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Motion events in Seri: Applying Talmy's typologies

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MOTION EVENTS IN SERI: APPLYING TALMY'S TYPOLOGIES

by

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Bachelor of Arts, Eastern Mennonite University, 2004

A Thesis
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of the

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ABBREVIATIONS AND SYMBOLS

Term	Meaning
*	In free translations: ungrammatical. In some of the texts, this symbol was used to gloss three Seri forms (<i>x</i> , <i>xah</i> , and <i>oo</i>) that were difficult to provide word glosses for; their meanings are not relevant to this thesis.
√	This symbol precedes a verb root (or stem, where specified).
†	The free translations appearing with this symbol were altered by the author of this thesis.
1P	1st person
1SgS	1st person singular subject
2P	2nd person
2SgS	2nd person singular subject
3:3	3rd person subject with 3rd person direct object
3IO	3rd person oblique/indirect object
3P	3rd person
Abs	Absolute
Atten	Attenuator
Aux	Auxiliary: Several different auxiliaries occur in the Seri glosses, all marked Aux. These affect mood and tense and their meanings are not relevant to this thesis.
Aw	Andative prefix <i>nt-</i>
BE _{LOC}	Mnemonic for the location portion of Motion
Cm	Compact
Decl	Declarative
DI	Delimiter
Dp	Dependent
DS	Different subject
Dt	Distal
Em	Emphatic
Fl	Flexible
Foc	Focus

Hz	Horizontal
Id	Independent
Im	Imperative
Impf	Imperfective
Interr	Interrogative
Intns	Intensifier
Ir	Irrealis
Lc	Location
Lq	Liquid
Md	Medial
MOVE	Mnemonic for the directed motion portion of Motion
N	Negative
Pl/pl.	Plural
Px	Proximal
QM	Question modal
Rl	Realis
SN	Subject nominalizer
Tr	Transitive
Twd	Venitive prefix (<i>mo-</i>)
UT	Unspecified time
Vt	Vertical

ABSTRACT

Leonard Talmy's typologies of motion hypothesize that in a language's depiction of Motion events, the semantic components of the event will find characteristic expression in consistent morphosyntactic structures. In the motion-actuating typology, the main verb in an event of Motion will characteristically conflate Motion with either the Path, Figure, or Manner of Motion. In the motion-framing typology, the Path component will characteristically appear in either the verb or the satellite to the verb. These typologies, proposed in their most cited forms in Talmy (1985) and Talmy (1991), have been applied over the years to dozens of languages, with varying degrees of success. Various researchers, notably Jon Aske and Dan Slobin, have proposed solutions to problems they perceived in the typologies.

In this thesis, an analysis of the Motion events of Seri (a language of the Mexican state of Sonora) was conducted based on publicly available texts. Seri has a split system of conflation in the motion-actuating typology, with Path, Figure, and Manner verbs used in different types of Motion events; the use of Path verbs seems to be the most characteristic. Under Talmy's criteria, the motion-framing type remains undetermined, but investigation using further guidelines reveals that Seri appears to be verb-framed.

During the course of this analysis, however, a number of difficulties were encountered in the application of the typologies. First, the definition and diagnosis of a Motion event (and therefore of Motion verbs) was unclear. Second, the identification of satellites was complicated by the imprecise nature of that category. Third, the semantic components of a given morpheme were often impossible to identify outside of a construction. Therefore, and

because of the inherent limitations of the typologies, a certain amount of caution is advised in their application, and several more interesting questions are proposed for the further exploration of the treatment of Motion in language.

CHAPTER 1

THE MOTION EVENT TYPOLOGIES

1.1 Overview of Talmy's Work

In 1972, after spending a number of summers doing field work in northern California studying Atsugewi, Leonard Talmy completed his dissertation: "Semantic structures in English and Atsugewi" (Talmy 1972). This lengthy document contained the seeds for what would become one of Talmy's major contributions to linguistics, a typology of motion event structures.

Talmy published numerous articles following the dissertation, some of them with a focus on motion, but it was not really until 1985, with the publication of "Lexicalization Patterns" (Talmy 1985) in Timothy Shopen's third volume on language typology, that Talmy's ideas began to attract widespread attention and be explored by other linguists. In 1989, a paper by Jon Aske (Aske 1989) made some suggestions about an aspect of the typology, and the discussion had begun.

In 1991 Talmy published his second groundbreaking paper on motion events (Talmy 1991), outlining an alternative typology with a basis in cognitive linguistics, while simultaneously a number of other scholars were also doing work with motion events and cognition (Olsen 1991; Choi and Bowerman 1991; Slobin 1991; Levin and Rappaport Hovav 1992). It became clear that Talmy's typologies were worth exploring, and these papers were followed by an abundance of others from a variety of scholars applying the typology from

their own perspectives, most making suggestions of one kind or another based on their findings.¹

In 2000, Talmy, whose contributions to the general field of cognitive linguistics have also been significant, published the two-volume work “Toward a cognitive semantics” (Talmy 2000a, 2000b) in which he included many of his previous articles, often with significant alterations. Both the 1985 and 1991 articles are included, and incorporate numerous changes and improvements as a result of the work done on motion events over the past decades.

Nevertheless, some scholars (Matsumoto 2003; Narasimhan 2003; Slobin 2004a; Zlatev and Yangklang 2004) are still unsatisfied with the typologies as they stand, and have made further proposals for improvement. It continues to be necessary to apply the typology to different languages to clarify the ways in which the existing typology is and is not adequate.

This thesis proposes to take a close look at the Seri language of northern Mexico with regards to Talmy’s motion typologies. First, it will attempt to provide a clear presentation of Talmy’s typologies and the difficulties one might encounter during their application. Then it will seek to classify the Seri language based on both typologies (1985 and 1991), highlighting the ways in which the typology is illuminating or inadequate. It will also look at the work of other scholars, measuring their proposals for the modification of the typology against what is found to be true of Seri. Furthermore, it will make any further suggestions for modifications felt to be necessary to adequately describe Seri’s expression of motion events.

¹ The list is long, but includes: (Ibarretxe-Antuñano 2004; Özçalışkan and Slobin 2003; Slobin 1996a; Naigles et al. 1998; Kita 1999; Slobin and Hoiting 1994; Matsumoto 1996; Tsujimura 2002; Ibarretxe-Antuñano 2003; Matsumoto 2003; Narasimhan 2003; Zlatev and Yangklang 2004; Velázquez-Castillo 2004).

1.2 The Motion Event

Talmy defines a “Motion event” (capital M) as it pertains to both motion and location. It has four semantic components:

“The basic Motion event consists of one object (the **Figure**) moving or located with respect to another object (the reference object or **Ground**). It is analyzed as having four components: besides **Figure** and **Ground**, there are **Path** and **Motion**.” (Talmy 2000b:25)

The component of Motion refers specifically to the occurrence or nonoccurrence of translational motion. Talmy defines translational motion as “motion in which the location of the Figure changes in the time period under consideration,” or a shift in “an object’s basic location ... from one point to another in space.” This excludes “self-contained motion” such as “rotation, oscillation or dilation” in which “an object keeps its same basic, or ‘average,’ location” (Talmy 2000b:25, 35). This thesis will follow authors like Slobin (see Slobin 2004a) in using the term “directed motion” in place of “translational motion”.

This thesis will use Talmy’s convention of capitalizing “Motion” when it refers specifically to the occurrence or nonoccurrence of directed motion, and using uncapitalized “motion” when it refers to any actual movement. The motion portion of Motion is represented as “MOVE”; the location portion is “BE_{LOC}”. The other components of a Motion event will also be capitalized.

Figure and Ground occur in relationship, and Path describes the relationship between them.

“The Figure is a moving or conceptually movable entity whose path, site, or orientation is conceived as a variable, the particular value of which is the relevant issue.

“The Ground is a reference entity, one that has a stationary setting relative to a reference frame, with respect to which the Figure’s path, site, or orientation is characterized.” (Talmy 2000a:312)

“Path” can refer to either the “path followed or the site occupied by the Figure object with respect to the Ground object” (Talmy 2000b:25)—that is, it can describe either a moving or stationary relationship.

The following sentence will serve to illustrate these four components.

- (1) *The man* *went* *out of* *the house.*
 Figure Motion (MOVE) Path Ground

This example involves a Figure (‘the man’) moving with respect to (‘out of’) a Ground (‘the house’).

A similar sentence illustrates a locative variation of this event.

- (2) *The man* *was* *in* *the house.*
 Figure Motion (BE_{LOC}) Path Ground

In this sentence, the Figure (‘the man’) is located with respect to (‘in’) a Ground (‘the house’). According to Talmy’s definition, this is a Motion event because it describes the **nonoccurrence** of directed motion; in other words, since the fact of non-motion (location) is relevant to the meaning of the sentence, this sentence describes a Motion event.

Of course, not every sentence is so neatly divisible into the four components (and, in fact, the four components need not all be explicitly expressed in every sentence describing a Motion event). Two (or more) semantic components can be expressed in one lexical unit, or—as seen in (1) above, two lexical units (‘out of’) can express one semantic component. Talmy refers to the former phenomenon (multiple semantic components expressed in one lexical component, or morpheme) as “conflation.” An example of this would be a sentence like (3) below, in which Motion and Path are expressed in one morpheme, ‘exit’.

