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The expression of static location in a typological perspective

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1. Goal and outline[i]

The purpose of this paper is to consider the crosslinguistic variation of the predicative element of a (henceforth BLC) in order to open up the scope of the discussion of this construction in two directions. One is to situate the contribution of the locative predicate to the BLC construction and to take into account its relation to other elements of the construction; going beyond the usual focus on either prepositions alone or locative verbs alone. The other direction is to look beyond the locative construction itself in order to consider where else the elements of the locative predicate can be found in the grammar of the language, and for what use. Although this paper describes the variety of locative predicates on the basis of examples from Amerindian languages, it aims to argue broadly for the development of descriptive strategies that would invite more comprehensive descriptions of this construction in the widest variety of languages possible. This is done with a double aim in mind: first to facilitate the discussion of such constructions for those faced with the description of still under- or un-described languages, most of which being by and large seriously endangered today, and ultimately to contribute to the on-going discussion of what Slobin has called "thinking for speaking" (1991) by contributing interesting new data from very diverse languages.

The paper will proceed as follows: section (2) sets the framework for this discussion of the predicative element of the , section (3) then illustrates the variety of such elements across Amerindian languages in terms of lexico-grammatical systems of locative verbs (posture, locative stems and positionals), while section (4) does so in terms of the variety of possible satellites (such as directionals). The last section (5) looks beyond the at the omnipresence of these same elements, or elements that share similar spatial semantics, across the languages considered earlier.

2. The framework

The framework within which the discussion evolves is at the crossroads of two general bodies of literature, one is from a functional-typological approach to linguistics that has been very productive in the last decades in responding to the challenge of describing the kind of new phenomena that can be found in yet under-described of languages, such as the Amerindian languages. The other is a cognitive semantics approach that has grown precisely out of preoccupations with accounting for particularities of the expression of space found in Amerindian languages, such as Atsugewi (Talmy 2000), and Tzeltal (Brown 1994).[ii]

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2.1. About functional typological linguistics

The functional-typological framework of linguistic analysis espoused here is outlined in Givón (2001), and is reflected in several ways in this paper**:**

a. through the exploration of the typological variety found in the expression of a particular functional domain, here that of the expression of static location, a sub-domain of the omnipresent domain of spatial expression,
b. by the consideration of strategies of linguistic expression, taken in the context of constructions, and placed in their discourse context,
c. and by opting for an approach to categorization that appeals to the concepts of prototypes and continua rather than discrete categories,
d. by attending to the dynamic aspects of grammar building, directly through grammaticalization, and indirectly through lexicalization.

2.2. Some notions from the literature on space

As the subsection titles indicates, only notions essential to the following discussion have been selected here.

2.2.1. From Talmy (1985, 2000)

From the pioneer work of Talmy two major concepts will be retained, that of verb- vs satellite-framed languages, and that of conflation of semantic information in the lexical motion verb (where the general category of MOTION includes motion and non-motion, ie static location).

The contrast between "verb-framed" and "satellite-framed" languages deals with the structural dimension of the construction and identifies the distribution of the spatial information of PATH between lexical and morpho-syntactic elements, as illustrated in (1):

(1) Spanish

a.	the bottle floated <u>out</u>	Satellite-framed	[PATH in particle]
b.	la botella <u>salió</u> flotando	Verb-framed	[PATH in verb]

Although one would rather talk of "strategies" than "languages", considering that some languages may exhibit both patterns, as shown by Kopecka (2004) for French, for instance.

The other concept taken from Talmy's work is that of "conflation", used for the analysis of verbal semantics and meant to distinguish between verbs of motion expressing at the same time either MANNER or PATH, as shown in (2):

(2) a. English

the bottle <u>floated</u> out	*conflation in verb of*	[MOTION+MANNER]

b. Spanish

la botella salió flotando *conflation in verb of* [MOTION+PATH]

2.2.2. From Sinha and Kuteva (1995)

Sinha and Kuteva (1995) discuss the concept of "distributedness of spatial semantics" while considering the variable of overt/covert expression. It is an approach that takes the whole construction into consideration and examines where and how the spatial information is expressed or recoverable. The examples in (3) show, on the one hand, how some path information may be optionally expressed (3a.), and on the other hand, how it may be doubled in verbal prefix and preposition (3b):

(3) a. the boy jumped (over) the fence
b. insert the plug into the socket

The notions introduced here were originally considered for the expression of motion but will be applied here in the context of Basic Locative Constructions.

2.3. BASIC LOCATIVE CONSTRUCTIONS

After identifying Basic Locative Constructions, the notion of a working typology of locative predicates will be entertained, followed by a presentation of a set of variables considered useful for a comprehensive typological study of such predicates.

2.3.1. About Basic Locative Constructions

A Basic Locative Construction is the construction used as the answer to the question "where is X?", in which X is a known "spatial entity" [iii] (hence definite) and its location the unknown information being sought. In English, the Basic Locative Construction follows the usual word order and uses the spatially neutral existential copula, with the spatial information found in the choice of preposition. The is not to be confused with the existential and/or presentational construction, which in English follows the pattern: "there is an x AT y". In this construction the spatial entity/figure X is an indefinite the existence of which is being predicated, the additional spatial information of the location being optional. Languages vary as to whether they use the same verbal predicate for both constructions; English does, for instance, while French does not (it uses the verb "avoir" for the existential/ presentational construction: "il y a un x…").

2.3.2. A working typology of locative predicates

The term "working" is used to underline not only the evolution of the proposed set of types, but ultimately a certain skepticism as to the feasibility or desirability of establishing a typology in terms of a list of distinct types,

if/when the phenomenon is taken in the multi-dimensional approach recommended here.

A typology of locative predicates was originally proposed by the researchers from the Max Planck Institute, their 2001 version of Annual Report identifying four types of situations being as follows:

Type		Predicate	Languages
Type 0		No verb in	*Saliba*
Type I	Ia.	Copula (i.e., dummy verbs used in many other constructions)	*English, Tamil, Chukchi, Tiriyó*
	Ib.	Locative (+ Existential) verb	*Japanese, Ewe, Yukatek, Lavukaleve*
Type II		Postural verbs (i.e. small set of posture verbs, 3-6 verbs)	*Arrernte, Dutch, Goemai*
Type III		Positional verbs (large set of dispositional verbs, 12-100)	*Tzeltal, Zapotec, Laz, Likpe*

Table 1. Early MPI typology of locative predicates
(cf. MPI Annual Report 2001: 63-66).

The typology to be proposed here introduces two changes. First, it regroups the languages without any predicative element in BLC with those with an existential copula, to the extent that neither type has a verbal element carrying spatial information. Second, it introduces the possibility of intermediate systems between prototypical posture verb systems with few elements (three or four usually) and the positional system rather specific to the Mayan family of languages (with several hundreds). This is in line with the approach taken here, that appeals to the notion of categories not being discrete and allows for continua. The result is a different distribution of the cases of Type I above and the addition of a layer of a possible new Type III, as shown below:

Type	Predicate
Type 0	no locative information (zero or existential copula)
Type I	one locative verb (distinct from existential copula)
Type II	prototypical posture verb system , European style
Type III	locative stems of some Amerindian languages
Type IV	positionals of Mayan languages

Table 2. Proposed typology of locative predicates

Standard examples of those different types are the case of Turkish for Type O, Spanish for Type I, with the spatial copula "estar"[iv], Slavic and Germanic languages for Type II.[v] The existence of positionals in Tzeltal Mayan was in fact at the origin of the interest in locative predicates and the motivation for proposing a typology that establishes a new type of locative predicates, Type IV here, distinct from posture verbs.

