Basic Locative Construction in Seri
Carolyn O'Meara
University at Buffalo
Linguistics Department
609 Baldy Hall
Buffalo, NY USA 14260
ckomeara@buffalo.edu

Basic Locative Construction in Seri*

1.   Introduction

The basic locative construction (BLC) is the prototypical locative construction in a given

language. The prototypical locative construction is understood here as the construction used

to locate an easily movable inanimate figure with respect to a ground to which it is not

attached in response to a 'where' question (Levinson and Wilkins 2006a; Levinson and Meira

2003). The following example in (1), which was taken from a text, illustrates a locative

construction in Seri; the figure is referred to by the pronoun *taax* 'those', coreferent with the

phrase *haxöl ináail quih catxo* 'many seashells'; the ground is referred to by the noun phrase

hant com 'the ground', which is the object of the postposition *iti* 'on'; and the predicate of the

matrix clause is a form of *coom* 'lie'.[1]

> (1) ...*haxöl ináail*   *quih*   *catxo*   *taax*   *hant*
>   seashell   DEF.ART.SG.UNSPEC   SBJ.NMLZ.many.SG   those   land
>   *com*   *iti*   *moom.*
>   DEF.ART.SG.LIE   on   RP.lie.SG
>   '...there were many seashells, they were on the ground.'

Example (2) illustrates a typical 'where' question in Seri; the figure is referred to by the noun

phrase *ziix an icóosi quij* 'the cup' and the locative verb *quiih* 'be located' is used.

> (2) *Ziix an icóosi*   *quij*   *háqui   tiih?*
>   cup   DEF.ART.SG.SIT where   NEUTRAL.be.LOC.SG
>   'Where is the cup?'

This paper provides a typological categorization of Seri with respect to the BLC typology of

Levinson and Wilkins (2006a). The typology is based on a survey of locative descriptions in

[1] I use the following abbreviations in this paper: 3 – 3rd person; ABS – absolutive; ART – article; DECL – declarative; DEF – definite; DIST – distal; DP – distant past; LOC – locative; NMLZ – nominalizer; PASS – passive; PL – plural; POSS – possessive; RP – recent past; SBJ – subject; SG – singular; UNSPEC – unspecified.

11 genetically and geographically distinct languages (Wilkins 1998, 1999). Researchers noticed that the 11 languages could be divided into three different groups based on the constructions used in their BLC.

- 'General verb languages' use a single copula or existential predicate in their BLC (e.g., English and Yucatec Maya).

- 'Postural verb languages' use a small set of three or four positional verbs in their BLC (e.g., Dutch and Arrernte)

- 'Multi-verb languages' (e.g., Tzeltal and Likpe) employ rich sets of around ten or more "dispositional" verbs in the BLC, i.e., verbs that describe properties of the figure such as support or suspension, orientation, and configuration of parts of the figure with respect to each other.

In this paper I present the BLC in Seri along with the predicates used in the BLC. I argue that Seri is best described as a multi-verb language under the BLC typology. However, as is discussed below, some issues arise as to what the most important criterion is to determine membership in each of the categories presented in the BLC typology. Seri does not seem to be a typical example of a multi-verb language since it illustrates traits of a postural verb language with its small set of verbs with posture semantics used in the BLC. However, Seri does not use posture verbs in a classificatory way, which is atypical of postural verb languages. Additionally, Seri uses a general locative verb in the BLC as a default verb when the actual position of the figure is not known, which is more characteristic of multi-verb languages.

2. The Comcáac (the Seri people) and their language

The Comcáac live in Sonora, Mexico in two small coastal villages along the Sea of Cortez, Punta Chueca and El Desemboque (of the municipality Pitiquito). There are around 800

inhabitants of the two villages, according to census data collected in 2000 (Gordon 2005). The Comcáac were traditionally semi-nomadic hunter gatherers. They moved around their range land according to the availability of fresh water and other natural resources. Their lifestyle has since shifted to be more sedentary. Their current livelihood consists of fishing and the production and sale of local handicrafts such as ironwood sculptures, baskets and jewelry made of seashells.

