

## The locative definite article *hac* in Seri<sup>1</sup>

### 1. Introduction

Seri has a variety of different definite articles, all of which are derived from nominalized forms of verbs, including posture verbs, motions verbs and general locative verbs. With animate entities, the definite article in Seri indicates the actual posture of the referent. For example *ctam cop* is used to refer to a man who is standing and *ctam tintica* (where *tintica* is derived from *tii ntica* ‘go away from’) is used to refer to a man who is going away from the deictic center (at a particular distance). However, frequently the definite article *quij* (derived from *-ij* ‘sit’) is used with people regardless of their precise posture (Marlett & Moser 1994). On the other hand, definite articles in Seri classify inanimate objects with respect to their shape or axial structure, which is conceptualized as a kind of “fictive” or metaphorical posture or “fictive” motion (following Talmy 1996), depending upon the definite article (see O’Meara & Bohnemeyer 2008 for further discussion). For instance, when the noun *hast* ‘stone’ co-occurs with the definite article *cap/cop* (derived from *-aap* ‘stand’), the resulting interpretation is ‘hill’ or ‘mountain’, but when *hast* co-occurs with the definite article *com* (derived from *-oom* ‘lie’), the resulting interpretation is ‘mountain range’. However, there are nominals which do not fit into this classification due to the spatial properties of their referents, e.g., *zaaj* ‘cave’, *imocl* ‘below it’, and *cöiyaticpan* ‘his/her work’. This paper looks at the kinds of nominals that the definite locative article *hac* co-occurs with in order to provide a complete description of the

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semantics of the noun class system in Seri. More specifically, I provide data which show that *hac* is used with nominals that make reference to objects whose shape is difficult to classify.

## 2. Seri people and their language

### 2.1. Seri people

The Seri people, or *Comcáac* (Seri people), as they call themselves, live in two small coastal villages along the Sea of Cortez in Sonora, Mexico – *Socaaix* ‘Punta Chueca’ and *Haxöl Iihom* ‘El Desemboque (del Río San Ignacio)’ (lit. ‘where the multi-colored clams lie’). The two villages are located in the autonomous Seri territory (*comcáac quih hant iti yaii*, lit. ‘land where the Seri people live), which is approximately 211,000ha in size. As of 2000, there were reportedly 800 Seri people living in the two Seri villages (Gordon 2005). Almost all of the Seri people are bilingual in Spanish, with Seri being their first language. Children are still actively learning Seri. However, primary and secondary education is provided in Spanish.

The Seri were traditionally semi-nomadic hunter-gatherers. They relied heavily on sea turtles, fish and small terrestrial animals for subsistence (Schindler 1981). The area that they used as general range land for resource exploitation was significantly larger than their current territory (Bahre 1967). They have since begun to lead a more sedentary life, relying on the sale of handicrafts and commercial fishing. This shift in modes of production took place in the early to mid-twentieth century (Felger & Moser 1984).

### 2.2. Seri language

The Seri language is a language isolate that is suggested to be part of the larger Hokan stock (Kroeber 1915, Kaufman 2008). More recently, it has been shown that Seri’s

association with the Hokan stock is questionable (Marlett 2005). Additionally, there are very few borrowings in Seri either from Spanish or other languages spoken in the area (Marlett 2005).

In terms of its structural properties, Seri is considered to be a predominantly head-final, head-marking language (Marlett 2005). Head-final properties are illustrated in the examples below where the utterance ends with a verbal predicate, for example, in (5) and (6). Head-marking properties are illustrated by person and aspect marking in the form of prefixes on verbal predicates, which is illustrated in examples (5) with *ixáafin* ‘s/he does it’, (6) with *yompási* ‘it does not have wrinkles’ and (13) with *consiifp* ‘you will arrive [there]’ and possessive marking in the form of prefixes on relational nouns as in examples (1) with *imocl* ‘below it, (7) with *ipac* ‘its back’ and (9) with *hisoj* ‘my body’.

### 2.2.1. Nominalizations

Seri has a productive process of deriving nouns from verbs by means of nominalization prefixes. There are different types of nominalizations depending upon the nominalizer prefix that is used (e.g., subject, object and action or oblique nominalizations). The prefixes that derive these deverbal forms reflect the thematic role of the head or the syntactic function the argument corresponding to them have in finite clauses. Example (1) shows a subject nominalized form *coqueht* in *ziix coqueht* ‘ball’ and an oblique nominalized form *iquicolim* in *hehe iti iquicolim* ‘table’.