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In this paper the European style posture verb systems and the Mayan positionals are considered more as extremes of a continuum than as the only two existing types of verbal predicate systems (of more than one element), and the idea of the existence of intermediate types of systems (as unknown to European languages as the positionals were) is illustrated. In what follows, instances of posture verb systems typical of Amerindian languages of the lowlands of Latin America will be shown first; then an example of an extended system of locative stems from North America will be introduced, in order to show the continuum rather than the discrete categorization of such systems; the situation of the Mayan positionals will be reviewed last, with an emphasis on its particular instantiations of complex semantic conflation.

Much remains to be done to produce the kind and quantity of extensive and comprehensive descriptions that would allow for better comparisons across systems. The kind of typological framework conceived here would require addressing a wide variety of descriptive issues, such as inventory, semantics, degree of grammaticalization, discourse use and metaphoric lexicalization processes.[vi] And once these questions are more thoroughly answered, the evidence will probably be that there is no way of reaching a simple categorizing typology, and that it might be better to identify how clusters of features distribute themselves in a multidimensional space. Hence the use by this author of the expressions of "working typology" and "descriptive strategies" in order to produce "typological descriptions", in this text and elsewhere.

The author is aware of the resistance on the part of some of her colleagues to the use of these expressions. One anonymous reviewer of this paper stated that if the typology is still at a "working" stage it is not publishable yet, although the qualifier "working" next to the term typology stems from her conviction that the data is not all in that will give us a clear picture of the infinite variations of such systems, particularly if one takes seriously into account the dimensions of the degrees of grammaticalisation of such systems and their place in the language in general. "Working" is therefore used in the literal sense of field linguists not specialists of this theme of the expression of space working out the specifics of this theme in the languages of which they are specialists in the kind of detail proposed here, and of working at building the kind of multidimentional typology mentioned above incorporating these new data. As for the expressions of "descriptive strategies" and of "typological descriptions", they also refer to the descriptive task of field linguists, particularly of those facing little to un-described languages like those of Amazonia, to whom we would like to offer "strategies" of how to tackle the subject, and from whom we hope to receive in response well informed descriptions that address the typological variables that have been identified so far on the subject.[vii]

2.3.3. Variables to be considered for a study of locative verbs

Before presenting data of locative predicates from Amerindian languages, this section will list the major variables that will be taken up in the description of each system below. This section is partly inspired by a recent collection of articles (Newman 2002) that considers posture verbs mostly in European languages, but includes also cases from the Pacific region, and from the American continent, such as the case of Dene (Chipeweyan from Canada, Rice 2002) and Trumai (an isolate from the Xingu of Brazil, Guirardello-Damian 2002).

a. Inventory, lexical density and conflation

The inventory of the elements of the system is a first indicator of contrast between systems: the systems of verbs of posture are generally limited to some cardinal positions, while those of dispositionals have larger inventories, reaching into the hundreds. The phenomenon of lexical density corresponds to the possibility of multiple verbal roots to describe certain postures/positions in great detail, such as for instance the many ways of being seated. The phenomenon of conflation is a matter of the complexity of the semantic decomposition of the verbal roots, which can include, beyond basic postural or dimensional information, additional features indicating orientation, number, manner, or activity at the origin of the position (a possibility that is very developed in the case of positionals).

b. Conventionalized usage

In the case of semantic extension of postures onto animals and inanimate objects, the use of posture verbs becomes conventionalized; this means that the choice of posture assigned to such entities is then largely a matter of cultural norms or established conventions that must be accounted for. This is the case, for instance, of boats that could be said to be either suspended, or sitting, or lying on the surface of the water, or of cups said to be either standing or sitting on a table.

c. Grammaticalized usage

The notion of grammaticalization covers several situations. One is the degree of systematicity of such paradigms for a certain function, in the case that concerns us here, that of the expression of static location. As a matter of fact, while all languages have an inventory of verbs that correspond to the semantic category of verbs of posture (in the same way as all languages have expressions of measure), only in certain languages have some of these lexical elements constituted themselves into morpho-syntactic paradigms obligatorily used in basic locative constructions. And to the extent that the process of grammaticalization is progressive, one can easily anticipate that different systems correspond to different stages of the evolution from a purely discursive usage to an established grammatical usage, to the point of obligatory usage. The systematic use of certain posture verbs inbasic locative constructionscan also be grammaticalized before that of others, of course.[viii]

The process of grammaticalization can progress further. After certain lexical systems of locative predicates have already constituted a grammaticalized system of posture verbs used in the context of basic locative constructions, those systems of posture verbs can further enter processes of grammaticalization. They may be used in complex verbal forms to express complex events, where they specify the position or the posture coextensive with the action itself, such as to read-sitting, to talk-standing, to sleep-suspended (in a hammock). The posture verbs can be found as different stages of grammaticalization, first as elements of serial constructions, but in some languages they have fully developed into systems of satellites (in the sense of Talmy) of verbs of action and constitute then a new morpho-syntactic category easily identifiable in the language. The use of these posture satellites can further extend to the expression of more abstract notions, such as aspectual values; the posture verb of sitting can become for instance the marker of the progressive.

The criteria listed above, of inventory, lexical density and semantic conflation, conventionalized and grammaticalized usages are considered essential to a descriptive strategy of the . What is generally available, in the case of Amerindian languages, is very incomplete and un-systematic information : if there are inventories, they remain incomplete, if there is some discussion of their semantics, it remains a matter of interpretations offered by non native linguists, while the descriptions of the grammatical functioning of these systems is often barely mentioned, if at all. In addition, the illustrative examples are limited to isolated words or to sentences isolated from discursive context.

2.4. Looking beyond

A last dimension of a productive descriptive strategy would be to evaluate in what way a particular system seems central in that language, through its own extensions in the grammar and through its formal or semantic links to other systems with spatial semantics in the language (such as its coexisting with certain types of nominal classification systems). Only studies that reach this level of comprehensiveness and detail could contribute to a well-informed comparative study of the phenomenon in general, and would allow us to construct well articulated and reliable typologies (in the sense of relying on reliable and usable data and analyses). Exploring and describing the place of the elements of the , beyond that construction, in the grammar is often the way to capture the particular genius of some languages in which spatial information is sprinkled throughout all forms of discourse, with a pervasive and detailed attention uncommon in European languages.

3. ABOUT LOCATIVE PREDICATES IN AMERINDIAN LANGUAGES

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This section will first propose an inventory of all the forms that may participate in the s, to situate the phenomenon of locative predicates in its proper context. It will then survey different types of locative predicates that can be found in Amerindian languages, with examples of two fairly prototypical small posture verb systems (in Sikuani and Teribe), followed by a case of a less prototypical and larger system (in Kwakwala) intermediate between clearly posture verb systems and much larger positional systems of Mayan languages (as Tzeltal) shown last.

3.1. Inventory of forms found in BLC

This inventory covers the morpho-syntactic elements of spatial semantics that can be found in . It puts in full view the various systems that may co-exist in a language, to invite a more comprehensive approach to the study of locative predicates by considering it in the context of all the possible elements of s, including those linked to the expression of figure and ground spatial entities. The SVOX constituent order in which the inventory is organized in the table below is of no particular relevance.