The language that the Seri speak is known to outsiders as Seri, but to them it is *cmiique iitom* 'Seri language'. It has been suggested that it is part of the Hokan stock (Kroeber 1915), but there is no conclusive evidence to say whether or not this is the case (Marlett 2001). Seri is a synthetic language that is, for the most part, head-final (Marlett 2005). Verbs in Seri can take more inflectional morphology than nouns. Nouns are only inflected for number, usually by a suffix, and possessed nouns require a possessive prefix. Otherwise, nouns have no further inflectional morphology. Most nouns are followed by a determiner, either an article or a demonstrative. The definite articles in Seri derive from the posture verbs *quiij* 'sit' (>*quij*), *caap* 'stand' (>*cop*, *cap*), and *coom* 'lie' (>*com*) (see examples (3), (4), and (8)) (Marlett and Moser 1994). In addition to the posture-based definite articles, there is an article derived from the locative verb *quiih* 'be located' (>*quiih*) (see example (1)) and there is a definite article that is used after relational nouns with spatial semantics and with place names which is derived from the verb *caahca* 'exist', 'be located' (>*hac*) (see example (8)). There are additional determiners that are derived from verbs of motion (e.g., *moca* 'come' (>*timoca*) and *contíca* 'go away' (>*tintica*)) (see example (5)).

There are a total of seven postpositions in Seri. The postposition usually appears directly in front of the verb, but the postpositional phrase can be discontinuous (Moser and Marlett 2005:877-878). Postpositions in Seri also inflect for the number and person of the

complement, which is indicated by a prefix (e.g., *hiihax* 'with me' and *hiicot* 'with us'). Only two of the seven postpositions were used in the data elicited for this study (see section 3 for more information), namely, *iti* 'on' and *ano* 'in'. In addition to postpositions, Seri has a set of possessed nouns that have spatial semantics (Moser and Marlett 2005:833). These possessed nouns (e.g., *imozít* 'its center' in example (11); *iyat* 'its tip' in example (12); *itácl* 'its surface' in example (13)), which occur in front of a postposition, were frequently used in the data that were elicited in this study. Section 4 provides examples that illustrate how these aspects of Seri grammar, as well as particular verbs in Seri, are utilized in Seri locative constructions.

3. Methodology

This study fits into the line of research known as semantic typology, which consists of comparative research of linguistic categorization across languages. This type of research has been pioneered by the members of the former Space Project at the Max Planck Institute for Psycholinguistics. They have developed a methodology for conducting large-scale investigations in semantic typology. These methods include the design and use of non-verbal stimuli that encode cells of the 'etic' grid of a particular domain in order to determine how a particular language represents the distinctions that are determined by the etic grid. In this case, the domain under investigation is topological space. The etic grid that the stimuli in this study encode is a language-independent possibility space which is determined by the conceptual dimensions that are present in the BLC typology.

The data for this study come primarily from elicitation sessions using the Topological Relations Picture Series (BowPed) (Bowerman and Pederson 1993; see also Levinson 2006a: 570-575)[2]. BowPed contains 71 black and white line drawings. Each drawing contains a figure (which was highlighted with a bright color) and a ground that

---

[2] Data collected from elicitation sessions was compared with data from recorded texts to ensure that the data was not an artifact of some particular aspect of the stimuli itself.

illustrate a particular spatial relation (e.g., hanging from, sitting on top of, stuck to, etc.).

Native language consultants were asked, for each drawing, 'Where is the [FIGURE]?' in Seri

(cf. (2)). They were instructed to describe the location of the object that is denoted by the

figure NP with respect to the location of the object denoted by the ground NP. I collected

data using the BowPed stimuli from three native speaker consultants.

The Language and Cognition Group at the Max Planck Institute developed an

implicational hierarchy to represent the findings from the 11 languages first investigated. The

BLC implicational hierarchy, as illustrated in Figure 1, consists of five different BowPed

scene types. Level I consists of scenes that represent prototypical locative relations with an

easily movable inanimate figure that is not attached to the ground object. In the initial study

(Wilkins 1998) there seemed to be predictable constraints on the semantic range of

application of the BLC across the 11 languages. The predictability is captured in the

hierarchy. Once the BLC has been determined for a given language, if the BLC is used to

describe scenes represented by Level IV then the language will also describe scenes at Level

III, II and I with the BLC.