- (3) *The man* *exited* *the house.*
 Figure Motion (MOVE) + Path ('out of') Ground

Talmy assumes that, in general, “where a particular meaning component is found to be in regular association with a particular morpheme” the process associating them is “lexicalization” (Talmy 2000b:24).²

To reiterate, every Motion event, by definition, comprises the four components discussed above, whether these four components are explicitly present or merely inferable. In (4), there is no explicit Ground; nevertheless, we can infer its existence and even guess that it is a container of some type.

- (4) *The man* *exited.*
 Figure Motion (MOVE) + Path ('out of')

1.3 Co-events

A Motion event, in addition to its four components, can optionally have an associated Co-event (also called a subordinate event). The Co-event is an event, concurrent with the Motion event, that “performs functions of support in relation to the [Motion] event. ... [It] can be seen to fill in, elaborate, add to, or motivate the [Motion] event” (Talmy 2000b:220), and most commonly the relation to the Motion event is that of Manner or Cause.³

To find a formal definition of Manner, one must look beyond Talmy’s original discussion of Motion events, where it is not defined directly. However, he offers this definition in the second chapter of Volume II of TCS:

² An alternative explanation would be that it is a process of semantic interpretation “based on present context and general knowledge” (Talmy 2000b:24) that supplies one of the components. This explanation is not very plausible with example (3), but looks more likely with a sentence such as “The bottle floated out of the cave,” where ‘float’ is not normally a motion verb (the default interpretation of “the bottle floated” would not include motion).

³ Other possible relations are Precursion, Enablement, Concomitance, and Subsequence (Talmy 2000b:28).

“Manner refers to a subsidiary action or state that a Patient manifests concurrently with its main action or state.” (Talmy 2000b:152)

So, for instance, the common English Manner verb ‘run’ would have a main action of directed motion, with a subsidiary action (or Manner) of leaping successively from one leg to the other; see example (5).⁴

(5) *The man* *ran* *out of* *the house.*
 Figure Motion (MOVE) + Manner (‘run’) Path (‘out of’) Ground

Other common English Manner verbs are ‘walk,’ ‘fly,’ and ‘swim’.

The definition for “Cause”, also not in the original discussion, is found with that of “Manner.”

“[Cause] refers to the qualitatively different kinds of causing events such as can be expressed by an English subordinate *from-* or *by-*clause. It is distinguished from causativity ... which corresponds to a superordinate clause of the type ‘NP CAUSES S.’” (Talmy 2000b:152)

One example Talmy (2000b:30) gives for Cause as a Co-event is “blow”, as in “The napkin blew off the table,” meaning ‘move from (due to) the wind blowing on [it]’ (example (6)).

(6) *The napkin* *blew* *off* *the table.*
 Figure Motion (MOVE) + Path (‘off’) Ground
 Cause (‘from the wind blowing on [it]’)

Manner and Cause are distinguished from each other by “whether the verb’s basic reference is to what the Figure does or to what the Agent or Instrument does” (2000b:28). In the case of the napkin blowing off the table, the verb refers to the wind acting upon the napkin, not to the napkin (Figure).

⁴ This description is not entirely satisfactory, however, since it ignores the circumstance of running in place. In that circumstance, Talmy might say that the main action is the “being located” in one place, but somehow “location” is not as compelling as “directed motion” in the role of the main action. See section 2.1 for further discussion of this issue.

1.4 Two Typologies

Equipped with the components of a Motion event and its possible Co-Events, we can proceed to discuss how these components manifest themselves in a given language. Talmy proposes to look at the issue in two ways. The first way, known as his “motion-actuating” typology, looks at which components are expressed in the main verb of a given language. The second, “motion-framing”, typology takes one component (Path) and seeks to determine the lexical component it is typically expressed in. Thus, the first typology’s focus is on a syntactic element, while the second focuses on a semantic component.⁵

1.4.1 *Motion-actuating*

In the motion-actuating typology, presented in its most widely-read form in Talmy (1985), the focus is on the root of the main verb in a sentence describing a Motion event. The typology seeks to classify languages based on which components of a Motion event characteristically manifest themselves in that verb root, where “characteristic” means colloquial in style, frequent in occurrence, and pervasive (expressing a wide range of semantic notions).

There are a number of possible patterns. Talmy’s assumption is that the component of Motion is always lexicalized in the main verb of a motion event,⁶ and that languages can be classified based on which additional components (Figure, Path, Ground, Co-Event) are also present (conflated) in the verb. (This typology takes its name from the “actuating” properties of the component(s) combined with Motion in the verb (Ibarretxe-Antuñano 2005).) This could result in four types (if two components are conflated in any a given verb—but there are

⁵ The terminology (motion-actuating and motion-framing) for the two typologies is taken from a published interview with Talmy (Ibarretxe-Antuñano 2005).

⁶ Whether this is a valid assumption will later be a matter of discussion.

other possibilities); however, in practice Talmy finds that there are only three main types: Motion + Figure, Motion + Path, and Motion + Co-Event (Talmy 2000b:60).

1.4.1.1 *Motion + Figure*

In the Motion + Figure type, the verb root expresses “the fact of Motion together with the Figure” (Talmy 2000b:57). Languages of this type have a system of verbs that “express various kinds of objects or materials as moving or located.” Talmy (2000b:57) gives the English example of ‘(to) rain’, referring to rain moving, as in (7):

(7) *It rained in through the bedroom window.*

One language for which this pattern is characteristic is Atsugewi, a Hokan language of northern California. It includes verb roots meaning such things as “for a small shiny spherical object to move/be-located” and “for a limp linear object suspended by one end to move/be-located”. These verb roots and many others form an extensive and pervasive system in Atsugewi. Other languages of this type include most northern Hokan languages and Navajo. Of the three main types, this is the least common.

1.4.1.2 *Motion + Path*

In the pattern Motion + Path, the verb root expresses the fact of Motion plus Path. Languages of this type have a system of verbs expressing motion along various paths. Talmy claims that languages of this type include the Romance languages, along with Japanese, Korean, and Turkish, and many others. In Spanish, for instance, a system of verb expresses a wide range of paths: in, out, by, through, up, down, away, back, around, across, along, about, together, apart—and so on.

(8) *La botella entró a la cueva.*
the bottle MOVED-in to the cave
‘The bottle entered the cave.’ (Talmy 2000b:49)

Once we know that a language typically combines Motion and Path, we can say it is a Path-type language, and we need go no further. However, Talmy does make an additional observation: he notes that the Co-event component, since it does not appear in the verb root, must be in another (independent) constituent, “usually adverbial or gerundive.” This sometimes leads to the omission of this information in a typical sentence if its inclusion would be “stylistically awkward.” For instance, example (9) adds information with the Manner component “floating” but is a more awkward sentence than (8).

- (9) *La botella* *entró* *a la cueva* *flotando*
 the bottle MOVED-in to the cave floating
 ‘The bottle floated into the cave.’ (Talmy 2000b:49)

This would presumably be true of the Motion + Figure type as well, although Talmy does not specifically say so.

1.4.1.3 *Motion + Co-Event*

The Motion + Co-event type expresses the fact of Motion along with either the Manner or the Cause of the motion (or one of the other Co-events; see 1.3). Languages of this type have a series of verbs expressing motion occurring with various manners or causes. English is the most often-cited example of this type; other languages of this type include most Indo-European languages (not the Romance ones), along with Chinese, Finno-Ugric, and many others. Example (10) shows Motion + Manner, and (11) shows Motion + Cause.

- (10) *The rock* *rolled* *down* *the hill.*
 Figure MOVE + Manner Path Ground
 (Talmy 2000b:30)

- (11) *The napkin* *blew* *off* *the table.*
 Figure MOVE + Cause Path Ground
 (Talmy 2000b:30)

The Motion need not always be directed motion; there can also be verbs (but always, apparently, a much smaller system) combining location with Manner or Cause, as in (12).

- (12) *The lamp stood on the table.*
 Figure BE_{LOC} + Manner Path Ground

(Talmy 2000b:27)

1.4.1.4 Other possibilities

The fourth combination, Motion + Ground, does not appear to form the characteristic expression for any language. However, there appear to be some isolated verbs of this type in various languages. Talmy gives the English example of the root *-plane* ('move with respect to a plane') in the verbs *deplane* and *emplane* ('board an aircraft') (13).

- (13) *The man emplaned.*
 Figure Path MOVE + Ground

In addition to this type, there is the possibility of combinations of Motion plus two other components. (Motion plus three or more components is not mentioned as a possibility; presumably it is a nonexistent combination.) This combination also does not appear to occur on a regular basis, nor does it form any language's major system for expressing Motion. Talmy says, "The reason for such a prohibition seems straightforward for any system that would undertake to make relatively fine semantic distinctions: it would require an enormous lexicon" (2000b:62) Nevertheless, Talmy says, English does have some denominal verbs of this type, like *shelve* (14) and *box* (15):

- (14) *I shelved the books.*
 MOVE + Path (onto) + Ground (shelf) Figure

(Talmy 2000b:62)

- (15) *I boxed the apples.*
 MOVE + Path (into) + Ground (box) Figure

(Talmy 2000b:62)

Another possibility, and one that does occur with some regularity, is the expression of Motion itself in isolation in the verb root. This can occur with location (16) and directed motion (17):

- | | | | | |
|------|----------------|-------------------|-------------|-------------------|
| (16) | <i>The man</i> | <i>was</i> | <i>in</i> | <i>the house.</i> |
| | Figure | BE _{LOC} | Path (site) | Ground |
-
- | | | | | |
|------|----------------|-------------|---------------|-------------------|
| (17) | <i>The man</i> | <i>went</i> | <i>out of</i> | <i>the house.</i> |
| | Figure | MOVE | Path | Ground |

Talmy cites Spanish as a language that regularly uses this type to represent the concept BE_{LOC}. Despite the fact that Spanish typically expresses directed motion in conjunction with Path, it does not do so with location, instead using the verb *estar* ‘to be located’ along with various locative prepositions to represent site. There are no distinct verb roots meaning ‘to be in,’ ‘to be on,’ etc.