FIGURE	**SPATIAL RELATION**		**GROUND**
NP	LOCATIVE PREDICATE	(a) ADPOSITIONS	NP
	(b) SIMPLE LOCATIVE PREDICATES locative verbs **posture verbs** **positionals**		
	(c) SATELLITES preverbs verbal particules **Directionals**		
	(d) BI-PARTITE STEMS		
	(e) NOMINAL CLASSIFICATION		
noun classes num. classifiers dem. classifiers	verbal classifiers	locative classifiers	

Table 3. Inventory of morpho-syntactic elements of basic locative constructions

Table 3 is organized in stages corresponding roughly to those of the discussions of basic locative constructions, from the original discussions concentrating on the semantics of adpositions, to the later interest in the variety of locative predicates, including at the bottom nominal classification systems found in the expression of figure and ground in some languages, because of their semantic and sometimes morphological links to locative predicates in such constructions. The evolution of the themes covered in the discussion of the expression of static location is sketched out in Grinevald (in press).

This paper concentrates on a selection of the elements of locative predicates (posture verbs, positionals, directionals), although the other systems must always be kept in view when describing s. They include:

(a)ADPOSITIONS: under this label are subsumed the prepositional/postpositional systems, as well as relational noun systems and case systems. The earlier studies of static location concentrating on the semantics of prepositions (see Vandeloise 1986 on the semantics of French prepositions for instance).

(c) BIPARTITE systems of locative predicates are made of two elements of equal standing, one specifying the shape of the entity and the other its posture, in a combination of classifier and posture semantics. Although they are not treated here for lack of space, they are typologically very interesting (and rare) and very foreign to European modes of expression. They are found in languages like Klamath (DeLancey 2003), for instance.

(d) NOMINAL CLASSIFICATION systems: efforts at outlining a typology of nominal classification systems can be found in Craig (1987), Grinevald (2000 and 2001). Of the several types that have been identified, only those with possible spatial semantics applying to spatial entities are mentioned here. They are interesting in sharing spatial features with co-existing locative predicate systems in a number of languages, and in being even morphologically related to locative predicates in some languages (as in Tzeltal). The issue of the spatial semantics of nominal classification systems is specifically treated in Grinevald (to appear a.). Classifier systems will only be mentioned in passing here.

In the survey of locative predicates from Amerindian languages offered below, the lexico-grammatical phenomenon of posture verbs and positionals will be taken up first, followed by that of a type of satellite, the directionals. It is worth noting again that, while this paper concentrates on locative predicates, the next step in the analysis would be to enlarge the discussion of spatial expression ofbasic locative constructionsto the two phenomena of relator/relational nouns and nominal classification systems.

3.2. POSTURE VERBS

As morpho-syntactic systems they are characterized as having a small closed inventory and obligatory use in BLC.

3.2.1. Inventory and semantics

The semantics of posture verbs correspond minimally to the basic three human body postures, to which many Amerindian languages add the posture of hanging, giving the following inventory: 3 x **standing/sitting/lying** + 1x **hanging.** The two systems presented below are representative of numerous systems of lowland Latin America in that they share the fourth posture of hanging, basically associated to the omnipresence and frequent use of the hammock.[ix] It is common in those

languages to have conventionalized postures extended to animals and inanimates. When the inventory is larger than those four basic posture verbs, postures combine with a variety of features, some spatial, others more aspectual, and often the notion of plural.

3.2.2. The case of Sikuani: underspecified localization

Sikuani, a Guahibo language of Colombia, has the four posture verbs typical of the Amazonian region:

(4) Sikuani (Queixalos 1998: 235)
e- 'sitting'
nu- 'standing'
bo- 'lying'
ru- 'suspended'

In the line of what Brown had said of the situation in Tzeltal (Mayan) to be considered below, Queixalos states that in Sikuani the localization of the referent/figure is less a matter of locating it in space with respect to a ground than one of representing its perceived spatial features.

(5) Sikuani (Queixalos 1998: 245)
ika Phouna ? hota raha nuka
where Phouna ? here assertive standing
'where is Phouna ? he is (standing) here'

The localization of a spatial entity is therefore negotiated through an indication of its posture, leaving the information of its actual localization implicit or underspecified. Although Queixalos notes that, in many cases, the choice of a particular posture verb for a given entity provides more information on its localization than might appear at first. "To say of a vulture that it is standing is to say that it is on the ground, while to say that it is sitting indicates that it is on a branch. If one says while walking through the rainforest that a caterpillar is suspended, the listener will look for a smaller branch or a twig, but if one says that it is lying/extended then the listener will look for a big branch. Therefore while talking of the posture of the figure, one describes in fact the ground" (1998: 247).

3.2.3. The Case of Teribe: a larger inventory

Teribe is a Chibchan language of Panama. It is described in Quesada (2000) as having eight posture verbs, that have been organized here in two subsets according to the complexity of their semantics.

(6) Teribe (Quesada 2000)
a. sök 'sit, live'
buk 'lie'
shäng 'stand'
pang 'hang'

b. *conflation of posture+TIME/MANNER/NUMBER*

jong	'stand permanently'
teng	'be in possession'
löng	'be plural in a state/place'
lok	'be firmly in a place'

The semantic features being conflated with that of posture are familiar ones: number, manner or permanence. The crossing of location and possession has also been noted in languages across the world. The same features will be found again in larger sets of locative verbs throughout the Americas, as shown with examples of Kwakwala and Tzeltal later.

3.3.The case of Kwakwala: larger set of "stems of location"

Kwakwala is a Wakashan language of British Columbia, Canada. The choice of this particular case is meant to make two points: One is that it offers additional examples of conflation of posture semantics with other semantic features, some also spatial (such as verticality and dimensionality), and others more familiar from other grammatical systems (such as animacy and number).[x] The other is that the semantics of this system are reminiscent of the semantics of numeral classifiers of many languages, in particular in its attention to dimensions (1D, 2D, 3D) and to concave shape(s), a common feature of Amazonian nominal classification systems. The set of 14 stems for basic locative constructions is given below:

(7) Kwakwala stems of location (Berman 1990: 52-6, cited in Mithun 2000:110)

χɑxʷ-	'vertical human is somewhere'
kʷəl-	'horizontal human is somewhere'
q́ʷɑ-	'vertical humans or long objects are somewhere'
χɑ-	'vertical long object is somewhere'
kɑt-	'horizontal long object is somewhere'
ḱukʷ-	'vertical flat object is somewhere'
xəkʷ-	'vertical flat objects are somewhere'
pəlq-	'horizontal flat object is somewhere on its front'
ńəχ-	'horizontal flat object is somewhere on its back'
ḿakʷ-	'bulky object is somewhere'
hən-	'hollow object is somewhere rightside up'
məx-	'hollow objects are somewhere rightside up'
qəp-	'hollow. object is somewhere upside down'
kʷɑxʷ-	'hole is somewhere'

One can easily identify the semantic features involved and their patterns of conflation. There is a basic contrast between human and non human entities, and different combinations of vertical vs horizontal axis of 1D (long) and 2D (flat) dimensions, with an additional concern with position (object on its front or back, right side up or down), plus two variants of 3D entities

(bulky/solid or hollow), the whole cast into a concern for number. In the end, the features are all easily identifiable, but the patterns of conflation are original. In addition this set of locative predicates is said to also be used with verbs of handling.[xi]

It is interesting to note in passing the existence in Kwakwala of another morpho-syntactic system, morphologically independent but involving very similar spatial semantics. It is a system of 20 numeral classifiers, of varying productivity. Berman calls them "suffixes of numerals" and lists the following 6 as the most common ones:

(8) Kwakwala numeral classifiers Berman (1990: 40, 38, cited in Mithun, 2000: 109)

-ukʷ	'human'
-sgəm	'bulky' ,
-ć̓aq	'long"
-x̣χɑ	'hollow'
-x̣̓sɑ	'flat'
-zɑq	'hole'

To be noticed are the parallels between the spatial semantics of these classifiers with some of those of stems of location, such as the various dimensions: 1D (long), 2D (flat) and 3D (bulky, hollow, hole).