Level V		Level IV		Level III		Level II		Level I
Animate-Ground	>	*Figure-Pierced*	>	*Ground-Pierced*	>	*Adhesion*	>	*Core-Scenes*
ring on finger	>	apple on skewer	>	arrow in apple	>	stamp	>	cup on table,
								fruit in bowl,
								lamp over table,
								ball under chair
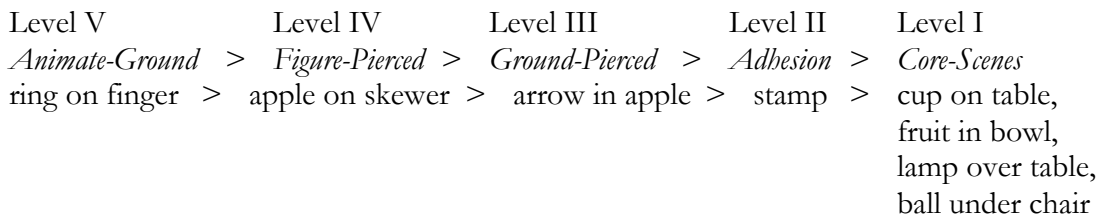
Figure 1 Implicational hierarchy across topological space with BowPed scene types provided as examples (adapted from Levinson and Wilkins 2006b: 519)

4. The BLC of Seri

This section presents an analysis of the basic locative construction of Seri. The formal

properties of the BLC in Seri and Seri's position on the BLC typology are discussed. Since

positional or posture verbs are featured in the BLC, but Seri does not have a form class of

positional verbs or locative verbs, a description is presented below with some of the formal

characteristics of the BLC. Alternative constructions that can be used to answer 'where'

questions are also considered in the following sections.

4.1. Formal properties of the BLC of Seri

The BLC of Seri is illustrated in examples (3) and (4).[3] Example (3) shows the BLC with a

verb root preceded by the recent past prefix[4] (*m-*/*mi-*/*im-*) which is used for imperfective

predication. There is no morphological class of locative verbs in Seri. At this point, it is still

under investigation whether there is a syntactic class of locative verbs which appear in the

construction type illustrated in example (3).[5]

(3) **[[NP**_{Figure} **]   [[NP**_{Ground} **] P**_{TopRel}**]**
   Icáaspoj   com   hant iti icáaspoj   com   iti
   pencil   DEF.ART.SG.LIE desk   DEF.ART.SG.LIE on
   [Verb]]_{BLC}
   m-oom.
   RP-lie.SG
   'The pencil is on the desk.' (BowPed 59)

Example (4) illustrates the BLC with a subject nominalized verb form followed by the

declarative *ha*/*iha*, which is used for stative predications.

(4) **[[NP**_{Figure} **]   [[NP**_{Ground} **]   P**_{TopRel}**]**
   Ziix an icóosi   quij   hehe iti icóohitim   com   iti
   cup   DEF.ART.SG.SIT table   DEF.ART.SG.LIE on
   [Predicate nominative   Declarative marker]]_{BLC}
   q-uiij   iha.
   SBJ.NMLZ-sit.SG   DECL
   'The cup is on the table.' (BowPed 1)

These constructions, which differ only in the form of the verbal predicate, indicate the

construction type that constitutes an instance of the BLC in Seri. The BLC consists of a

---

[3] The abbreviation TopRel stands for topological relator.
[4] This prefix is called the proximal (mood) prefix in Moser and Marlett (2005) and in Marlett (1981).
[5] Examples collected using the BowPed stimuli indicate the scene number that was used to elicit them. If not otherwise stated, examples with no reference come from texts or other elicitation.

figure-denoting NP, a ground-denoting NP followed by a topological relator (a postposition and sometimes a relational noun with spatial semantics) and finally a predicate.

There were also alternative constructions given in response to 'where' questions which are not considered to be part of the BLC in Seri. One of those is the passive construction, as illustrated in example (5) where the verb *caasj* 'extend to dry out', a transitive verb, takes the passive prefix *p-*.

