	<i>xo-rimo</i>	<i>datshé</i>	<i>pele</i>	<i>mo-jwa</i>
contact	+	O	O	O	O	O	O
"Left/Right" adjacency	O	O	-	-	-	-	-
"Front/Back" adjacency	O	O	-	-	-	+	+
Face-to-Face	O	O	-	-	-	O	O
Alignment	O	O	-	-	-	O	O
Figure lower than Ground	O	-	-	-	+	-	-
Figure higher than Ground	O	O	-	+	-	-	-
enclosure	O	-	+	-	-	-	-
relevant feature of choosing front	-	-	-	-	-	+	-

In short, *mo-Y-ng* constructions are defined by the feature [+ contact], *mo-tyeng* by [+ enclosure], *xo-rimo* by [+ Figure higher than Ground], *datshé* constructions by the feature [+ Figure lower than Ground] and *pele* and *mo-jwa* are distinguished by the feature [+ relevant feature for choosing front]. Moreover, their use depends on the relative size of Figure and Ground and

the featuredness of the Ground as described in 3.3. Constructions with *ha-ŷ-ng* can only be defined negatively according to this table.

i- is not always a simple emphatic in the elicited sentences but the exact semantics of *i-* and the semantics and occurrence of the verb are still uncertain.

Abbreviations

N	noun	PERF	perfect tense
S	stem	PASS	passive
V	verb	APPL	applicative
CX	subject concord of noun class X	CONJ	conjunctive formative

NOTES

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¹ See abbreviations above.

² I refer to Figure, Ground and Path in accordance with TALMY (1975, 1983, 1985) where a basic locational event involves an object, the Figure, which is moving or located with respect to another object, the Ground, while the Path refers to the course followed or site occupied by the Figure relative to the Ground.

³ Some other locative nouns, which were not elicited with the help of the "on-pictures", are followed instead by the conjunctive formative *le-*.

⁴ The prefix *i-* is used - though not in the examples elicited - as a general locative when prefixed directly to a non-locative noun and when the locative suffix *-ŷ* is added, expressing 'in the area of'.

REFERENCES

- Bowerman, M.**
1992 On Picture Series. In: COGNITIVE ANTHROPOLOGY RESEARCH GROUP *Manual for the Space Stimuli Kit 1.0*. Nijmegen: Max Planck Institute.
- Doke, C.M.**
1967 *Bantu: Modern Grammatical, Phonetical and Lexicographical Studies since 1960*. London: Dawsons of Pall Mall.
- Guthrie, M.**
1948 *The Classification of the Bantu Languages*. (Handbook of African Languages.) London: Oxford University Press.
- Hill, D.**
1993 Topology. In: COGNITIVE ANTHROPOLOGY RESEARCH GROUP *Manual to the Cognition and Space Kit 1.0*. Nijmegen: Max Planck Institutc.
- Talmy, L.**
1975 Semantics and syntax of motion. In: J. KIMBALL (ed.), *Syntax and Semantics 4*. New York: Seminar Press, pp. 181-238.
1983 How language structures space. In: H. L. PICK & L. P. ACREDOLO (eds.), *Spatial Orientation. Theory, Research and Application*. New York & London: Plenum Press, pp. 225-282.
1985 Lexicalization patterns: semantic structure in lexical forms. In: T. SHOPEN, S. ANDERSON, T. GIVÓN, E. KEENAN & S. THOMPSON (eds.), *Language Typology and Syntactic Field Work*, Vol. 3. New York: Cambridge Universtiy Press.