The case of the Kwakwala system of locative predicates is therefore more complex and larger than the preceding cases of posture verbs considered. The system seems to have developed around characteristics of inanimate objects, identifying only two of the basic human postures (vertical=standing and horizontal=lying). In that sense this system is reminiscent of numeral classifier systems that attend to basic dimensions (1D, 2D, 3D) and secondary features of these dimensions (solid vs concave). This Kwakwala system represents therefore a type intermediate between the simpler posture verb systems presented above and the yet more complex positional system to be presented below.

3.4. POSITIONALS

The case to be considered here is well known in the literature on the linguistics of space. It constituted an early response to universal claims about adpositions being the locus of spatial relation information (Landau & Jackendoff 1992). In this often cited paper entitled "*What* and *where* in spatial language and spatial cognition", *what* refers to the spatial entity about which it is said that no spatial characteristics are explicitly given, and *where* to the spatial information that is said to be encapsulated uniquely in the adpositions. In this context, Brown (1994) "The INs and ONs of Tzeltal locative expressions: the semantics of static descriptions of location" was offered as a case study of a language with no spatial prepositions but an elaborate system of positionals. In this sytems the location of the figure

must commonly be inferred from the description of its posture and position, in a more elaborate but similar type of distribution of spatial information already seen in the Sikuani case earlier.

3.4.1. The basics of Tzeltal (Mayan)

Tzeltal is a language of the Tzeltalan branch of the Mayan family of languages. It shares with all Mayan languages a verb initial syntax, an ergative system of person marking indexed on the predicate (Erg=ergative, Abs =absolutive), and a propensity for relational nouns (possessed nouns in adpositional function) in contrast to few prepositions, and hundreds of special lexical roots constituting a category of their own, known as positional roots.

The particulars of Tzeltal are a VOS word order, the existence of a unique semantically vacuous preposition (ta), and the active use of the positionals in s, following the template shown below:

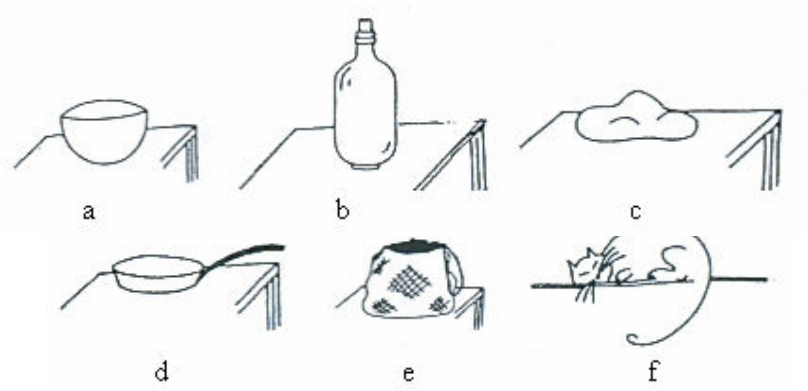
(9) Tzeltal BLC template

a.	locative predicate	oblique/NP	'subject'/**NP**
	POSITIONAL-Abs	PREP ground	figure
b.	waxal-Ø	ta ti'-k'jk'	p'in
	vertical-Abs3p	PREP mouth-fire	pot
	'the pot is (standing vertical) by the fire'		

3.4.2. Positionals: explicit information about the figure

The semantics of the positionals are characterized by extensive conflation of different types of information about the figure, such as its shape, texture, size, disposition and manner in which it was put in that position, while the topological relation is left implicit. Below are some of the examples given on the variation in the expression of what appear in European languages to be the simple concepts of support 'on' and containment 'in':

(10) 'ON' in Tzeltal



a. pachal -of wide-mouthed container canonically 'sitting'

b.	waxal	-of tall oblong-shaped container or solid object canonically 'standing'
c.	pakal	-of blob with distinguishably flat surface lying 'face down'
d.	lechel	-of flat bottomed object lying on its flat surface
e.	chepel	-of a filled bag held from underneath
f.	mochol	-of an animate object lying in a ball on its side

The claim is that for a simple localization, the speaker must choose from a very large inventory of hundreds of positional roots, that are learned early and used frequently, in their multiple derived forms (locative predicates being only one of them) as will be discussed later. The particular derivation of positionals as locative predicates is by affixation of a –Vl suffix to the root, with accompanying vowel harmony, as in pach-al and xij-il above.

3.4.3. Positionals: examples of semantic granularity in other Mayan languages

The semantics of Mayan positionals has long attracted the attention of Mayan linguists. In what follows, examples from another closely related Mayan languages illustrates the notion of semantic granularity, with samples of positionals with posture semantics. The positionals of Tzotzil, a sister language of Tzeltal, given by Haviland (1992) from a search through data from Laughlin (1975), shows that out of an inventory of about 50 postural positionals, there are 16 positionals for the sitting position, with conflation of (a) configuration of legs, (b) permanence of the position, (c) detail of position with respect to ground, (d) spatial configuration of ground.

(11) sitting positionals of Tzotzil (Haviland 1992: 558)

a.	chot	'seated, sitting on bottom'
	jetz	'cross-legged, sitting with legs tucked under, flat to the ground'
	kej	'kneeling'
	xok'	'sitting on one's haunches, hunkered'
b.	tzub	'crouching (cat, rabbit, person), immobile'
	tzurn	'sitting huddled, idle'
	ju'	'seated on ground and unable to stand, sitting idly or feebly'
	juch'	'sitting unwilling to stand'
c.	koy	'sitting close to ground with legs spread apart, up'
	tiv	'squatting (person), crouching (cat, rabbit), standing with bent limbs sticking upwards'
	lub	'sitting (hen) crouched (cat, rabbit, person), low to the ground, flattened'
	len	'seated with "bottom" on the ground'
	petz	'sitting cross-legged or with legs tucked under, anchored or rooted to the ground'

d. lep 'seated on something elevated above the ground'
luch 'perched, protuberant (blister), on something elevated'
nak 'residing, dwelling, at home, seated permanently'

3.5. Conclusion

This quick tour of the variety of locative predicate systems in Amerindian languages focused on their inventories and their semantics to show interesting cases of semantic granularity and conflation of spatial features with other features common to many languages such as animacy and number. It was meant to point to the fact that languages may put emphasis on characteristics of the figure rather than be explicit and concise on its actual location, leaving the information of location to be inferred from the semantic and pragmatic context. This sample of data raises as many questions as it answers, pointing to interesting lines of inquiry to follow up, about the exact inventory of such systems, about the semantic analysis of those elements, about the number of types of systems to be counted, by what criteria, and about the place of such systems in the overall functioning of the language, in some cases alluded to and to be considered below. The purpose of this section was mainly an extension and a reworking of a typology of locative predicates originally proposed by members of the space project of the MPI.