(1)	<b>Ziix</b>	<b>c-oquéht</b>	<b>quij</b>	<b>hehe</b>	<b>i-ti</b>	<b>iquicolim</b>
	thing	SBJ.NMLZ-bounce	DEF.ART.SG.sit	wood	3.POSS-on	OBL.NMLZ.sit.IMP
	<i>quij</i>	<i>i-mocl</i>	<i>hac</i>	<i>ano</i>	<i>y-ij.</i> <sup>2</sup>	

<sup>2</sup> Abbreviations used here include: ABS – absolutive; ADV – adverb; ART – article; AUX – auxiliary; DECL – declarative; DEF – definite; DEM – demonstrative; DEP – dependent; DP – distant past; EMPH – emphatic; INDEF – indefinite; LOC – locative; NEG – negative; NMLZ – nominalizer; OBJ – object; OBL – oblique; PART – particle; PASS – passive; PL – plural; POSS – possessive; REAL – realis; RP – recent past; SBJ – subject; SG –



occurs with the definite article *com*. For inanimate objects, the axial structure of the object is the primary factor that determines definite article selection.

- (3) *Ziix an icóosi quij hehe iti icóohitim com*  
 cup DEF.ART.SG.sit table DEF.ART.SG.lie  
*i-ti q-uiij iha.*  
 3.POSS-on SBJ.NMLZ-sit DECL  
 ‘The cup (lit. ‘sitting thing from which one drinks’) is on the table (lit. ‘lying wood on which one eats’).’ (BowPed 1)

Nominals are not restricted to co-occur with only one determiner. This variability in article selection is illustrated in Table 1.

	<i>quij</i> DEF.ART.SG.SIT	<i>com</i> DEF.ART.SG.LIE	<i>cop</i> DEF.ART.SG.STAND
<i>hast</i>	‘stone’	‘mountain range’	‘mountain’
<i>zaah</i>	‘sun’, ‘watch’		‘day’, ‘sunlight’
<i>iizaj</i>	‘moon’		‘month’
<i>hant</i>		‘land’	‘year’

**Table 1.** Article variability and selection of noun senses (Marlett & Moser 1994: 103)

The sense of the noun is determined by the article that is used. Posture-based articles classify entities in the following way: animate beings with respect to the posture they are in or inanimate beings with respect to their spatial properties like shape or axial structure, support, and orientation. This can be thought of as a type of “fictive” or metaphorical posture (in analogy to Talmy’s (1996) “fictive motion”) in the case of the posture-based articles or fictive motion in the case of the motion-based articles. (For further discussion see Marlett & Moser 1994, Moser 1978 and O’Meara & Bohnemeyer 2008.)

### 3. Locative definite article *hac*

The locative definite article *hac* is likely derived from the subject nominalized form of the verbal predicate *-aahca* ‘be located’. This article has the same syntactic distribution as the other definite articles (i.e., it appears at the end of a noun phrase). It has been observed that this definite article co-occurs with nominals which refer to places or with

state and action nominalizations (Moser & Marlett 2005: 833). However, it seems that a more refined description can be made regarding the semantic properties of nominals which co-occur with the definite locative article *hac*, namely that these nominals make reference to entities which are difficult to categorize with respect to their shape. In other words, the referents of nominals which co-occur with *hac* are not easily categorized with the posture-based or motion-based definite articles.

### 3.1.State and action nominalizations

As stated above, state and action nominalizations occur with the definite article *hac*. State and action nominalizations refer to states or action events and as such refer to entities which are not easily classified based on spatial properties, like shape or posture. Example (4) provides an instance of *hac* occurring with a state nominalization, *ziix quih cöihamsisiin* ‘love’.

- (4) **Ziix quih**                      **cöi-h-a-msisiin**                      **hac**  
 thing DEF.ART.SG.UNSPEC 3.OBL.3.POSS-OBL.NMLZ-CAUS-love    DEF.ART.SG.LOC  
*ziix quih*                      *c-aziim*                      *iha.*  
 thing DEF.ART.SG.UNSPEC SBJ.NMLZ-beautiful    DECL  
 ‘Love is a beautiful thing.’ (OPT\_PathVerbs)

In example (5) *cöiyaticpan* ‘his/her working’, an event nominalization, occurs with *hac*.