Spanish, therefore, has a “split” or “complementary” system of conflation, a type that occurs when a language characteristically employs one type of conflation for one type of Motion event, and a different type of conflation for another type of Motion event.

1.4.2 Motion-framing

The motion-framing typology was first presented in Talmy (1991), and is often assumed to have been intended as a replacement for the motion-actuating typology, although it is merely an alternative perspective (Ibarretxe-Antuñano 2005). The typology encompasses more than just motion events, and we will not explore its full implications here. The discussion of a few terms should serve to clarify the aims of this typology.

In the motion-framing typology, a Motion event is considered to be part of a complex event (called a macro-event), made up of the Motion event itself (the framing event) plus a Co-event, along with the **relationship** between those two events (it is this relationship that

can be labeled Manner, Cause, etc.⁷). Furthermore, the framing event is considered to be made up of four components: a “figural entity” (corresponding to Figure); a “ground entity” (corresponding to Ground); an “activating process” (corresponding to Motion), in which the figural entity “either makes a transition or stays fixed with respect to the ground entity” (2000b:218), and an “association function” (corresponding to Path) that relates the figural entity with the ground entity.

This way of formulating the Motion event is terminologically but not otherwise different from the formulation presented above (1.2 and 1.3), and serves to make the typology applicable to event types other than Motion. But the force of this typology lies in choosing the association function, that is, Path (and sometimes the association function together with the ground entity, or Path plus Ground), to be considered the schematic core (“core schema”) of an event. In other words, the association function “determines [the event’s] particular character and ... distinguishes it from other framing events” (ibid.).

What all of this terminology reduces to is that Talmy has chosen the component Path (or, Path together with Ground) as the most defining part of the motion event, and attempts to classify languages based on whether they place this “core schema” characteristically in the verb root or in what Talmy calls the “satellite to the verb” or just “satellite”. This he defines as:

“... the grammatical category of any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb root. It relates to the verb root as a dependent to a head. ... A set of forms that can function as satellites in a language often overlaps partially, but not wholly, with a set of forms in another grammatical category

⁷ This clarifies Talmy’s earlier definition of Co-event (see 1.3), which used but did not elaborate on the term “relationship”.

in that language, generally the category of prepositions, verbs, or nouns” (Talmy 2000b, 102).⁸

This creates two language types in the typology: verb-framed languages and satellite-framed languages.

Spanish is considered a verb-framed language (at least in terms of directed motion), with Path manifesting itself regularly in verb roots, as seen above (1.4.1.2). English, on the other hand, is considered to be satellite-framed, with Path appearing in a wide range of satellites, such as ‘out’ (18) and ‘apart’ (19):

(18) *The man* *went* *out.*
Figure MOVE Path

(19) *The bottles* *floated* *apart.*
Figure MOVE Path

⁸ See section 2.3 for a further discussion of the definition of a satellite.

CHAPTER 2

DETERMINING THE TYPOLOGY OF A LANGUAGE

Talmy's typologies, on first presentation, may appear to be easily applicable. In practice, however, a number of difficulties arise. The process of determining the types of any given language should look approximately like this:

- 1) Find the Motion verbs of a language.
- 2) Determine which of the Motion verbs are "characteristic" of the language.
- 3) Determine what semantic components are present in the characteristic Motion verbs.
- 4) Find the satellites in the language.
- 5) Determine what semantic components are present in those satellites.
- 6) Given (3), determine whether the most characteristic combination of components is
Motion + Figure, Motion + Path, Motion + Co-event, or some other possibility.
This will provide the motion-actuating type.
- 7) Given (3) and (5), determine whether Path most typically manifests itself in the main
verb or the satellite. This will provide the motion-framing type.
- 8) If not a satellite-framed type, optionally, determine which components are most
characteristic in the satellites. This information extends the classification of the
motion-actuating type.

The first difficulty arises in finding the Motion verbs of the language. Talmy assumes that a Motion verb is any main verb that appears in a Motion event, and under that assumption, in order to find Motion verbs we must be able to identify the Motion events of a

language. Section 2.1 will discuss how this is problematic and what a solution might be. It is also difficult to pick out, from the list of motion verbs in the language, only those that are *characteristic*; see section 2.2 for details on this problem. Another difficulty arises in finding the satellites of the language. Since the concept of “satellite” is not very clearly defined, it can be difficult to determine what is or is not a satellite (see section 2.3). A fourth difficulty is that, even once the verbs and satellites are found, it can be hard to determine exactly which semantic components they contain (see 2.4 for details). Section 2.5 discusses what happens if, having successfully navigated the process, one arrives at the end to find that the language in question does not fit neatly into any of the types proposed.

2.1 Identifying Motion Events and Motion Verbs

Talmy’s definition of a Motion event makes it clear that every event of this type is composed of four semantic components, Figure, Ground, Path, and Motion. So in order for an event to be defined as a Motion event, it must be demonstrated to include those four components. This is clear enough in the following sentences (sentence (20) shows the four basic components, while (21) also includes the optional Manner component):

(20) *The man* *exited* *the house.*
 Figure MOVE + Path Ground

(21) *The man* *ran* *out of* *the house.*
 Figure MOVE + Manner Path Ground

In (22) and (23), although the component Ground is not explicit, it can be inferred because Path is a relationship between Figure and Ground.

(22) *The man* *exited.*
 Figure MOVE + Path

(23) *The man ran around.*
 Figure MOVE + Manner Path

But what about a sentence like (24)?

(24) *The man ran.*
 Figure ??

This should, in theory, be parallel to (21) and (23), with both Path and Ground elided. However, it is easy to conceive of a man running but not going anywhere (for instance, on a treadmill). It cannot, therefore, be said that the verb ‘run’ entails the component MOVE, since there would be no directed motion in this event. What about Motion in general? Perhaps the specific component (MOVE vs. BE_{LOC}) can change, but ‘run’ always entails one or the other kind of Motion. However, compare (25) and (26):

(25) *The man ran on the treadmill.*
 Figure BE_{LOC} + Manner Path (site) Ground

(26) *The man read on the treadmill.*
 Figure ?? Path? Ground?

If the verb in (25) entails BE_{LOC}, then presumably so should the verb in (26). But this is clearly a questionable assumption; the verb ‘read’ in isolation conjures no hint of location or motion. It is simply an activity verb that happens to be accompanied by a locative prepositional phrase, and it would be injudicious to call it a Motion verb based on such a sentence. Nor can we claim that every activity that occurs in a stated location is a Motion event.

This brings us back to ‘run’, which can clearly be used in Motion events like (21) and (23) but which also occurs in (24) and (25) in isolation and with a locative phrase, respectively. If it is injudicious to assume that ‘read’ takes on a Motion component when paired with a locative phrase, so it is also injudicious to think that ‘run’ switches its type of component from MOVE to BE_{LOC} when in isolation or paired with a locative phrase. Nor

does it seem to make any more sense to remove or add the entire Motion component depending on whether the verb is part of a Motion event.

However, in Talmy's view, this is in fact what happens: "An English-type language will generally have a regular pattern of ... 'lexical doublets'" (Talmy 2000b:31), words that can have two usages, one a simple meaning and the second with another component added to that meaning. He gives the example of float that, in its basic usage, refers to "the buoyancy relation between an object and a medium":

(27) *The bottle floated on the water.*

With the same usage, float appears in (28), subordinate to a clause of motion:

(28) *The bottle went into the cave, floating on the water.*

Adding the concept of motion directly to that of buoyancy results in a second usage type, seen in (29):

(29) *The bottle floated into the cave on the water.*

If this view is correct, then 'run' would indeed have two usages, one without a Motion component and one with. But an alternative to this view is presented in Narasimhan (2003). He proposes (from a Construction Grammar standpoint) that, rather than being a lexical issue, this is a phrasal one. He says:

"The occurrence of oblique paths in Hindi is strictly constrained by the semantics of the verbal head of the clause. English has in addition, the option of allowing path phrases to **extend** the verb's semantic profile." (p. 154)

In other words, it is not the verb itself that has components added or subtracted, it is the construction in which the verb occurs that allows a different (motion) interpretation of certain verbs. This view is appealing because it means that the motion component need not be associated with the verb at all, but only with the particular construction a verb is found in.

Whether or not Motion is explicitly present in a verb, however, it is clear that some verbs can take a motion interpretation and others cannot, and in order to apply the typologies we must still determine which is which. We will need to leave the location portion of Motion aside to do this because of cases like (26) that show that it is fruitless to try to identify a Motion event based on the presence of a locative phrase.

At the beginning of this section, we stated that a Motion event must be demonstrated to include all four of its components (explicitly or implicitly). Leaving Motion itself out, since it may or may not be a lexical component (and is also what we are trying to diagnose), we are left with Figure, Path, and Ground.

Since Figure is generally equivalent to the subject or object of a clause, every clause will refer to an entity that could serve as the Figure in a Motion event, so finding the Figure will not help us to recognize a true Motion event and we will leave it aside. The identification of Ground presents a problem: without an explicit Path, it is impossible to tell whether the relationship of a Ground to a Figure is one of location or translation, and we cannot diagnose a Motion event based on location alone. This leaves us with Path (the translational or directed version), the most diagnostic component—and not coincidentally also the “core schema”—of a Motion event.