3. Satellites in Basic Locative Constructions

The previous section considered the variety of lexical locative verbs constituted into morpho-syntactic systems of locative predicates in . This section will open up the question of constructions with locative satellites, based on the case study of yet another Mayan language. It will describe for this language, the extensive use of directionals on an existential copula, in contrast to the extensive use of positionals in the neighboring Tzeltalan languages considered above.

4.1. A field study of Basic Locative Constructions in Jakaltek Popti' (Mayan)

Considering the attention given to the use of positionals in Basic Locative Constructions in Tzeltalan languages, fieldwork was planned to duplicate the results with data from Jakaltek Popti', another neighboring Mayan language, but of the Q'anjob'alan branch of the family.[xii] Date were collected through a picture description task based on elicitation materials from the MPI-Nijmegen space project (Bowerman et al: 1996). Data collection took place during a special workshop on the subject at the local language academy and included the production of written descriptions by 18 native speakers, subsequently amplified by extensive (and at times very intense) discussions among and with those speakers.[xiii] The study produced overwhelming evidence of the actual very limited use of positionals as locative predicates in the Jakaltek Popti' language (of the order of the

pragmatically marked use of their equivalent in French, for instance), and of the omnipresence of an alternative strategy, a construction involving the use of directionals as satellites of an existential copula.

4.2. The existential copula

Jakaltek Popti' has an existential copula 'ay', used in different constructions, such as the existential, possessive and locative ones, as illustrated below. The examples of the copula 'ay' are taken from Craig (1977:19-21), and Craig (1983:27) but have been re-transcribed in today's official Mayan orthography:

(12) existential 'ay'[xiv]

a. ay anma yul konhob' mach skuy yuninal yinh
exist people in town NEG teach their children
ab'xub'al
in language
'there are people in town that do not teach their children the language'

b. kaw ay q'a'
much exist heat
'it is very hot'

(13) existential in possessive constructions

a. ay no' hin txitam
exist CL POSS1 pig
'I have a pig'

b. ay ha melyu?
Exist POSS2 money
'do you have money?'

(14) existential in locative constructions

a. ay-k'oj no' wakaxh pet san marcos
exist-DIR CL cow in San Marcos
'the cows are (across) in San Marcos'

b. ay-ik-toj no' mis yul te' kaxha
exist-DIR-DIR CL cat in CL chest
'the cat is (inside away) in the chest'

The use of the existential in exactly these three constructions is not a phenomenon particularly typologically noteworthy, as it is found in languages around the world. Its significance is in a comparison of languages of the same Mayan family, sharing the same categories of positionals and directionals, and opting for different strategies for their basic locative constructions.

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4.3. Inventory of Jakaltek-Popti' directionals

One of the characteristics of Jakaltek-Popti' is an elaborate system of directionals that includes three mutually exclusive sets of directionals suffixed to the predicate in the schema : PRED-DIR1-DIR2-DIR3. Craig (1994) gives a description of the basic functioning of these directionals and their use in discourse.
The lexical sources of these directionals are identifiable as motion verbs (for all directionals but one). Each set has distinct semantics:

- DIR3 is the set most commonly used, and has deictic semantics (away/toward), as determined from a chosen point of reference.
- DIR2 specifies one of two types of path information: either direction (up/down) or boundary crossing (in/out)
- DIR1 as a set tends toward aspectual meaning in most of its uses (from return: again; from stay: once and for all; from unidentified verbal source: suddenly)

	DIRECTIONALS		MOTION VERBS	
DIR 3				
	-toj[xv]	'away'	toyi	'to go'
	-tij	'toward'	tita	'come!' (defective IMP)
DIR2				
	-(a)h-	'up'	ahi	'to go up'
	-(a)y-	'down'	ayi	'to go down'
	(o/e/i)k-	'inward'	oki	'to enter'
	-(e/i)l-	'outward'	eli	'to exit'
	-(e/i)k'-	'across'	ek'i	'to cross'
DIR1				
	-pax-	'back, again'	paxi	'to return'
	-kan-	'still, for good'	kani	'to stay'
	-kanh-	'upward, suddenly'	?	?

Table 4. Inventory of Jakaltek Popti' directionals

4.4.Basic Locative Constructions in Jakaltek Popti'

The situations considered here correspond to cases of support (ON) and containment (IN) of the kind mentioned in the section on Tzeltal above.

Of the various possibilities to express the equivalent of ON in Jakaltek Popti', the examples below illustrate common combinations of existential and either the directional '-(i)k' to express situations of contact or the directionals ah+toj for situations of support:

(15) "ON" in Jakaltek Popti'

a. aykoj 'contact' <ay + (i)k +oj
exist+inward+intr

-said of : shoe on foot / ring on finger / snail on wall

b. ahatoj 'support' <ay +ah +to-oj
exist+up+away-intr
(with irregular morphophonemics)

-said of : spider on the ceiling / man on the roof /cup on the table

For situations of containment, the language is sensitive to the axis of insertion and distinguishes between objects inserted horizontally (-ik) or vertically downward (-ay), specifying in addition that the insertion is being considered has having placed the figure away (-toj):

(16) "IN" in Jakaltek Popti'

a. ayiktoj '(horizontal) insertion'
<ay +ik+to-oj
exist+in+away-intr

-said of : rabbit in cage / cigarette in mouth / earring in earlob

b. ahaytoj '(vertical)insertion'
<ay +ay +to-oj (with dissimilation morphophonemics)
exist+down+away-intr
-said of : apple in the bowl

In all the situations considered above, the deictic directional '–toj' 'away' indicated that the scene was considered from afar, looking at the figure being located. However, interesting cases of reverse orientation occurred, with the directional '–tij' 'toward' pointing toward the viewer, as in the following situations:

(17) ORIENTATION TOWARD in Jakaltek Popti'

a. ayiltij <ay +il +ti-oj
exist+out+ toward-intr

-said of : dog in doghouse looking out
cat under the table looking out

b. ahaytij <ay +ay +ti-oj
exist+down+toward-intr
(with dissimilation morphophonemics)

-said of : lamp hanging from the ceiling

Through the marked choice of the deictic directional –tij, 'toward' for satellite in a Basic Locative Construction, Jakaltek Popti' expresses, beyond the usual spatial notions involved in such constructions, a particular notion of force, such as the notion of an intentional look imputed by the viewer/speaker to the animals or that of the functional use of a lamp, meant

to project light. Such notion of force was introduced in the analysis of certain prepositions by Vandeloise (1986) and Herskovitz (1986).

4.5.Same morphological material, different basic locative constructions

The case of Basic Locative Constructions in Jakaltek Popti' was introduced for two reasons. One was to extend the study of locative predicates so as to include cases of directionals, which constitute a particular type of locative satellites, akin to English verbal particles but of distinct lexical origins and more grammaticalized use in such constructions. This Jakaltek Popti' system of directionals happens to be particularly developed and grammaticalized in comparison to similar systems of other Mayan languages (such as Tzeltal or Tzotzil). The other point was to underline how languages of the same family may share morphological material, in this case the categories of positionals (specific to the Mayan family of languages and which Jakaltek certainly possesses) and of directionals (developed in both Tzeltalan and Q'anjob'alan languages), but may appeal to one or the other material to build their basic locative constructions. The phenomenon of positionals in the Tzeltalan branch of the family (Tzeltal, Tzotzil) with its emphasis on the characteristics of the spatial entity-figure is therefore to be contrasted to the alternative use in the Q'anjob'alan languages of directional satellites, tracing lines of path in space from a standpoint to a point in space of a neutral figure.[xvi] How to contextualize such different choices made by otherwise close languages is partly what the next section is about.