(5) *Hacalca   taax   poosj   tintica   iti   yo-**p**-ásalim.*
     clothes   those   rope   that.THITHER.DIST   on   DP-**PASS**-extend.PL
     'Those clothes were extended out to dry on that line.' (BowPed 37)

This construction is structurally distinct from the BLC in that it contains a dynamic action verb form. Instances of the BLC in Seri do not contain dynamic action verb forms. In addition, the passive construction was not used to describe prototypical locative relations, which were depicted in the core scenes of BowPed. As mentioned earlier, a prototypical locative relation describes the relation between an easily movable inanimate figure with respect to a ground to which it is not attached.

Another alternative construction that was given in response to 'where' questions is instantiated by sentences that contain verbs meaning 'wear X' or 'have X', where X is an article of clothing or shoes.

(6) *Hatáamt   com   comcáii   quih*
     ABS.POSS:shoe   DEF.ART.SG.LIE   elderly.woman   DEF.ART.SG.UNSPEC
     qu-itáamt   *iha.*
     SBJ.NMLZ-wear.shoes.SG   DECL
     'The woman has the shoe on.' (BowPed 21)

The distinguishing feature of this construction is that the verbs in these predications are derived from possessed nouns (i.e., nouns that require possessive marking). For instance, *quitáamt* 'wear shoes' or 'have shoes' is derived from *itáamt* 'his/her sandal', 'his/her shoe'.

The root of the denominal verb has two prefixes: *i-*, which is the third person possessive marker and *qu-*, which marks subject nominalizations.

Another type of response to 'where' questions occurred in descriptions of scenes that fall in between the two ends of the BLC implicational hierarchy (level I and level V, as illustrated in Figure 1). These responses contain a verb root preceded by the distant past prefix[6] (*yo-/y-*) which is claimed to be used for past-time reference or for reference to habitual actions (Moser and Marlett 2005: 865), as is illustrated in example (7).

(7) *Hamác canoj*   *quij*   *haaco* *quih*   *i-izc*
    lamp   DEF.ART.SG.SIT   house DEF.ART.SG.UNSPEC   3.POSS-wall
    com   *iti*   **y**-*acáai.*
    DEF.ART.SG.LIE   on   **DP**-hang.SG
    'The lamp is hanging from the ceiling of the house.' (BowPed 50)

However, it is unclear exactly what this distant prefix marker means. It is possible that verbs with this prefix denote a result state of some event, but there is insufficient data at this point to decide this. For the time being this type of response will not be considered to instantiate an independent construction. There are thus at least three construction types that are used in the BowPed corpus: the BLC, the passive construction and the 'wear'-verb construction.

Figure 2 illustrates the distribution across BowPed scene types of the three kinds of constructions included above, as well as the distribution of utterances that contain the distant past prefix. The grey area indicates that the majority of responses to each of the BowPed stimulus items in the encircled area across consultants were utterances that contained the distant past prefix. The areas that are outlined with a black line indicate that the majority of responses for each of the BowPed items across consultants were instances of the passive construction type or the BLC.

---

[6] This prefix is called the distal (mood) prefix in Moser and Marlett (2005) and Marlett (1981).

Level V   Level IV   Level III   Level II   Level I
Animate-Ground > *Figure-Pierced* > *Ground-Pierced* > *Adhesion*   >   *Core-Scenes*
ring on finger > apple on skewer > arrow in apple > stamp   >   cup on table,
                                            fruit in bowl,
                                            lamp over table,
                                            ball under chair

Figure 2 BLC implicational hierarchy for Seri with examples of BowPed scenes (adapted from Levinson and Wilkins 2006b: 519)

A total of five verbs were used in BLC responses. The five verbs are *coom* 'lie' (see example

(3)), *quiij* 'sit' (see example (4)), *coop/caap* 'stand' (see example (8)), *quiih* 'to be (located)' (see

example (9)), and (*cola*) *cocáai* 'hang' (see example (10)).