- (5) **Qu-ihéhe**                      **quij**                      **cöi-y-aticpan**  
 SBJ.NMLZ-be.leader DEF.ART.SG.sit 3.OBL.3.POSS-OBJ.NMLZ-work  
**hac**                      *miizj*                      *hacx i-x-áafin.*  
 DEF.ART.SG.LOC well alone 3;3-EMPH-do  
 ‘The president is administering (working) well.’ (Moser & Marlett 2005:50)

State and action nominalizations do not easily fit into the nominal classification system that is based on shape and axial structure (i.e., sitting, standing or lying) or with respect to their trajectory (i.e., coming or going away from). Consequently, they co-occur with the locative definite article. In this case, however, the name of the article seems

inappropriate since state and action nominalizations are not necessarily related to location. Nevertheless, throughout this paper I will continue to use the cover term “locative definite article” in order to describe this particular article in Seri.

### 3.2.(Some) inalienably possessed nouns

In general, there is very little morphology that occurs in the Seri nominal lexicon. Plural number can be marked on nouns through various processes (e.g., suffix, stem change, both a suffix and a stem change, or no change at all). Nouns can be grouped into two classes<sup>3</sup> based on whether they require a possessive prefix or not. I will call the class of nominals which require a possessive prefix inalienably possessed nouns (as opposed to common nouns, which are not obligatorily possessed). This class of nominals includes kinship terms, body part terms, relational nouns, as well as some nominals which refer to personal belongings such as articles of clothing and pets.

Some inalienably possessed nominals co-occur with the locative definite article *hac*. This includes some body part terms and relational nouns. Body part terms can occur with no determiner, as is the case with *ihyeen* ‘my face’ in example (6).

- (6) *Ih-yéen*      *yo-m-pási.*  
1.POSS-face    DP-NEG-wrinkled  
‘My face doesn’t have wrinkles.’ (Moser & Marlett 2005:244)

Body part terms can also occur with the definite articles that are derived from the posture verbs, as is illustrated with *ipac com* ‘its back’ in example (7).

- (7) *Cmiique cap*                      *i-pac*              *com*                      *c-aptj*              *iha.*  
person    DEF.ART.SG.stand    3.POSS-back    DEF.ART.SG.lie    SBJ.NMLZ-wide    DECL  
‘The person’s back is wide.’ (AIM\_ReINs)

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<sup>3</sup> Possessive marking differs slightly in the case of kinship terms where a few of the prefixes manifest themselves differently (see Moser & Marlett 2005: 834 for further discussion). However, for the purposes of the paper, these details are not relevant.

Body part terms that make reference to a body part whose shape is difficult to categorize can occur with *hac*, as is shown in example (8) with *ihyeen hac* ‘my face’ and in example (9) with *hisxeen hac* ‘my abdomen’. For instance, *-sxeen* ‘abdomen’ appears to refer to the general internal abdomen region – an area of the body that does not have clear spatial boundaries (as was illustrated to me by Seri language consultants while labeling the parts of a human body). It is the place where stomach growls come from, *isxeen an canloj* ‘stomach growl’ (lit. ‘its abdomen area thunder’).

(8) *Hiif*            *quij*                    *tiix* *ih-yeen*        *hac*  
 1.POSS-nose DEF.ART.SG.sit DEM 1.POSS-face DEF.ART.SG.LOC  
*oo zo haa ha.*  
 ADV INDEF.ART SBJ.NMLZ.be DECL  
 ‘My nose is part of my face.’ (OPT LexRel\_Landscape)

(9) *Hisxeen*            *hac*                    *hi-soj*            *cop*  
 1.POSS-abdomen DEF.ART.SG.LOC 1.POSS-body DEF.ART.SG.stand  
*oo zo haa ha.*  
 ADV INDEF.ART SBJ.NMLZ.be DECL  
 ‘My abdomen is part of my body.’ (OPT LexRel\_Landscape)

Relational nouns, another type of inalienably possessed noun, make reference to object parts or spatial regions projected from object parts. These nouns commonly make reference to spatial regions which do not have clear boundaries, making them difficult to classify with respect to their shape or axial structure. This is illustrated with *imocl hac* ‘below it’ in example (10) and *imozit hac* ‘the middle of it’ in example (11).