5. BEYOND BASIC LOCATIVE CONSTRUCTION.

A comprehensive description of the make-up of a Basic Locative Construction should include situating this construction in the grammar of the language in general, by exploring where else the same morphological material is found, and for what purpose. This section will therefore reconsider the systems presented earlier to situate them in their respective grammars. It will first consider, briefly, the common extension of posture verbs into the grammar of Chibchan languages like Teribe and Kuna, and will explore later the place of positionals and directionals in the Tzeltalan and Q'anjob'alan Mayan languages.

5.1. POSTURE VERBS in grammar and discourse

> Beyond Basic Locative Constructions, which are, after all, rather infrequent in natural discourse as such, posture verbs happen to be in fact much more frequently used in discourse in other constructions. They can appear in expression of motion events, whether in serialized constructions or as satellites of motion verbs, for instance, at different stages of grammaticalization. They can also further undergo metaphorical extensions, and be used beyond motion events, to mark aspectual notions, such as the relatively well documented cases of posture morphemes expressing progressive or habitual, for instance.[xvii] Cases of

grammaticalization of posture verbs will be illustrated with examples from two Chibchan languages of Central America, Teribe and Kuna.

5.1.1. Serialized posture verbs in Teribe (Chibcha)

Posture verbs are found serialized in constructions for complex events in this Chibchan language (Quesada 2000) in which verbs of action combine with posture verbs expressing associated or resultative positions of the figure, as shown below:

(18) a. bor kégue Toño jem shäng bebi
1poss uncle Toño go.up standing too
'my uncle Toño was going(standing) too'

b. domer jem tye pang jeklo go shko
man go.up climb hanging ladder with of
'the man is climbing up(hanging) with the ladder'

c. tawa shwlin zrö-no buk/*shäng
1pl.exc deer kill-PERF lying/*standing
'we killed the deer lying'

5.1.2. Posture satellites of Kuna (Chibcha)

The data come from one of the earlier extensive studies of Native Amerindian discourse by Sherzer (1990, 1995), in which he emphasizes how some aspects of the grammar express some specific traits of the Kuna culture. One of his areas of demonstration of such a link between culture and grammar is precisely that of the extensive use of posture verbs as verbal suffixes. The Kuna language has four posture verbs (with an inventory reminiscent of the Sikuani system seen in section 3.2.2 above), two of which interestingly involve positions in hammocks:

(19) -kwici 'standing'
-sii 'sitting'
-mai 'lying, in a horizontal position, as in a hammock'
-nai 'in a perched or hanging position, when in a hammock the feet are barely touching the ground)

These posture verbs have given rise to four posture verbal suffixes extensively used in discourse. There is a routine association of actions with posture, such as the action of speaking that can be performed in any of the four body postures, but with different cultural connotations. As described by Sherzer (1990:71): "Kuna chiefs perform chants from a perched or hanging position in their hammocks, located in the center of the public gathering house. Only chiefs are permitted to sit or lie in these hammocks and in fact being in a hammock is both a symbolic and a literal expression and manifestation of being a chief. When a chief speaks (rather than chants) he may do so either from the hammock or standing. When standing, he

assumes the same position as the chiefs' spokesman, who always stands when speaking".

Such associations are illustrated by the following examples gleaned from texts:

(20) a. sucu tulakan se pattemai
the butterfly people land on it
'[literally: land in horizontal position on it]'

b. akkwaser namaynai
the spider is chanting
[literally: chanting-in a hanging, perched position]'

c. we sayla pialit sunmakkwici we?
that chief speaking, where is he from?
'[literally: speaking-standing]'

d. emit an ittosii
now he is listening to me
[literally: listening-sitting]'

The use of posture suffixes pervades Kuna discourse and is involved in metaphorical extensions, of the kind discussed further by Sherzer. In the course of analyzing the narrative style of a text recorded from one of the native Kuna orators, Sherzer explains how, in Kuna, "the captain of a boat is like a chief, trying to keep the boat moving along, always in danger of bumping into something. A boat is a conventional Kuna metaphor for hammock which in turn represents the role of chief. [The narrator]thus relates boats, hammocks, and chiefs in his various narratives". Recalling how "two of the suffixes, -mai 'lying' and -nai 'hanging', refer to positions in the hammock, and, by association, to the positions chiefs take in their hammocks in the center of the gathering house, Sherzer further notes that "the positionals, which all by themselves can be metaphors -mai, -nai (chiefs); -kwici (chiefs, chiefs' spokesmen); -sii (chiefs' spokesmen, ritual leaders, ordinary villagers), are furthermore associated with and sharpen other metaphors. When trees are -kwici 'standing', they are like chiefs or spokesmen speaking; when they are -sii 'sitting', they are like village leaders sitting on benches in the center of the gathering house. When animals are -nai 'hanging', they are like chiefs chanting in their hammocks." (Sherzer 1990:79).

It is therefore essential when talking of posture verbs of Basic Locative Constructions in a language like Kuna to pay attention to their much more extensive discursive use as satellites in the expression of complex events, and to recognize how they convey cultural specific norms.[xviii]

5.2. About positionals in Tzeltalan (Mayan) languages

The use of positionals as locative predicates of Tzeltalan Basic Locative Constructions is to be understood in the wider context of a pervasive use in this language of positional roots. The centrality of the phenomenon of

positionals in the grammar of that language can be demonstrated from both a semantic and a morphological perspective.

5.2.1. Very large inventory and rich semantics

The positional roots are counted in the hundreds, and as illustrated with the few examples expressing support and containment in examples (9) and (10) of section 3.4.2. above, their semantics conflate detailed notions of posture, texture, orientation, dimension, etc. They are part of the core vocabulary of the language and turn out to be among the first types of words learned by children (de León 2001).

5.2.2. Positionals as a distinct and very productive root class

Positional roots are one of the characteristics of the family of Mayan languages. They constitute a category of roots of their own, distinct from those of nouns and verb (transitive and intransitive) roots, and are identified by their own derivational morphology, in a language very rich in derivational morphology. They are bound roots at the heart of extensive derivational possibilities, as illustrated with Tzeltal examples of derivations with the root of standing position, from Monod-Becquelin (1997):

(21)	a.	Positional root	tek'	in standing position
	b.	Adj. predicate	tek'-el	standing
	c.	Intransitive verb	tek'-ah	to stand up
	d.	transitive verb	tek'-an	to stand X up

(21.b) is the form found in Basic Locative Constructions, as adjectival predicate, (22c) is an intransitive inchoative, while (21d) is a transitive causative verb. [xix]

The existence of an extensive system of numeral classifiers in Tzeltal further multiplies the opportunities of using positional roots in discourse, since numeral classifiers can be derived from the hundreds of positional roots. Berlin (1968), a classic study of the Tzeltal numeral classifier system provides detailed analysis of the semantics of the numeral classifiers with ample photographic illustrations, while Laughlin's dictionary of Tzotzil (1975), one of the largest Amerindian dictionaries still to date, also contains an extensive inventory of positional roots and numeral classifiers derived from them.