Path, therefore, is what we must identify if we want to know whether a given event is one of Motion. Since Path is the relationship between Figure and Ground, it follows from the presence of Path that the other two components exist, whether explicit or not, and from there it is easy to conclude that the event is one of Motion.

Having now discovered how to identify a Motion event and called into question the existence of “Motion verbs” per se, we can also identify those verbs that can be used in an event of directed motion (which we can call Motion verbs, for convenience). I propose the

use of the term “path phrase” to expedite the process, where “path phrase” will refer to any set of morphemes (nouns, adverbs, pre/postpositions, affixes, etc.) used in conjunction with a verb that indicate motion in a particular direction. A path phrase will always include Path, or Ground, or both, with Path optional only if the path phrase is used in conjunction with a presumed Path verb. Thus, if a given verb can be used with a path phrase, it can be considered a Motion verb.

2.2 Identifying the Characteristic Verbs

It is not enough to merely identify the Motion verbs of a language; in order to assign a type to the language, those motion verbs that provide a **characteristic** expression of Motion of the language must be identified. By “characteristic”, Talmy means three things: the verbs must be “colloquial”, not literary or stilted; they must be frequent in occurrence in speech; and they must be pervasive, meaning that the verbs, taken as a group, express a wide range of semantic notions.

In practice, some care must be taken to make sure the words identified in research meet these three criteria. In the first place, it means that ideally one’s source for research should include the spoken expression of the language, not just written texts or dictionaries; in fact, the use of a dictionary alone could well give a false idea of a language’s type. But in cases where it is impractical for a researcher to gather his or her own data, it would be helpful if a way could be found for the research to be done with whatever is available—often, a dictionary and texts.

A written, polished text will most likely contain both colloquial and literary usages, and it may not be possible for someone unfamiliar with the language to tell which is which. Oral texts that are later written down will serve better, but still may not be representative of the ordinary style of everyday (“colloquial”) speech. In addition, a dictionary will usually not

give any idea either of colloquiality or of frequency (though texts can reflect frequency); a dictionary can provide a list of words, but the number of Motion verbs of each type in a language does not necessarily indicate its typological status (Matsumoto 2003).

It can also be difficult to determine whether a given set of verbs is “pervasive” enough to be characteristic of the language. The Path verbs in a Path language tend to be a much smaller group than the Manner verbs in a Manner language, and even a language that is classed as a Path language can have a group of Manner verbs larger than its Path group (Matsumoto 2003; Narasimhan 2003). So the relative size of the set is not the issue; we must look instead at the coverage the group provides in a semantic field. For instance, in order to be called pervasive, a group of Manner verbs must provide words for all the major Manner types (e.g. walk, run, fly, jump, swim) as well as a wide array of more specific concepts (e.g., bounce, slither, slide, crawl, trudge, skip, etc.). A group of Path verbs should cover a set of Paths that could conceivably describe any given Path; how they divide this into semantic notions will likely vary from language to language. Similarly, a group of Figure verbs should have a word appropriate for any kind of Figure, though again the division of the field will probably vary greatly.

A problem with the criterion of pervasiveness arises if a language has a group of words that cover many, but not all, of the possible concepts, leaving a few to be expressed by other methods. Would this still be a “pervasive” group? This is an open question.

2.3 Identifying Satellites

In 1.4.2, the concept of “satellite” was briefly defined but not discussed in detail. In this section we will see that Talmy’s definition is unclear enough, even according to his own work (see below), to leave in doubt exactly what is to be classed as a satellite.

To reiterate, a satellite is in “a sister relation to the verb root,” relating to it as a “dependent to a head.” A satellite “can be either a bound affix or a free word.” The category of satellites does not include “noun-phrase or prepositional-phrase complement[s]”, but it does include, potentially,

“English verb particles, German separable and inseparable verb prefixes, Latin or Russian verb prefixes, Chinese verb complements, Lahu nonhead ‘versatile verbs’ ... , Caddo incorporated nouns, and Atsugewi polysynthetic affixes around the verb root.” (Talmy 2000b, 102)

With this definition, Talmy is attempting to capture “an observable commonality, both syntactic and semantic, across all these forms” (ibid.), and he cites as an example the satellite’s “common function across one typological category of languages as the characteristic site ... for the expression of Path” (ibid.). More illuminating is his explanation that he is trying “to capture the commonality between [English verb] particles and comparable forms in other languages” (ibid., 103). In other words, it seems, the definition of a satellite is partly based on the characteristics of English verb particles.

However, Talmy continues, “[t]here is some indeterminacy as to exactly which kinds of constituents found in construction with a verb merit satellite designation.” The forms mentioned above, he says, are more or less clear, but what about inflections, auxiliaries, negatives, and closed-class particles like ‘only’ or ‘even’? Furthermore, he does not know “whether this indeterminacy is due to the present theory’s early stage of development or to a cline-like character for the satellite category” (ibid.).

The effect of this indeterminacy on the application of Talmy’s typology to a language should be clear: it cannot be determined with any certainty what the satellites of a language are, when the concept of “satellite” remains partially undefined. The best that can be done,

for now, is to adopt a definition that seems to fit the facts of a particular language, and be consistent within that language.

Matsumoto (2003) outlines a somewhat different difficulty with the satellite concept. He points out that, since the satellite is defined in terms of its syntactic function rather than its syntactic category, the terms “verb” and “satellite” in the motion-framing typology could just as well be replaced with “head” and “non-head.” Furthermore, he claims, this would be an improvement on the verb-satellite distinction since prepositional-phrase complements are excluded from the satellite category, which makes a sentence like (30) not technically satellite-framed:

(30) *The man walked toward the park.*

There is something to be said for both views. Talmy’s satellite category does seem to capture similarities in behavior between otherwise quite different syntactic categories, but he does not address the issue Matsumoto brings up, that there are cases in which a Motion event is technically neither verb-framed nor satellite-framed. The approach I will take in this thesis will be to make use of the concept of satellite while recognizing that there are difficulties with (and alternatives to) the theory.

2.4 Determining the Semantic Components of a Morpheme

As we began to see during the discussion on the identification of Motion events (2.1), it is not always simple to determine what the semantic components of a given morpheme are with respect to Talmy’s classification. Even leaving the “Motion” component aside, since it seems to be dependent on context, some difficulties remain with the identification of Manner, Path, and Ground. The verb ‘fall’, for instance, is one example of a word for which a case could be made for its lexicalization of either a Manner or a Path component, or both. It indicates a downward movement (‘falling up’ is not generally acceptable), but also a particular kind of

downward movement—namely, an uncontrolled one. As a result, some linguists treat it as a Path verb, others as a Manner verb, and still others say it conflates both components (*Linguist List* 2002).

This is not to say that determining semantic components is always an impossible task, but this example highlights the difficulties inherent in the real-world application of Talmy's theory when the meaning of a word has multiple aspects fitting with different semantic components. I myself think that in a case like this it is correct to account for both components and call it a Manner + Path verb, but the fact that there is no consensus on the issue makes it clear that this issue is problematic. It is of little import if consensus cannot be reached on only one verb, since the typology allows for individual variation, but the problem grows in proportion to the number of words that are in question.

In addition to the problem of multiple potential components, the difference between Path and Ground can sometimes be unclear. Since Talmy does not specifically address adverbs (and indeed, it is not clear whether they are to be treated as satellites or not—in English, probably not), the semi-specific nature of adverbs makes it difficult to decide what he would do with them. Look, for instance, at example (31):

(31) *The plane flew high.*

This sentence can be interpreted in two ways: as an event of directed motion (the plane flew from a lower level to an upper level), or as a locative event (the plane flew at a high altitude). In the former, 'high' would seem to be a Path, and in the latter (if the event is even considered a Motion event), 'high' would be a Ground. We cannot choose between these two interpretations without more context, and thus cannot say that 'high' actually lexicalizes one component or the other—its meaning is dependent on context.

However, Talmy does make a distinction between Path and Path + Ground satellites. Satellites that express both Path and Ground, Talmy says, are “informationally complete with respect to that Ground, rather than anaphoric or deictic” (2000b:110). He gives as examples *home*, meaning ‘to his/her home’ (32) and *shut*, meaning ‘to (a position) across its associated opening’ (33):

(32) *She drove home.*

(33) *The gate swung shut.*

The implication of this distinction for our adverb, ‘high’, is that if we cannot know what particular high place it is (as we cannot: in the sky? above the building? in the tunnel?), then it does not lexicalize a Ground. Therefore, for this thesis, the measure of the components of an adverbial satellite will be whether or not it is anaphoric.

2.5 Determining the Typology

After the characteristic motion verbs are identified and the components of both verbs and satellites are analyzed, the last difficulty in determining the typology of a language must be overcome: the actual classification (see section 3.5). It may be that this is no difficulty at all, and the classification is clear. But it may also be that the language does not fit neatly into any of the types. If this is really the case, there is nothing to be done except suggest a revision of the typology. And in fact, the Talmy typologies have already undergone quite a bit of revision at his own and others’ hands; this will be discussed in detail in Chapter 4.