(8) *Hehe   cop   hast   cop   iti   i-yat*
    wood   DEF.ART.SG.STAND   stone   DEF.ART.SG.STAND   on   3.POSS-on.top.of
    *hac   iti   **c-aap**   iha.*
    DEF.ART.SG.LOC   on   SBJ.NMLZ-stand.SG   DECL
    'The tree is on top of the mountain.' (BowPed 65)

(9) *Hateiictim   quih   contíir imátax   cop   iti*
    Piece.of.cloth   DEF.ART.SG.UNSPEC   candle   DEF.ART.SG.STAND   on
    qu-iih   iha.*
    SBJ.NMLZ-BE.LOC.SG   DECL
    'The piece of cloth is on the candle.' (BowPed 4)

(10) *Ziix ipáspoj*   *quih*   *haaco*   *quih*   *i-izc*
photo   DEF.ART.SG.UNSPEC   house   DEF.ART.SG.UNSPEC   3.POSS-wall
com   *iti*   **m-ocáai**.
DEF.ART.SG.LIE   on   RP-hang.SG
'The photo is hanging on the wall.' (BowPed 44)

With five verbs used in the BLC, this means that Seri falls somewhere in between a postural verb language, which typically have 3-4 posture verbs that occur in the BLC and a multi-verb language, which has around 10 or more verbs that occur in the BLC.

If it turns out that these utterances formed with the distant past prefix instantiate the BLC, Seri will have more verbs that participate in the BLC. The following verbs occurred in utterances that contain the distant past verbal prefix: *quiti* 'be connected (something standing)' (see example (11)), *coocp* 'emerge', 'grow' (see example (12)), and *csáamij* 'curled up in spiral' (see example (13)).

(11) *Hehe*   *cop*   *hast*   *cop*   *i-mozít*
wood   DEF.ART.SG.STAND stone   DEF.ART.SG.STAND   3.POSS-center
hac   *iti*   **y-iti**.
DEF.ART.SG.LOC   on   DP-connected.SG
'The tree lives in the middle of the hill.' (BowPed 17)

(12) *Hehe istj*   *coi*   *hehe*   *hizac*   *i-yat*   *hac*
tree.leaves   DEF.ART.PL   wood   this   3.POSS-tip   DEF.ART.SG.LOC
tintica   *iti*   **y-acp**.
that.THITHER.DIST   on   DP-grow.SG
'The leaves grow on the branch of the tree.' (BowPed 41)

(13) *Cocázni*   *quih*   *hehe it*   *quih*   *i-tácl*
snake   DEF.ART.SG.UNSPEC   stump   DEF.ART.SG.UNSPEC   3.POSS-surface
hac   *iti*   **yo-sáamij**.
DEF.ART.SG.LOC   on   DP-curled.in.spiral.SG
'The snake is rolled in a circle on the stump.' (BowPed 23)

The meanings of verb roots which occur with the distant past prefix, as illustrated in the above examples, are similar to the meanings expressed by dispositional roots in Mayan languages (Bohnemeyer and Brown, in press). In Tzeltal, dispositional predication instantiates the BLC, although Tzeltal speakers can use the existential predication in cases

where dispositional predication is not appropriate (Bohnemeyer and Brown, in press). The similarity in the meanings of the Seri verb roots described above and the dispositional verb roots in Mayan languages, like Tzeltal, provides potential support that Seri is more like a multi-verb language than a postural verb language.

4.2. Seri as a multi-verb language

Selection among posture verbs in Seri primarily depends upon the actual disposition of the figure and not on its shape and function. The shape and function of the figure determine which verb is used in postural verb languages. For instance, in Seri if an apple is inside of a bowl or on a plate, the verb *quiij* 'sit' is used, whereas if the apple is attached to a branch and hanging from a tree the verb *cocáai* 'hang' is used. The noun that refers to fruit does not occur with one positional verb exclusively in Seri locative constructions.

In Dutch, a postural verb language, posture verbs are used in 'where' questions and locative descriptions, whereas the copula, *zijn* 'be', is rarely used. In cases where the orientation of the figure is not known to the speaker, the posture verb is preferred, although the copula is also acceptable (van Staden, Bowerman and Verhelst 2006: 494).