5.2.3. Omnipresence of positionals in Tzetalan languages

The point is that the Tzeltalan languages have maximized the use of their positional roots. They are indeed found in the locative predicates of Basic Locative Constructions, but they are in fact extensively used in the language, through a very productive derivational system, as numeral classifiers and verbs, intransitive and transitive. Such frequent use of positional roots therefore directs the attention in that language systematically to spatial and other physical characteristics of the entities talked about, such as the figure of a basic locative construction.

Interestingly, as will be seen next, neighboring Mayan languages such as Jakaltek Popti', although they possess the same positional roots, do not exploit them as extensively, and give preference to spatial information about path and trajectory instead.

5.3. About directionals in Q'anjob'alan (Mayan) languages

In contrast to the omnipresence of position roots in the Tzeltalan languages just noted, the Q'anjob'alan Jakaltek Popti' language seems to have turned to the intensive exploitation of its motion verbs by grammaticalizing them into directionals. In fact the use of directionals noted in Basic Locative Constructions in this language would seem to result from a secondary development in a chain of grammaticalization of motion verbs in the language. From an earlier stage of serialization of motion verbs not evidenced in Jakaltek Popti' but present in other Q'anjob'alan languages (as demonstrated in Zavala 1993) Jakaltek Popti' has developed further an extensive system of directional verbal suffixes used pervasively in the language, with the semantics of abstract path not linked any more to any notion of movement.

5.3.1. ABC of Jakaltek-Popti' grammar

Two of the main characteristics of the Jakaltek Popti' language are its directional system and its noun classifier system. The inventory and lexical origin of the system of directionals already introduced in Table 4 above has been described in Craig (1994) and will be considered further below. The noun classifier system has been described for its semantics (essentially material rather than shape or function) in Craig (1986) and for its high degree of grammaticalization (its use as determiner of referentiality and as proform) in Craig (1987). The language makes very little use of the type of numeral classifier system that has developed in other branches of the family, such as the Tzeltalan one just considered, and uses instead a very small and very grammaticalized number system (akin to a gender system, with only three suffixes for human, animal and inanimate). Positionals are used relatively sparingly, in pragmatically marked circumstances.

The characteristics of Jakaltek Popti' (VSO word order, directionals, noun classifiers and number classes) are all found in the following example:

(22) a. xsmujkanaytoj heb' naj naj 'they buried him'
VERB SUBJECT OBJECT

b. x-Ø-s-muj-kan-ay-to-oj heb' naj naj
Asp-A3-E3-bury-DIR1-DIR2-DIR3-suff# Pl/human CL/man CL/man
'they buried him (once and for all+down+away)'

5.3.2. Jakaltek-Popti' directional basics

As already shown, these directionals are grammaticalized motion verbs of clear lexical origin organized in three distinct sets (DIR1, DIR2, DIR3), which are semantically distinct and arranged in fixed order (which is not the case of directionals in Tzeltalan languages, for instance). Their high

frequency of use in natural discourse is reminiscent of the frequency of use of posture suffixes in Kuna, with clear cases of lexicalized directionals in dictionary citations, and extensive use in metaphors of cultural relevance. Jakaltek Popti' directionals can also be shown to have evolved to express an abstract notion of trajectory traced in space, without any movement of spatial entities, as evidenced in their use with non-motion verbs, such as perception or locution verbs, as illustrated below:

(23) a. xil-ah-toj naj tet ix
saw-DIR2-DIR3 CL/he to CL/her
'he saw her (up) (away)'

b. xil-ay-tij ix
saw-DIR2-DIR3 CL/she
'she saw him (down) (toward)'

(24) a. xtiyoxhli-ah-tij naj tet ix
saluted-DIR2-DIR3 CL/he to CL/her
'he said hello (up+towards) to her'

b. xta'wi-ay-toj ix tet naj
responded-DIR2-DIR3. CL/she to CL/him
'she answered him (down+away)'

Note in these examples the perspectivizing use of the last directional, -toj 'away' or –tij 'toward' indicating the point of reference from which the scene is to be conceived, like a camera point of view. In (23a). the scene is viewed from the man down in the street looking ('away' –toj) at his lady friend up at the window; who in (23b) looks back down at him, seen from his standpoint (hence, -tij). In (24a.) the scene is viewed from behind the woman, so that when the man addresses the woman it is 'toward' her (-tij), and when she answers back to him, it is 'away' (-toj). It is precisely the same mental calculation of path that was found in the use of the directionals in BLC in section 4.4. above, including the interesting use of –tij commented upon with example (17), of the cat looking out from under the table, with the path of vision being conceived from the point of view of the viewer. The use of directionals in Basic Locative Constructions in Q'anjob'alan Jakaltek Popti' needs therefore to be contextualized and recognized as one of the many uses of the omnipresent directionals, underlining the saliency of path information in that language. It is thefore to be put in contrast with the strategic choice of spatial positional semantics made instead by the neighboring Tzeltalan languages.

5.3.2. On the distributedness of spatial information: path directionals and static Relational Nouns

The discussion of directionals in Jakaltek Popti' could extend further to the question of how spatial information is distributed across constructions in this language. As was already mentioned, Mayan languages have few spatial prepositions (none actually in the case of Tzeltal), and a few relational nouns functioning as complex adpositions.[xx]

It is interesting to note therefore how, in a language like Jakaltek Popti', the precise use of several directionals to specify path information contrasts with the permanently static semantics of the adpositional (relational noun) element, which indicates either the end point position of the motion or its point of origin. Such an interesting distribution of spatial semantics, between path directionals and static relation nouns is illustrated in the examples below:

(25) a. xkin hateniktoj yul karo
xk-in ha-ten-ik-toj y-ul karo
Asp-A1 E2-move-DIR2-DIR3 E3-RN truck
Lit: you moved me in+away in the truck
'you pushed me into the truck'

b. xkin hateniltij yul karo
xk-in ha-ten-il-tij y-ul karo
Asp-A1 E2-move-DIR2-DIR3 E3-RN truck
Lit: you moved me out +toward in the truck
'You pulled me out of the truck'

The distribution of space information in English is between a conflation of directionality with motion in a contrastive pair of verbs 'push/pull' and complex prepositions expressing boundary crossing and either goal or starting point of the motion (INTO/OUT OF). In contrast, Jakaltek-Popti' has a spatially neutral verb 'move', with all the path information concentrated in the sets of directionals; in addition, the relational noun serving as adposition indicates uniquely the functional spatial relation between a figure and a ground, independent of whether this relation is found at the origin or the end point of the displacement, leaving the directionals to provide all the motion information. Directionals are therefore salient in that language, by their information load and their omnipresence in discourse, and their presence in basic locative constructions is but one instance of their frequent use.

CONCLUSIONS

This paper has considered the variety of locative predicates of Basic Locative Constructions on the basis of data from Amerindian languages. It has introduced the idea of more of a continuum than strictly categorial distinctions of locative predicate types, allowing for intermediate types of systems between a simple posture verb system and a very large positional system. It has extended the study of Basic Locative Constructions from locative verbs to the possibility of locative satellites, taking the case of directionals of verbal origin of some Mayan language as a case in point, always keeping in view the process of grammaticalization that can produce such systems. It has argued finally for the value of looking beyond the basic locative construction to explore the links between the morphological material used in such a construction with the rest of the grammar of the language, considering, on one hand, the issue of posture verbs turning into

satellites of event verbs and, on the other, the origins of directional satellites of basic locative construction.