(10) *...haas*            *quih*                    *c-aacoj*            *quih*  
 mesquite.tree DEF.ART.SG.UNSPEC SBJ.NMLZ-big DEF.ART.SG.UNSPEC  
*i-mocl hac ano ha-t-oii...*  
 3.POSS-below DEF.ART.SG.LOC 3.POSS.in 1.PL-REAL.DEP-be.PL  
 ‘...we lived below the big mesquite tree...’ (MLA 5/30/07 5)

(11) *Ox xepe*            *quih*                    *i-mozit*            *hac*  
 thus seawater DEF.ART.SG.UNSPEC 3.POSS-middle DEF.ART.SG.LOC  
*ano m-oom ha.*  
 3.POSS.in RP-lie DECL

‘It comes in as if from the middle of the sea.’ (OPT HaiXepeImacQuij)

The co-occurrence of *hac* with some inalienably possessed nouns is not determined by their membership in this noun class, but rather by their referential properties. One of the reasons that quite a few inalienably possessed nouns co-occur with *hac* is that most of the spatial relational nouns refer to spatial regions which are not easily classifiable based on their spatial properties. Additionally, there are many body parts terms in Seri which refer to containers or in general make reference to parts that do not have clear spatial boundaries.

### 3.3.Place names

Similar to body part terms, some place names occur with the locative definite article *hac*, depending upon the kind of place that is made reference to. For instance, islands are categorized based on their shape and consequently, place names that refer to islands occur with the corresponding definite article – *com* if the island is long and not particularly wide and *quij* if the island is mountainous and not very long. This is illustrated with *Tahejök quij* ‘Tiburón Island’ in example (12).

- (12) ...*ox po-pacta ta Hast Otiipa Tahejök quij*  
thus IRR-be PART Patos.Island Tiburón.Island DEF.ART.SG.sit  
*hast z i-ti t-ap, Hast Canlc*  
stone INDEF.ART 3.POSS-on REAL.DEP-stand Hast Canlc  
*ha-p-ah, tiix i-ti cö-i-t-queen ma x...*  
SBJ.NMLZ-PASS-say DEM 3.POSS-on 3.OBL-3;3-REAL.DEP-touch SR UNSPEC.TIME  
‘...then Patos Island is together with a hill on Tiburón Island that is called *Hast Canlc*...’ (OPT 6\_14\_07)

*Tahejök quij* ‘Tiburón Island’ is thought of as an instance of the kind of island that is referred to as *hant xepe imac quij quij* which literally means ‘the land that is sitting in the middle of the ocean’. *Coof Coopol It Iihom* ‘San Lorenzo Island’, on the other hand,

is an instance of the kind of island that is referred to as *hast xepe imac coom com* which literally means ‘the stone that is lying in the middle of the ocean’.

Playas, or dry lakebeds, are thought of as sitting in Seri<sup>4</sup>, and thus, when a place name is used to refer to a playa, it occurs with the definite article *quij*, as in *Caail Heeque quij* ‘the name of a small playa’ in example (13).

- (13) ...*cmaax*    *Caail Heeque*    *quij*                    *co-n-siifp*                    *aha.*  
 now            small.playa            DEF.ART.SG.sit    3.OBL-2-IRR.arrive            DECL  
 ‘...now you will arrive at the small playa (*Caail Heeque*).’ (THF 7\_9\_06\_3)

Place names that refer to ranches and camps almost always occur with the locative definite article *hac*. This is shown in example (14) with the place name *Hatájc hac* ‘Pocho Coyote’ which refers to what is now a Mexican ranch near El Desemboque (one of the two Seri villages). This follows from the discussion of the types of nominals that *hac* co-occurs with, in that ranches and camps do not have clear spatial boundaries, making them difficult to classify based on their spatial properties.

- (14) ...*Hatájc*            *hac*                    *cö-ha-t-azcam...*  
 Pocho.Coyote    DEF.ART.SG.LOC    3.OBL-1.PL-REAL.DEP-arrive.PL  
 ‘...we arrived at Pocho Coyote [a ranch]...’ (MLA 5\_30\_07\_1)

Speakers can also make reference to El Desemboque by saying *Haxöl Iihom hac*. This is illustrated in example (15).