CHAPTER 3

ANALYSIS OF SERI

3.1 Introduction to the Seri Language

Seri,⁹ or *Cmiique Itom*, is a language isolate spoken in the Mexican state of Sonora. It has more than 900 speakers, up from less than 200 in 1920 (Lewis 2009; Marlett 2006). The language has been surprisingly resilient and unaffected by contact with Spanish, and has few loanwords, instead drawing upon linguistic creativity to come up with terms for items new to the culture (Marlett in preparation). It has been a written language since the 1950s, although new spelling conventions were adopted in 2005 with the publication of the dictionary (Moser and Marlett 2005). Nevertheless, there are still relatively few publications in Seri.

Seri is a head-final, SOV, language. Main clauses typically follow dependent clauses, and complements precede the verb. It is a synthetic, generally agglutinating language (Marlett 2005). It makes frequent use of clause chaining, and uses a different-subject marker when the subject changes person. Verbs are inflected for person and number. Mood and aspect are obligatory on the verb, but there is no grammatical tense; notions relating to time are inferred from context and verb forms that distinguish realis from irrealis. It is also a pro-drop language (Marlett in preparation).

Phonologically, the language has a simple inventory of four vowels, twelve obstruents, and six sonorants (Marlett, Herrera, and Astorga 2005). The syllable structure allows two

⁹ The ISO 639-3 code for Seri is sei.

consonants in the onset, two or three vowels in the nucleus, and two or three consonants in the coda (Marlett 1988).

3.2 Methods

For this analysis of Seri, three sources were used: the Seri dictionary, published in 2005 (Moser and Marlett 2005);¹⁰ 17 glossed Seri texts, ranging in length from 3 pages to 146 pages in their glossed forms, available at www.lengamer.org (see appendix);¹¹ and the unpublished draft of a grammar of Seri (Marlett in preparation; see Appendix for the URL).

A further note is in order about the nature of the texts used. Two of the texts (ALIM and Hablemos) were translations made from Spanish into Seri; these are also composed of individual sentences which do not form a story. The other texts are stories which were transcribed from recordings of native speakers telling them; these were very minimally edited and the edits are noted in the glossed versions of the texts.

No new data were collected for this thesis. This choice was made in part to demonstrate that an analysis of Motion verbs is possible without doing original data collection if a good source of texts is available. Although this choice had its challenges, eventually I did arrive at a practicable method for analyzing Motion data through texts.

First, I went through the dictionary looking for anything that could possibly be construed as a Motion verb. Next, I looked for occurrences of those verbs in the texts. Many verbs did not occur at all. Besides resulting in no examples to study, this also indicated that the verb in question was probably infrequent enough to safely exclude it from a list of characteristic

¹⁰ The dictionary gives English translations for each example sentence but not word-by-word glosses; these glosses were obtained either from the draft of the grammar, when available, or by comparing each word with those found in the glossed texts; these self-compiled glosses were corrected with the help of Stephen Marlett.

¹¹ Some small alterations of these glosses from the published texts (omitting irrelevant options in the gloss, for instance) were made at the suggestion of Stephen Marlett. Larger changes are footnoted.

Motion verbs. Of course this was not an infallible indicator, since the subject material of the texts also limited the possibilities. A few verbs not found in the story texts are included in the analysis on the strength of the example sentence in the dictionary.

Second, the occurrences of each verb were studied to see if they were ever used in the context of a Motion event. This determination was made based on the criterion specified at the end of section 2.1: did the verb occur with a path phrase? The path phrases it occurred with, if any, were also classified according to type: telic vs. atelic. Section 4.1.1 will provide more information about this classification, but a brief explanation is will be of use here. We will, after Aske (1989), define a telic path phrase as one that predicates an end-point location of the Figure; atelic path phrases are those that predicate a location for the whole proposition. A determination was also made as to whether the expression of motion predicated a boundary crossing in the sense that Slobin and Hoiting (1994) propose (whether, during the course of a motion event, a boundary is crossed). Again, more information on this is provided in 4.1.1.

Third, each verb was categorized according to the component(s) it lexicalized. This resulted in four lists: Path verbs, Manner verbs, Figure verbs, and verbs with two components. Each of these lists was checked for pervasiveness, and inconsistencies within each group regarding path phrases, telicity, and boundary-crossing were noted. Then an attempt was made to determine which of these lists formed the “characteristic” expression of Motion as defined by Talmy. This information was used to determine the motion-actuating type for Seri.

This method covers pervasiveness and, to some extent, frequency (although this could be quantified and isn't), but is not able ensure colloquiality, as noted in 2.2.

The determination of the motion-framing type necessitates the identification of the satellites of a language, so this was my next step. Since the definition of “satellite” leaves

some room for debate as to which syntactic categories qualify for this designation (see 2.3), a decision had to be made about how to define “satellite” for Seri. This decision will be discussed in greater depth in section 3.4, but it involved choosing from among the syntactic categories that can appear in a verb phrase; only those words relating to Motion were considered.

After establishing what the relevant satellites were, I next determined what the semantic components of those satellites were. This information, together with the information about the semantic components of the verbs, was used to determine the motion-framing type of Seri.

3.3 Verbs

Seri has five types of verbs that are used in conjunction with Motion events: pure motion, Path, Co-event (or Manner)¹², Figure, and verbs with two components. The pure motion verb is \sqrt{a} ‘go’¹³. The Path verbs are used very frequently in the texts and cover a broad range of semantic notions, though they cannot be said to provide complete coverage of the notion of Path. As a group, they permit path phrases, though each verb may have its own restrictions. The Manner verbs are not used quite as frequently. Although they too cover a range of semantic notions, it is more difficult with Manner verbs to determine how complete the coverage is. Some of the Manner verbs permit the use of path phrases in restricted ways, but many do not seem to. The Figure verbs are divided into two groups: location verbs and ‘Put’

¹² Technically the conflation pattern would be Co-event, but since most of the verbs under consideration are verbs of Manner, the term Manner will be used instead of Co-event.

¹³ The symbol $\sqrt{\quad}$ will be used in this thesis to indicate the root form of a verb (or stem, where specified). In addition, the heading of each section discussing a verb will be given in the following format: verb root, dictionary citation(s), English gloss(es) of the root.

verbs. These are all verbs in common use, and provide complete coverage of their semantic domain. They allow path phrases of all types. This information is summarized in Table 1.

Table 1: Attributes of Seri Motion verb types

Type	Frequency	Pervasiveness	Path phrases
Motion	Very frequent	Only one verb	Yes
Path	Very frequent	Wide coverage	Yes (few restrictions)
Manner	Less frequent	Some coverage	Restricted or disallowed
Figure	Frequent	Complete coverage	Yes

This thesis examines only a few verbs with two components, and does not propose a unified behavior pattern for all verbs of this type.

In the discussions of the following verbs, we can expect to encounter several constituent types regularly occurring as part of the path phrases. These will be oblique objects; location nouns, pronouns, and adverbs; and P-elements. P-element is the working term used in one draft of the Seri grammar (Marlett in preparation) for a class of words that, in the types of clauses under consideration in this thesis, always occur in preverbal position. They subcategorize for a complement, which may or may not be contiguous. They are very similar to what other researchers have called “relational preverbs” (Hale and Craig 1988). Section 3.4.2 provides more details on this class of words. In the following examples, the verbs under discussion are presented in bold, and the presumed path phrases are outlined in brackets. Because a P-element and its complement may not be contiguous, there will sometimes be two sets of brackets in a clause (one bracketing the Path and the other bracketing Ground); this will not affect the conclusions of this thesis.

3.3.1 Pure Motion Verb \sqrt{a} (*moca*, *intica*, *contica*) ‘come, go to’

The verb root \sqrt{a} ‘go, move’ indicates only directed motion; it implies no Path or other component. However, it must be used with the venitive (‘toward’) prefix (*mo-*) or andative (‘away’) prefix (*nt-*), resulting in a verb form that indicates Path as well as motion (34).

- (34) *Canóaa zo [haa] moca ha.*
 boat a there Twd-SN-move Decl

‘There comes a boat.’ (DS2005, haa)¹⁴

It can be used with several types of path phrases. It occurs with an oblique object (35), a P-element in (36), or a location adverb (37), but does not seem to occur with any location nouns.

- (35) ... *[hehe án com] contita x, ...*
 countryside the.Hz 3IO-Aw-RI-move UT

‘... he went around in the countryside, ...’ (Glutton 148)

- (36) *Juan quih [haaco quih iyat hac ano] mota, hant xahjiit.*
 Juan the surface.of.roof the from(it) he.came he.fell

‘Juan fell off the roof.’ (ALIM, p. 157)

- (37) *[licp hac iicp] mota, [toc] cōmoya.*
 nearer it.was.coming there it.came

‘It was getting closer.’ (Cöquimáxp 37)

None of the above examples predicate an end location for the figure, so they are all atelic.¹⁵ (38), however, is telic:

¹⁴ The following conventions will be used to cite examples: from the dictionary, I will cite the entry under which the example sentence is given. For texts with sentence or clause numbers, I will give that number (as in: Glutton 148). For texts without sentence or clause numbers, the page number of the original version is given (as in: ALIM, p. 157). This information is also summarized in the appendix.

¹⁵ Aske (1989:6) gives “OFF THE TABLE” as an example of an end-of-path location/state for a figure. However, though the English gloss of (36) (‘off the roof’) would seem to fit this pattern, the Seri P-element in this case is *ano* ‘in/from/to’, which does not (i.e. instead of being *off* the roof, Juan has *come from* the roof).