It has been emphasized at every step how languages make specific choices of strategies, even with shared basic morphological material, and how this leads to the specific highlighting of one type of spatial information or another, by specifying either the contour or position of the figure through posture verbs and positionals, or path information through directionals. Such contrastive choices of saliency of one aspect or another of spatial information are probably good candidates for testing how the structure of language can induce different ways of thinking for speaking (Slobin 1991). And although nothing much was said here of the interweaving of locative predicates with nominal classification systems through the grammar of some of the languages considered, this should also be a rich area to explore further.

The closing remark will be that much remains to be done to describe adequately this type of construction in all the dimensions suggested here, and to place the study of its components in their proper grammar and discourse context, in particular for the majority of the languages of the Americas. Those languages have certainly already proven to be very informative for typological discussions as a whole, but it is probably worth saying once again how the majority of them stand to disappear in the near future and how their description and documentation is urgent. It is from a certain sense of urgency and from the familiarity with the enormous descriptive task that remains that the approach taken here talks of a descriptive strategy to handle such systems, as an invitation to more comprehensive descriptions of the linguistics of Basic Locative Constructions that will enrich a typology of such constructions.

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[i] This paper is an updated version of the talk originally given at the 2002 conference. It is part of a series of papers on the same topic of a typological approach to the expression of space in Amerindian languages which includes: Grinevald in press (a shorter version in French of this paper), to appear a. (on spatial information about spatial entities in nominal classification systems), to appear b. (a case of "distributedness" of information between directionals and relational nouns (equivalent of adpositions) in a Mayan language). It has benefitted from discussions with linguists working on native languages of America (in particular on the occasion of two seminars on the topic at the INAH of Mexico), and with other fellow linguists, among whom I would like to thank in particular Anetta Kopečka for fruitful interchanges.

[ii] The immersion in functional-typological grammar being connected to a first career under the name of Craig at the University of Oregon, as colleague of Givón and DeLancey, among others ; and the interest in space in Mayan languages having been sparked also early on by association with the fellow Mayanists that initiated the research program on space at the Max Planck Institute for Psycholinguistics of Nijmegen (in particular Haviland and de León, Levinson and Brown).

[iii] The expression "spatial entities" used for concrete entities and objects with spatial dimensions and contours is taken from Aurnague's writings (see Aurnague 1996, 2001, and Aurnague, Hickmann and Vieu, to appear).

[iv]Excluding from consideration at this point, as pragmatically more marked, the use of other verbs of location such as *encontrarse* 'to be found'*, situarse* 'to be situated' or the use of *ser* 'to be' with locative expression in some essentially non-localizing context.

[v] See for instance recent work by Lemmens (2002) on Dutch posture verbs.

[vi] More crucially Grinevald (2003) and Grinevald and Seifart (2004) pay closer attention to the many variables that must be taken into account to fully describe such systems (those of vitality, productivity, age and specifically that of the level of grammaticalization of the system), pointing away from the hope of a simple categorical typology and towards a characterization of the specifics of particular systems in a multidimensional approach showing the interweaving of such variables, allowing for astonishing variation across close languages and dialects of the same language. Aikhenvald (2000) is a mine of information on classifying systems of the world, with its own way of organizing such data that only partially overlaps with that of the references given above.

[vii] This needs to be said still in France where the author has encountered manifestations of a lingering posture among some field linguists that descriptions must be done free of interference from any outside framework or theory, and that the work of typology per se comes later (as per on going discussions with Gilber Lazare, for instance, but also with Africanist colleagues who still promote this attitude, particularly in their teaching). Posture to which is opposed here the one of back and forth dynamics in which data collection and analysis are informed by and inform in return the developments of general linguistics, particularly of typological studies.

[viii] One can note that in French for instance, certain verbs of attachment with pseudo-postural meaning (such as *attaché à* 'attached to', *collé à* 'glued to') are much more frequently used (particularly in written mode) than standard postural ones.

[ix] In addition to humans in hammocks, the posture applies to objects and animals hanging, in particular to all objects of daily use, such as tools, instruments and clothes as well as food, all hung on the walls of the shelters to store them and have them out of reach of animals. Tables, chairs, beds, shelves are not found in traditional houses of the Amazonian region.

[x] The inventory includes also an interesting concave feature that is reminiscent of the shape of the suspended (in a hammock) posture. Translations for certain elements of Amerindian

languages must always be taken with some caution, as they are often reinterpretable; this can happen with the translation of some of the posture verbs, for instance, particularly the fourth one introduced, labelled here "hanging" but often labelled otherwise in descriptions. See for instance the case of the inventory of Trumai according to Guirardello-Damian (2002:142) that talks of stand, sit, lie, plus a fourth that could be the hanging one but for which she gives the translation "lie/be lying in a place that is not the floor/ground (earth)". Interestingly, this language has two more posture, that she labels 'be in a closed place', and 'be in a liquid medium'.

[xi] This set of locative predicates is said to also be used with verbs of handling (or caused motion). It therefore belongs to the wider phenomenon discussed in the North Amerindian literature under the label of classificatory verbs, encountered in locative, possessive and caused motion constructions.

[xii] Fieldwork took place in the summer of 2002 and was financed by the same GDR on Space that is at the origin of this conference and publication .

[xiii] The Jakaltek Popti' language academy is one of 21 Mayan language academies involved in efforts at language maintenance and language standardization, as part of a vast Mayan movement in Guatemala today (see Grinevald 2002). Discussions therefore went beyond a simple collection of data (data riddled, of course, with variation), and involved the speakers' own concern for defining the kind of "norm" they might propose in the pedagogically oriented materials they plan to produce themselves.

[xiv] The copula is tense/aspectless and inflects for its subject with an absolutive marker, which happens to be Ø for third person.

[xv] The forms –toj and –tij are in fact bi-morphemic, composed of the directional and an intransitive verb final suffix -oj. By regular morphophonemic rules, -to+oj >-toj and –ti+oj >-tij.

[xvi] The very limited use of positionals in that particular Mayan language was widely shared among speakers: the only case of unanimous use of a positional in the set of situations considered was that of the ladder said to be "leaning" on the wall.

[xvii] Examples of extension of posture verbs to progressive and habitual aspects markers from languages of Africa, Australia, and America are given in Newman's introduction (2002).

[xviii] See Enfield's (2002) study of associated posture construction in Lao, for instance, for another example of traces of cultural norms in the grammar of a language.

[xix] Brown (1994) actually regroups various types of roots into a larger category of DISPOSITIONALS. They include the positional roots (-Vl) themselves, the bivalent roots positional/transitive (-VL or b'il 'resultative') and transitive roots or transitive stems derived from positionals.

[xx] They tend to have, sets of so-called "relational nouns" instead, which are like complex prepositions of clear lexical origin and at different grammaticalized stages. de León (1992) is a detailed study of the grammaticalization process of relational nouns in Tzotzil, another Mayan language (sister language of Tzeltal). The expression "relational nouns" may further be a misnomer, since the lexical origin of some of theses adpositional elements can actually be verbal.