- (15) ...*Haxöl Iihom*    *hac*                    *i-ti*                    *m-piij...*  
 Desemboque            DEF.ART.SG.LOC    3.POSS-on    2-IRR.sit  
 ‘...if you are in El Desemboque del Río San Ignacio (lit. ‘where there are multi-colored clams’)...’ (THF 7\_9\_06\_4)

Similar to the case of inalienably possessed nouns, the discussion on place names illustrates that it is not membership in this particular class of nouns that determines

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<sup>4</sup> The reason that *caail* occurs with *quij* as opposed to *com* seems to have to do with the fact that dry lakebeds are long, not very tall and not particularly narrow – the crucial component being that they are not very narrow.

whether a particular noun occurs with *hac* or not, but rather it is the semantics of the nominal referent. Of particular interest here is that it is not the case that all nouns which refer to places occur with *hac*. The determining factor is what kind of geographic entity is being referred to by the place name and whether that particular geographic entity is easy to categorize based on its shape.

### 3.4.Landscape terms

Given the discussion of place names above, it is not surprising that nominal expressions which refer to landscape objects can also occur with the locative definite article.

However, as is the case with place names, if the landscape term refers to a landscape object that has spatial boundaries which are more clearly categorized based on its spatial properties, the nominal will occur with one of the definite articles derived from a posture or motion verb. For example, (16) shows that *xatj* ‘reef’ occurs with the definite article *quij* which is derived from *-ijj* ‘sit’.

- (16) ...*taax ano siihca xatj quij*.  
 there 3.POSS.in IRR.be.LOC reef DEF.ART.SG.sit  
 ‘...there will be the reef.’ (GHF 7/2/06 1)

In example (17) *hant queemej* ‘dune’ occurs with *com* which is the definite article derived from *-oom* ‘lie’. This is due to the fact that dunes are significantly longer than they are wide and relatively low.

- (17) ***Hant qu-eemej com in-s-yaai pix...***  
 land SBJ.NMLZ-move.slowly DEF.ART.SG.lie 2-IRR-go.toward DOUBT  
 ‘If you want to go to the dunes (lit. ‘land that moves slowly’)...’ (GHF 7/2/06 2)

There are landscape objects that do not have clear spatial boundaries and some that refer to voids, e.g., caves in a mountain or holes in the ground. Landscape terms that make reference to these types of landscape objects co-occur with *hac*. For instance, to

refer to a seep where fresh water comes out of the sea floor, you would say *xepe ano hax hac*, lit. ‘the seawater in the freshwater’, as is illustrated in example (18).

- (18) *Xepe ano hax hac xepe*  
 seawater 3.POSS.in freshwater DEF.ART.SG.LOC seawater  
*com oo zo haa ha.*  
 DEF.ART.SG.lie ADV INDEF.ART SBJ.NMLZ.be DECL  
 ‘The freshwater in the sea [a seep] is part of the sea (lit. ‘lying seawater’).’ (OPT LexRel\_Landscape)

Other nominals which make reference to these kinds of landscape objects include *hant ipot hax* ‘well’ and *zaaj* ‘cave’, both of which occur with *hac*, as is shown in examples (19) and (20), respectively.

- (19) *Hant i-pot hax... hax cop*  
 land 3.POSS-bottom freshwater freshwater DEF.ART.SG.stand  
*hant i-pot hax hac*  
 land 3.POSS-bottom freshwater DEF.ART.SG.LOC  
*oo zo haa ha.*  
 ADV INDEF.ART SBJ.NMLZ.be DECL  
 ‘The well... the water of the well is part of the well (lit. ‘freshwater that is at the bottom of the land’).’ (OPT LexRel\_Landscape)

- (20) *Xazoj quih ih-sücö aha,*  
 mountain.lion DEF.ART.SG.UNSPEC 1-IRR.kill DECL  
*zaaj hac hapx cö-poop tax.*  
 cave DEF.ART.SG.LOC outside 3.OBL-IRR.stand PART  
 ‘I am going to kill the mountain lion when it comes out of the cave.’ (Moser & Marlett 2005:68)

Finally, it is worth noting that if a complex nominal construction is headed by a spatial relational noun it will co-occur with *hac*. For instance, in example (21) in order to refer to the top of a hill the speaker says *hast cop iyat hac* which involves a landscape term being modified by a relational noun. In this case the relational noun is specifying the particular part of the landscape entity that is being referred to, which is in this case, the very top part of it.

- (21) ...*hast cop iyat hac*

stone DEF.ART.SG.stand 3.POSS-top DEF.ART.SG.LOC  
*ano siifp caha.*  
3.POSS.on IRR.arrive AUX.DECL

‘[she] will arrive at the summit of the hill (lit. ‘standing stone’).’ (THF 7\_9\_06\_6)

This example further illustrates the claim in this paper that *hac* is used with nominal expressions which make reference to objects whose shape is difficult to classify.