(14) *Waar*   *staan/ ?zijn*   *de*   *kopjes?*   (Dutch)
      where   stand/ are   the   cups
      'Where are the cups?' (van Staden, Bowerman and Verhelst 2006: 494)

In contrast in Seri, as is illustrated by example (2), the generic locative verb *quiih* is generally used in 'where' questions. Posture verbs are used only when the position of the figure is established or fixed (e.g., *iime* 'his house, as illustrated below in example (15)).

(15) *I-ime*   *quih*   *háqui*   *hac*
      3.POSS-house   DEF.ART.SG.UNSPEC   where   DEF.ART.SG.LOC
      ano   *t-ap?*
      in   NEUTRAL-stand.SG
      'Where is his house?' (Moser and Marlett 2005: 67)

If the figure-denoting NP can combine with different posture verbs in Seri and the figure is not visible to the speaker, it is especially preferred to ask the question 'Where is the [FIGURE]?' using *quiih* 'be located'.

Goemai, a Chadic language that is spoken in Central Nigeria, has a set of postural verbs that behave differently than previous descriptions of posture verbs indicate. More specifically, the semantics of Goemai postural verbs take into account the locative relation between the figure and the ground and not the posture or abstract shape of the figure (Hellwig 2003:148). Goemai has five locative verbs, the first four of which are postural verbs: *lang* 'hang/move', *t'ong* 'sit', *d'yem* 'stand', *t'o* 'lie' and *d'e* 'exist' (Hellwig 2003: 10). The fifth verb, *d'e*, is used, for instance, when the locative relation between the figure and the ground is unknown or when none of the postural verbs can adequately describe the locative relation (Hellwig 2003: 152-155). This feature is similar to the use of Seri *quiih*. This characteristic is particularly atypical of postural verb languages, like Dutch, and more characteristic of multi-verb languages. One reason for this is that postural verb languages employ posture verbs in a classificatory way. Inanimate objects have a default posture within the classificatory system. The default posture of an object corresponds with one of the posture verbs. In a locative construction, a noun that refers to a particular object will occur with the posture verb that corresponds to its default posture unless the object is in a non-canonical position. This further explains the preference of posture verbs, as opposed to a general locative verb, in 'where' questions in postural verb languages like Dutch (see example (14)). In such languages the speaker assumes the object is in its default position and correspondingly uses the default posture verb in the 'where' question.

Goemai and Seri, like postural verb languages, employ a small set of 4 posture verbs in the BLC, but unlike postural verb languages they do not use posture verbs in a

classificatory way. Like multi-verb languages, Goemai and Seri employ a general locative verb/copula in their BLC which acts as a default locative predicate when the actual position of the figure is unknown. Seri acts in more ways like a multi-verb language, fulfilling at least two of the suggested criteria for membership in this category of the BLC typology. Consequently, Seri will be categorized as a multi-verb language, as opposed to a postural verb language.

5.   Conclusion

This paper has provided a first look at the Basic Locative Construction in Seri. In particular, this paper focused on the set of verbs used in the BLC which consists of five verbs. Given just the number of verbs used, it initially seemed that Seri might be best classified as a postural verb language; but the use of *quiih* 'be located' patterns with the use of general locative verbs in a multi-verb language. There were also quite a few first responses to BowPed stimuli that used the recent past verbal prefix which are not considered instances of the BLC. Responses with this prefix included three additional verbs. Depending upon the outcome of further research into the denotation of the recent past prefix, these three verbs might also participate in the BLC in Seri, which would contribute to the evidence that Seri is best classified as a multi-verb language in the BLC typology.

This paper also raises the question as to what the appropriate criteria are for applying the BLC typology to languages like Goemai and Seri. If the primary criterion for determining whether a language is a postural verb language or a multi-verb language is the number of verbs the language uses in the BLC, then Seri and Goemai would be closer to postural verb languages since they employ a small set of verbs in the BLC. However, if the primary criterion is not the number of verbs used, but whether the verbs are used in a classificatory way or not, then Goemai and Seri would best be classified as multi-verb languages since they

do not use posture verbs in a classificatory way in the BLC. Goemai and Seri both employ a general locative verb/copula in their BLC, which could be a different criterion for determining membership as a multi-verb language. An additional means of distinguishing between postural verb languages and multi-verb languages which has been suggested is the tendency for postural verb languages to have richer sets of adpositions (e.g. Dutch) or spatial nominals (e.g., Yélî Dnye) and multi-verb languages to have small sets of general adpositions or just one single general adposition (e.g., Tzeltal) (Levinson and Wilkins 2006b: 524). This final potential criterion is beyond the scope of this paper, but it further illustrates that determining what the major criterion for determining membership in one of the three BLC typological categories needs to be further developed as BLC studies of additional languages are conducted.