- (38) *Ox tpaacta ma, cmaam cop [hehe án com] contima.*
 then woman the countryside the she.goes
 ‘Then the woman goes to the desert.’ (Basketmaker 21.1)

This example does predicate an end location, but still does not necessarily cross a boundary in the Slobin and Hoiting (1994) sense. So \sqrt{a} does seem to take both telic and atelic path phrases, but might not be used to describe boundary-crossing activities.

3.3.2 Path Verbs

The list of Path verbs under consideration (see Table 2) may not be exhaustive, but can most likely be regarded as at least representative of the range of path verbs in common use in Seri. All of the Path verbs can take a path phrase; the restrictions on this phrase vary according to the semantics of each verb. The system of path verbs in Seri is not completely pervasive. Notable exclusions are the paths ‘down’, ‘up’, and ‘out’; these concepts must be expressed with multiple morphemes, not with a single verb root.

Table 2: Seri Path verbs

Verb root	Gloss	Path
\sqrt{iin}	go/return	(none)/back to
\sqrt{yaa}	go to	to
\sqrt{aiix}	go away from	from
\sqrt{azquim}	go/enter	(none)/into
\sqrt{afp}	arrive	to the point of
\sqrt{ooit}	arrive	to the point of
\sqrt{ictim}	cross	across/via
\sqrt{eectim}	cross/travel	across/along
\sqrt{aao}	pass by	past/along
\sqrt{afin}	encircle	around

3.3.2.1 \sqrt{iin} (*quiin*) ‘go, return’

The verb \sqrt{iin} can have a number of different senses. Example (39) shows it, like \sqrt{a} , used with the sense of pure directed motion, with no Path expressed:

(39) ... *[cocsar* *coi* *iicp* *hac* *iiqui]* *siin*
 non-Indian.Mexican the next.to the toward(it) he.will.go

ta *x, ...*
 Aux *

‘... he would go to where the non-Indian Mexicans were ...’ (Glutton 219)

The 2005 dictionary gives one definition of this verb as ‘go away’. (40) is one example that might uphold this definition:

(40) *Hant pofii ta,* *potaaplc* *ta,* *[hant* *z*
 in.the.morning very.early.in.the.morning DS place a

iiqui] *hpsiin* *ta* *hmimoz*
 toward.(it) I.will.go.away Aux I.think.it

‘Tomorrow I plan to leave early.’ (ALIM, p. 131)

However, another interpretation is that \sqrt{iin} again means ‘go’ and the path is attributable to the P-element *iiqui* ‘toward’ combined with the complement *hant z* ‘a place’; the unspecified location provides the sense of going ‘away.’

(41) shows the sense that \sqrt{iin} (which has the plural suppletive stem \sqrt{itooij}) can have when it is used with an oblique object. In this case, the verb includes the Path ‘back to’.

(41) *He* *hatee* *[Cofteecöl* *himcap]* *cöhasitooij* *poho.*
 I as.for.me San.Esteban.Island that we.will.return.to perhaps

‘I think that maybe my family and I will return to San Esteban Island.’
 (Cöquimáxp 14)

The andative prefix *mo-* (which has an allomorph *n-*) can also be added to the verb root to create a stem that means ‘return’, as in (42).

(42) *He* *xaa* *nsitooij* *quee* *hi.*
 We soon will.return.(pl.) Aux Decl

‘We will be back very soon.’ (Topete 6)

\sqrt{iin} cannot occur without one of the following (Marlett in preparation): the P-element *iiqui* (39), (40), a locative adverb or pronoun (43), (44), an oblique object (41), or the prefix *mo-* (42).

- (43) ... [*toii*] *iquiin* *itcmamzo*
 toward.somewhere.else to.go he.did.not.want.it
 ‘... he didn’t want to keep going.’ (ALIM, p. 159)

- (44) *He* [*taax*] *cösiin* *caha.*
 I there will.return Aux-Decl
 ‘I will return there.’ (Glutton 518)

Examples (39), (41), and (44) appear to be telic, but not boundary-crossing; (40) and (43) are atelic and (42) has no path phrase. Thus, \sqrt{iin} can take both telic and atelic path phrases.

3.3.2.2 \sqrt{yaa} (*cyaa*) ‘go to’

The verb \sqrt{yaa} ‘go to’ (which has the plural suppletive stem \sqrt{coziit}) has the Path ‘to.’ It also requires a locational direct object, which serves as a path phrase, as in (45).

- (45) [*Hasoj com*] *hasoziit.*
 river the we.will.go.to.it
 ‘Let’s go to the river.’ (ALIM, p. 159)

In (46) \sqrt{yaa} describes the movement toward the baby, while another verb, \sqrt{afp} , describes the arrival at the location itself; this would seem to indicate that \sqrt{yaa} is used atelically.

- (46) *Zaxt quisiil* *tiquij* *itaho,* *ityaai,*
 baby that she.saw.him she.was.going.to.it,

 [*hantaxal xah*] *cötafp, ...*
 near Atten she.arrived.to.him
 ‘She saw that baby, she was going to it, she got fairly close to him, ...’
 (Glutton 28-30)

3.3.2.3 √*aiix* (*quiiix*) ‘go away from’

√*aiix* ‘go away from’ (which has the plural stem √*âaaxoj*) has the Path ‘from.’ It requires a locational direct object (explicit in the clause in (47) and inflected for on the verb of (48)), which serves as the path phrase. Its use is generally atelic.

- (47) [*jComcaac* *hizcoi*] ***haseaaxoj*** *aha!*
 Seri.people these we.will.leave.it Aux-Decl
 ‘Let’s go away from these people!’ (Brothers 3.1)

- (48) *Comcaac* *quih* *iicp* *yaii* *hac*
 Seri.people the next.to where.they.were the
- haa* *tahca* *ma* *x,* ***ihtaaiix*** *ma, ...*
 there it.was DS * I.was.going.away.from.it DS
- ‘The place where the (Seri) people were was close, but I was (unknowingly) going away from it ...’ (Topete 63)

3.3.2.4 √*azquim* (*cazquim*) ‘go, enter’

In some cases, √*azquim* ‘go, enter’ seems to be purely directed motion, with no Path. This is the case in (49), where it is used with the adverb *yeniiquei* ‘ahead of’ as the path phrase:

- (49) *Ctam* *tintica* *cmaam* *tintica* *iiqui cöihiin hac*
 man the woman the with.respect.to.him/her
- ctam* *tintica* *ihaha* *quih* [*yeniiquei*] ***miizquim.***
 man the its.speed the ahead he.was.going
- ‘The man is going faster than the woman.’ (Hablemos, p. 110)

However, when the verb appears with the third person indirect object prefix *co-*, it can mean ‘enter’ or ‘penetrate’, in which case it would have the Path ‘into’:

- (50) *Hahóot* *hac* *ah* *contita,* ***cömiizquim.***
 Abs-entrance the.Lc Foc 3IO-Aw-Rl-move 3IO-Px-enter
 ‘S/he entered by the door.’ (DS2005, ah)

3.3.2.5 √*afp* (*caafp*) ‘arrive’

The verb √*afp* (plural stem √*azcam*) implies the Path ‘to the point of.’ It can be used by itself, as in (51) or with an oblique object (52):

- (51) *Hax* *ihtaqueeejim* *oo* *ma,* *hax* ***yomafp*** *oo; ...*
 rather/very I.waited.for.him * DS rather/very he.didn’t.arrive *
- ‘I waited for him, but he didn’t come back...’ (Topete 39)

- (52) [*Haxoj* *com*] ***cötazcam,*** ...
 shore the they.arrived.to.it
- ‘They arrived to land...’ (Brothers 11.1)

It can also be used with a location noun (53):

- (53) *Cmaam* *quij* [*heme*] ***tafp,*** ...
 woman the camp she.arrives
- ‘When the woman arrives at camp, ...’ (Basketmaker 26.1)

Or with a P-element (*ano, iti, itáai*) as in (54), (55), and (56) respectively.

- (54) *Juan* *quih* [*ihyaaco* *cop* *ano*] ***miifp,*** ...
 Juan the my.house the in/to.(it) he.arrived
- ‘Juan arrived at my house ...’ (ALIM, p. 159)

- (55) ... [*hant* *hac* *iti*] ***tafp,*** *yoque.*
 earth the on/to(it) he.arrived it.is.said
- ‘... he arrived to land.’ (Brothers 61.2)

- (56) *j[Canóaa* *quih* *itáai]* ***cafp!***
 boat the.F1 3P-to Im-arrive
- ‘Go meet the boat!’ (DS2005, itáai caafp)

All the examples that include a path phrase are telic, but probably none of them are boundary-crossing. (54) would be an example to test on this count: when Juan arrives at the house, is he inside, outside, or is it unclear from the linguistic expression? If he is outside or it

is unclear, then no boundary-crossing is implied because he has not crossed from the outside to the inside of the house.

3.3.2.6 \sqrt{ooit} (*cooit*) ‘arrive’

\sqrt{ooit} ‘arrive’ (which has the plural stem \sqrt{eme}) does not appear by itself but always within an idiom of some kind. (These are *hacx cōcooit* (‘apart arrive’) ‘make a mistake, error’, *hapx hant cooit* (‘outside down arrive’) ‘rush out, escape’ and *hant cooit* (‘down arrive’) ‘fall down, dive’ for (57), (58) and (59), respectively.) Nevertheless, it maintains a consistent path, ‘to the point of’. It subcategorizes for a location adverb (57) or a location noun (58), (59).