#### 4. Conclusion

The Seri definite article system provides an interesting case of form-to-meaning mapping, namely, it provides an example of a noun class system which is based on whether or not nominal referents are easily categorized based on their shape or whether they are more void-like in nature (e.g., caves, wells, etc.) or completely without a spatial geometry (e.g., events and actions<sup>5</sup>). More specifically, in the Seri nominal lexicon objects are classified based on their literal or metaphorical shape or their literal or metaphorical trajectory. If they cannot be classified under one of those categories, then they occur with the locative definite article *hac*.

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<sup>5</sup> Thanks to Stephen Marlett for pointing that there is an exception to this when it comes to meteorological terms. In some of these cases, the interpretation of nominals that are used to refer to meteorological entities such as *zaah cop* ‘sunlight’/‘day’ can likely be explained by coercion effects (following Pustejovsky 1998 and O’Meara 2010).

## References

- Bahre, C. J. 1967. *The reduction of the Seri Indian range and residence in the state of Sonora, Mexico (1536-present)*. MA thesis, University of Arizona, Tucson.
- Gordon Jr., R. G. 2005. *Ethnologue: Languages of the World*, Fifteenth ed. SIL International, Dallas, Online version: <http://www.ethnologue.com/>.
- Jackendoff, R. S. 1983. *Semantics and cognition*. Cambridge, MA: MIT Press.
- Kaufman, T. 2008. Hokan languages. In Brown, K. and S. Ogilvie (eds.) *Concise encyclopedia of languages of the world*. New York: Elsevier. 504-510.
- Kroeber, A. L. 1915. Serian, Tequistlatecan, and Hokan. *University of California Publications in American Archaeology and Ethnology*, vol. 11. University of California Press, Berkeley. 279–290.
- Marlett, S. A. 2005. A typological overview of the Seri language. *Linguistic Discovery* 3.1: 54-73.
- Marlett, S. A. 2007. La Relación Entre Las Lenguas “Hokanas” en México: ¿Cuál Es La Evidencia? In Buenrostro, C., S. Herrera Castro, Y. Lastra, F. Nava López, J. J. Rendón Monzón, O. Schumann Gálvez, L. Valiñas Coalla y M. A. Vargas Monroy. (eds.). *Clasificación de las lenguas indígenas de México*. Memorias del III Coloquio Internacional de Lingüística Mauricio Swadesh. Universidad Nacional Autónoma de México-Instituto Nacional de Lenguas Indígenas, México. 165-192.
- Marlett, S. A. and M. B. Moser. 1994. El Desarrollo de Clases Nominales en Seri. In: López Cruz, G. and J. L. Moctezuma Zamarrón (eds.). *Estudios de Lingüística y Sociolingüística*. Universidad de Sonora and Instituto Nacional de Antropología e Historia, Hermosillo. 97–105.

- Moser, M. B. 1978. Articles in Seri. *Proceedings of the 1977 Hokan-Yuman Languages Workshop, University of Utah, June 21-23, 1977*. Occasional Papers on linguistics 2: 67-89. Carbondale, Ill.: Southern Illinois University.
- Moser, M. B. and S. A. Marlett. 2005. *Comcáac Quih Yaza Quih Hant Ihíp Hac: Dictionary Seri–Spanish–English*. Plaza y Valdés Editores, México City, and Universidad de Sonora, Hermosillo.
- O’Meara, C. 2010. *Seri landscape classification and spatial reference*. PhD Dissertation. University at Buffalo.
- O’Meara, C. and J. Bohnemeyer. 2008. Complex landscape terms in Seri. *Language Sciences* 30(2-3): 316-339.
- Pustejovsky, J. 1998. *The generative lexicon*. Cambridge, MA: MIT Press.
- Schindler, S. M. 1981. *The material culture and technoeconomic system of the Seri Indians: An experimental reconstruction*. Dissertation: Southern Illinois University.
- Talmy, L., 1996. Fictive Motion in Language and “Ception”. In: Bloom, P., Peterson, M., Nadel, L., Garrett, M. (Eds.), *Language and Space*. MIT Press, Cambridge, pp. 307–384.
- Talmy, L. 2000. *Toward a cognitive semantics*. Volumes I and II. Cambridge, Massachusetts; London, England. The MIT Press.