6. References

Bohnemeyer, J. and Brown, P. in press. "Standing divided: Dispositional verbs and locative predications in two Mayan languages". In Ameka, F. and Levinson, S.C. (eds.) special issue *Linguistics*.

Bowerman, M. and E. Pederson. 1993. "Topological relations pictures". In E. Danziger and D. Hill (eds.) *'Manual' for the Space Stimuli Kit 1.2*. Nijmegen: Max Planck Institute for Psycholinguistics, Cognitive Anthropolgy Research Group, pp. 40-50.

Gordon, R.G., Jr. (ed.), 2005. *Ethnologue: Languages of the World*, Fifteenth edition. Dallas, Tex.: SIL International. Online version: http://www.ethnologue.com/.

Hellwig, B. 2003. The grammatical coding of postural semantics in Goemai (a West Chadic language of Nigeria). Unpublished PhD dissertation. University of Nijmegen, The Netherlands.

Kroeber, A.L. 1915. "Serian, Tequistlatecan, and Hokan". In: *University of California Publications in American Archaeology and Ethnology*, vol. 11. University of California Press, Berkeley, pp. 279–290.

Levinson, S.C., Meira, S., and The Language and Cognition Group 2003. "'Natural concepts' in the spatial topological domain – adposition meanings in crosslinguistic perspective". *Language* 79: 485-516.

Levinson, S.C. and Wilkins, D.P. 2006a. *Grammars of space*. Cambridge: Cambridge University Press.

Levinson, S.C. and Wilkins, D.P. 2006b. "Patterns in the data: Toward a semantic typology of spatial description". In Levinson, S.C. and D.P. Wilkins (eds.), *Grammars of space*. Cambridge: Cambridge University Press, pp. 797-876.

Marlett, S.A. 1981. The structure of Seri. Unpublished PhD dissertation. University of California, San Diego.

Marlett, S.A. 2001. "Las relaciones entre las lenguas "hokanas" en México: ¿Cuál es la evidencia?" III Coloquio Internacional de Lingüística Mauricio Swadesh. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México. August 29 - September 4, 2001.

Marlett, S.A. 2005. "A typological overview of the Seri Language". *Linguistic Discovery* 3.1, pp. 54-73.

Marlett, S.A. and Moser, M.B. 1994. "El Desarollo de Clases Nominales en Seri". In: Gerardo Lo´pez Cruz, G., Moctezuma Zamarro´ n, J.L. (eds.), *Estudios de Lingüística y Sociolingüística*. Unversidad de Sonora and Instituto Nacional de Antropología e Historia, Hermosillo, pp. 97–105.

Moser, M.B. and Marlett, S.A. 2005. *Comcáac quih yaza quih hant ihíip hac: Diccionario seri-español-inglés*. Hermosillo, Sonora: Universidad de Sonora and Plaza y Valdés Editores.

van Staden, M., Bowerman, M., and Verhelst, M. 2006. "Some properties of spatial description in Dutch". In Levinson, S.C. and D.P. Wilkins (eds.), *Grammars of space*. Cambridge: Cambridge University Press, pp. 475-511.

Wilkins, D.P. 1998. "The semantic extension of basic locative constructions cross-linguistically". In Kita, S. and Walsh Dickey, L. (eds.) Max Planck Institute for Psycholinguistics, Annual Report, pp. 55-61.

Wilkins, D.P. 1999. "The verbal component in Basic Locative Constructions". In Van Geenhoven, V. and Warner, N. (eds.) Max Planck Institute for Psycholinguistics, Annual Report, pp. 61-71.