(57) *Xiica oosx coi pac [hacx] cōmooit*
 things what.she.counted the.Pl some apart she.arrived.to.it
 ‘She made an error in her addition.’ (DS2005, *cooit*)¹⁶

(58) ... *hapxa coi mos [hapx hant] cōteme, ...*
 cotton- the.Pl also outside down 3IO-RI-arrive-Pl
 tail.rabbit
 ‘... the rabbits also rushed out...’ (Rabbit_Puma 16.2)

In (59) we see that the P-element *ano* (which has the apocopated form *an* in this example) is used to provide further information about the path.

(59) *Juan quih [hasoj com an hant] mooit.*
 Juan the river the in/to.(it) he.fell/dove
 ‘Juan dove into the river.’ (ALIM, p. 157)

\sqrt{ooit} appears to have both telic (58), (59) and atelic (57) uses. Furthermore, in (59) a boundary (air to water) is crossed.

¹⁶ Although this is a metaphorical use of the word (in that the “arrival” is to a non-spatial point, i.e. an error), it is still illustrative of the sense.

3.3.2.7 \sqrt{ictim} (*quiictim*) ‘cross’

The transitive verb \sqrt{ictim} ‘cross’ seems to imply that the entire width of something is traversed in one discrete event (i.e. (60) and (61) should probably not be interpreted as motions that meander and do not reach the other side). The path is ‘across’ or perhaps ‘via’.

- (60) *Hona* *iti* *hptiij,* *ihptácat,*
 (place name) on/to(it) I.am/was.(seated) I swam

[*Xepe Coosot tintica toi*] ***hyictim.***
 Infiernillo the toward.somewhere else I.crossed.it

‘I was at Campo Hona and swam across the Infiernillo [a strait].’ (DS2005, *quiictim*)

- (61) *Haaho* *tintica,* [*tiix*] ***ihsíctim*** *aha.*
 road the that.one I.will.cross.it Aux-Decl

‘I will cross the road.’ (DS2005, *quiictim*)

This means the path phrases occurring with \sqrt{ictim} are telic and it is used to describe boundary crossings.

3.3.2.8 \sqrt{eectim} (*queectim*) ‘cross, travel’

\sqrt{eectim} ‘cross, travel’ is similar to \sqrt{ictim} and may be morphologically or etymologically related. It implies the path ‘across’ or sometimes ‘along’. It appears only in idiomatic expressions, generally paired with a path phrase like a P-element or an oblique object. (62) and (63) are telic events but (64) is atelic.

- (62) *Taa icozam* *tazo* *quih* *cōquitai* *ha,* [*Tahejōc* *quij*
 step one the it.fit(s) Decl Tiburon.Island the

iiqui] ***cōiseectim*** *hac.*
 he.will.cross.to the

‘He crossed to Tiburón Island in just one step.’ (Glutton 316)

- (63) *Hehe hascám montaj quih cöcaticpan quih [Haxöl Iihom*
 ship shrimp the working.with.it the Desemboque

iti] seectim queeya?
 will.pass.by Aux-Interr

‘Is the shrimp boat going to pass by Desemboque?’ (DS2005, queectim)

- (64) *Juan quij quiha ha, [hant quih] cöteectim.*
 Juan the fast Decl earth/place the he.travels

‘Juan is a fast walker.’ (ALIM, p. 180)

3.3.2.9 \sqrt{aao} (*caao*) ‘pass by (a place)’

The transitive verb \sqrt{aao} ‘pass by (a place)’ (plural stem \sqrt{aaait}) seems to have a number of facets of meaning. In the following example, \sqrt{aao} means ‘move past’ and has a direct object as a path phrase.

- (65) ... [*xaaslca com*] ***hihaaotim*** *iti, ...*
 sahuesos the I.passed.by.it on/to(it)

‘... I had passed some sahuesos [cactuses]...’ (Topete 41)

In the next two examples, however, the path would be better characterized as ‘along’ and ‘across’ respectively, rather than ‘past’.

- (66) *Oot timoca mos [haaho timoca] itaao,*
 coyote the also road the he.passed.it

toc cömoca ha.
 there coming Decl

‘Coyote was passing along [MOVE-along] the road, there he came.’
 (Pinacate_Coyote 3)

- (67) *Ox tpacta ma, [xepe timoca] imaaít.*
 then sea the they.passed.by.it

‘They were crossing the sea.’ (Cöquimáxp 19)

Furthermore, \sqrt{aao} can sometimes simply express movement with no particular reference point in mind. Even though it must have a locational direct object, it can be a generic one like *hant zo* in the following example:

- (68) *Pohamoc ta, [hant zo] hpaa, hpsinzaait*
 tonight earth/place a I.will.pass.it I.will.do.it.slowly/carefully
 'At night I have to walk slowly.' (ALIM, p. 151)

(69) is a good example of the atelicity of \sqrt{aao} (the verb \sqrt{afp} is used to indicate telicity).

- (69) *Juan quij [haaho timoca] itcmaao,*
 Juan the road the he.does/did.not.pass.it

[hant hayaa timoca án] itaao, miifp.
 planted.field the its.area he.passed.it he.arrived
 'Juan didn't come by the road but through the field.' (ALIM, p. 157)¹⁷

3.3.2.10 \sqrt{afin} (*quifin*) 'encircle, go around'

\sqrt{afin} 'encircle, go around', which has the plural stem \sqrt{afija} , has the path 'around.' It is used in (70) with the adverb *toii* as a path phrase. (This was the only available example of this verb.)

- (70) *Canóaa z ano hatáhca, [Tahéjóc quij*
 boat a in/from/to.(it) we.were.seated Tiburon Island the

toii] hamíifja xo, moosni zo
 toward.somewhere else we.went.around.it but sea.turtle a

tompáho ho.
 it.is/was.not.seen/found Decl
 'We went around Tiburon Island by boat but we didn't see any sea turtles.'
 (DS2005, *quifin*)

¹⁷ The glossing of this example is altered from the original translation at the suggestion of Stephen Marlett (personal communication).

3.3.3 *Manner Verbs*

The group of Manner verbs under consideration includes the major verbs of manner (run, walk, swim, fly) as well as a few of the more specific verbs (i.e. slither), with the latter chosen mainly for the availability of clear example texts demonstrating their use.

The Manner verbs we are exploring fall roughly onto a cline, with a verb that seems to indicate directed motion by itself (dropping its Manner component) at one end, and verbs that appear to be unable to accept a path phrase at the other. At the directed motion end is \sqrt{atax} ‘go, walk’, which does not seem to take path phrases but has a sense in which it drops its Manner component and depicts only directed motion. The next group on the cline includes \sqrt{panzx} ‘run’, \sqrt{cap} ‘fly’, and \sqrt{acat} ‘swim’. These can all indicate directed motion in conjunction with an atelic (but not a telic) path phrase. A final group includes verbs like \sqrt{noftj} ‘slither’ and \sqrt{cojp} ‘jump’, which seem to be unable to tolerate any path phrase, thereby excluding themselves from Talmy’s Motion typology. They are discussed here because they are the Seri equivalents of Manner verbs in other languages (like English) that are used to describe directed motion.

None of the Seri Manner verbs appear to be used with a telic path phrase or used to describe a boundary crossing. Some verbs, such as \sqrt{ojoz} ‘flee’, do not fit neatly into one of the three groups mentioned above; these will be discussed in their individual sections below.

A note about the group of ‘carry’ words included in this section: these words are never (in the corpus of texts under consideration) used with a path phrase, and thus fall into the final group of Manner verbs (the ones excluded from the typology). They are more complex than most of the other verbs discussed here, since they subcategorize not just for a Figure but also for an Agent acting on that Figure. For the most part, any of the more complex types of verbs have been left out of the discussion, but I deemed this group to be an important addition

to this section on Manner verbs since it illustrates on a broad scale the unacceptability of path phrases with most Manner verbs.

3.3.3.1 \sqrt{atax} (*catax*) ‘go, walk’

The verb \sqrt{atax} can be translated as both ‘go’ or ‘walk’, depending on the context.

Sometimes it seems to indicate directed motion on its own, as in (71).

- (71) ... *toc cõihiihtim iti, hoo xah teme, tatak, ...*
 there he.is/was on/to(it) soon he.went
 ‘... while he was there, he soon went.’ (Brothers 63.2-3)

(72) is an example in which the typical manner component of this verb, ‘walk’, is clearly absent. The shark does not walk but ‘goes’ in the water.

- (72) *Hacat tintica tinzáait, tatak, xazím,*
 shark the it.does.slowly it.goes it.is.pleasant

xepe án tintica an cõiháao hac.
 sea area the in its.passing.by the
 ‘The shark goes slow and looks very pretty when it is in the sea.’ (DS2005, hacat)

But in other instances, such as (73), there is clearly a ‘walk’ component.

- (73) *Cói isiitaxim ipi z an imoofin iha.*
 still his.(future).walking yet a not.having.reached Decl
 ‘He was not old enough to walk yet.’ (Glutton 61)

This is not a fine-grained Manner verb, however, as seen in (74), where two clauses are used to express the motion: one with a different Manner verb ($\sqrt{apasiroj}$, ‘stroll’) which refines the less specific ‘walk’.

- (74) *Comcaac hizcoi capasiroj iha. Calx iha.*
 Seri.people these strolling.(pl.) Decl going.(pl.) Decl
 ‘These people are going out for a walk.’ (Hablemos, p. 110)

\sqrt{atax} does not appear with path phrases. Instead, additional clauses are used to describe Path, as in (75) and (76).

(75) ... *[hast com imac] tooyam, tatax, ...*
 rock/mountain the in.middle.of.it he.traveled.high he.went
 ‘... he crossed the mountains, he went...’ (Brothers 64.3-4)

(76) ... *cmaax tatax, [hehe án com] contita, ...*
 now he.went countryside the he/it.was.going
 ‘... he went, he went to the countryside, ...’ (Glutton 532-533)

3.3.3.2 \sqrt{panzx} (*cpanzx*) ‘run’

\sqrt{panzx} ‘run’ (plural stem $\sqrt{pancojc}$) has a clear and consistent Manner component, and can also be used with a path phrase. (77) contains an atelic path phrase.

(77) ... *comcaac coi tcooo [hiicp] impancojc.*
 Seri.people the all.of.them toward.me they.ran
 ‘... everyone ran toward me.’ (Topete 125)

However, (78) and (79), which predicate a beginning and/or end state of the figure, do so in separate clauses: \sqrt{panzx} does not appear to take a telic path phrase.

(78) *Tpancojc oo x, [toc] conticat iha.*
 they.ran * * there going.(pl.) Decl
 ‘They had left running.’ (More literally: ‘Running, they were going there.’^{†18}
 (Topete 84)

(79) *Cmaax [taax iti] motat,*
 now there/that/those on/to(it) they.were.coming/came

[hiiqui] tpancojc, [he] tazcam ma, ...
 toward.me they.ran they.arrived.to.me DS
 ‘Then they came from them, they ran toward me, they arrived to me, ...’
 (Topete 126)

¹⁸ This symbol (†) following a free translation, here and elsewhere, indicates that I have made changes or rewritten the translation to be more literal (under Stephen Marlett’s guidance).

It can be used with a locative (atelic) phrase (80).

- (80) *Cmaam tintica [hehe án com ano] cpánozxim iha.*
 woman Dt-Aw countryside the.Hz 3P.in/from SN-run-Impf Decl
 ‘The woman is running in the countryside.’ (Grammar 18.4)

However, the same type of locative phrase can have a different meaning, depending on context. A telic reading of (81) is prohibited. Additionally, a countryside is typically much larger than a house, making it easier to run ‘in’. This fact, combined with the use of the imperfective form in (80), gives us the difference between the running ‘in’ a location of (80) and the ‘through’ reading of (81).

- (81) *Cmaam tintica [haaco cop ano] yopanzx.*
 woman Dt-Aw Abs.house the.Vt 3P.in/from Dt-run
 ‘The woman ran through [in and then out] of the house. (*The woman ran out of the house.)’ (Grammar 18.4)

3.3.3.3 \sqrt{cap} (*ccap*) ‘fly’

\sqrt{cap} ‘fly’ does not indicate directed motion by itself (82), but with a path phrase, it can indicate atelic (not telic) motion. (83) includes an atelic path phrase.

- (82) *Ziicale xah ziix ccap quih hai cop ano*
 birds and airplane the wind the in/from/to.(it)

tooxalca, ccaptoj iha.
 they.are/were(seated) flying(pl.) Decl
 ‘Birds and airplanes fly in the air.’ (Hablemos, p. 85)

- (83) ... *oot tintica [iizax quij] cōtcap ma, ...*
 coyote the moon/month the he.flew.to.it DS
 ‘Coyote flew toward the moon...’ (Moon 33)

In (84), a boundary crossing is not described with \sqrt{cap} but instead with a series of other clauses.

- (84) *Tiix* *ccap* *iha* *yax,* *itixö,* *hizeecp,*
 that.one flying Decl because he.jumped.over.it other.side

taax *iti* *tap, ...*
 there/that/those on(it) he.was.(standing)

‘Since he flies, he jumped over it, he was on the other side, ...’ (Moon 13-14)

3.3.3.4 √*acat* (*cacat*) ‘swim’

The verb √*acat* ‘swim’ does not, by itself, imply directed motion (85).

- (85) *Haxz* *tintica* *tacat,* *hax* *yatómtim* *oo.*
 dog Md-Aw Rl-swim Intns Dt-make.sound.in.water-Impf Dl

‘The dog was swimming and was hitting the water (making sound).’
 (DS2005, *catóm*)

It can, however, be used in the context of directed motion, though not with a telic directional phrase: (86) and (87) use a separate clause to indicate the directed motion while (88) prohibits the telic reading.

- (86) *Xicaquizíil* *coi* *pacataj* *x,* [*canóaa* *com*]
 children the.Pl Ir.Dp-swim-Pl UT boat the.Hz

cösiizcam *aha.*
 3IO-Ir.Id-arrive.Pl Aux-Decl

‘The children will get to the boat by swimming.’ (DS2005, *cacat*)

- (87) *Impácat* *¿[toox]* *insüzquim* *haaya?*
 2SgS-Ir.Dp-swim far 2SgS-Ir.Id-enter Aux-QM

‘Are you going to swim out far?’ (More literally: ‘In swimming, will you go far?’ †) (Grammar 17.3.1.3)

- (88) *Haxz* *tintica* [*canoaa* *com*] *cöyacat.*
 dog the.Aw boat the.Hz 3IO-Dt-swim

‘My dog swam toward the boat.’ (*My dog swam to the boat.) (Grammar 18.4)

It can be used with a locative (atelic) phrase, as in (89).

- (89) *Haxz hiixz quih [xtaasi quij ano] cácatim iha.*
 dog 1P-pet the.Fl estuary the.Cm 3P.in SN-swim-Impf Decl
 ‘My dog is swimming in the estuary.’ (Grammar 18.4)

3.3.3.5 \sqrt{iha} (*quiha*) ‘go fast’

\sqrt{iha} ‘go fast’ might be better glossed as ‘be fast’ since appears to be intolerant of directed motion. In (90), to describe telic directed motion, the directionally stronger manner verb \sqrt{panzx} is also used, as well as the path verb \sqrt{azquim} .

- (90) *Ox isoj isiih xah ta tamoz, tpanzx,*
 thus what.will.be.his.custom * Aux he.tried he.ran

tiha, [hehe quij án] cösüzquim xah ta tamoz, ...
 he.is/was.fast plant/wood the interior he.will.enter * Aux he.tried

‘When he went to do as was his custom, he ran fast, he wanted to run under a bush...’ (Rabbit_Antlers 4)¹⁹

To describe atelic directed motion in (91), the path verb \sqrt{eectim} is used.

- (91) *Juan quij quiha ha, [hant quih] cöteectim.*
 Juan the fast Decl earth/place the he.travels/traveled
 ‘Juan is a fast walker.’ (ALIM, p. 180)

3.3.3.6 \sqrt{ojoz} (*cojoz*) ‘flee’

The verb \sqrt{ojoz} , most often glossed ‘flee’, can have a number of other meanings when appearing as the head of an idiomatic verb phrase. Two motion-related idioms are *hapx iiqui cojoz* (‘outside toward flee’) ‘go away angry’ (92), and *ptino cojoz* (‘each-other on flee’) ‘mill around’ (93):

¹⁹ The glossing of this example is altered from the original translation at the suggestion of Stephen Marlett (personal communication).

- (92) ... *Hajhax* *hant* *taax* *iti* *toii*,
 Tecomate place there on/to(it) they. are/were

[hapx iiqii] tojocam, yoque.
 they.left.mad it.is.said

‘... they were living at Tecomate (and) they went away angry.’ (Brothers 1.2-3)

- (93) *Comcáac* *coi* *tseaalam,* *hanso* *[ptino] yajoz.*
 Seri.people the they.were.moving just they.were.milling.around

‘The people were moving around and milling around.’ (DS2005, cojoz)

Both of these idioms incorporate P-elements. However, \sqrt{ojoz} in its non-idiomatic usage does not take P-elements or any kind of path phrase. Instead, an additional clause is used to indicate path.

- (94) ... *tojocam,* *[hast* *ihmáa* *himcap* *iiqii]* *mitóoij.*
 they.fled mountain other(s) that toward(it) they.went

‘... they fled, they went toward that other mountain.’ (Cöquimáxp 6)

3.3.3.7 \sqrt{noftj} (*cnoftj*) ‘slither’

\sqrt{noftj} ‘slither’ is another manner verb appearing to be intolerant of directed motion. (95) uses the verb \sqrt{atax} to depict the component of directed motion.

- (95) *Colimaj* *tintica* *hanso* *tnofalca,* *tatax* *ma,*
 whipsnake the just/very it.was.slithering it.was.going/went DS

ihyoíim *xo,* *cohyomjít.*
 I.threw.at.it but I.did.not.hit.it.with.it

‘I threw things at the snake while it was slithering away, but I didn’t hit it.’ (DS2005, cnoftj)

3.3.3.8 \sqrt{cojp} (*ccojp*) ‘jump (like a toad or cat)’

\sqrt{cojp} ‘jump (like a toad or a cat)’ describes a very specific manner, and seems not to tolerate a directed motion interpretation. In (96), the jumping motion is preceded and

followed by two separate clauses indicating motion, and another pair of clauses indicate the ground and path.

- (96) *Ziix hax ano quij zo [haa] ntita, hanso tcojopim,*
 toad a there it.went just/very it.jumped
- [toc] contiiha iti, hehe hoox captj*
 there it.was.going while plant/wood so.very wide
- zo toc cotom ma, imócl hac contiya.*
 a there it.was(lying) DS under.it the it.went.to.it

‘The toad jumped and went under a wide board.’ (DS2005, ccojpp)

3.3.3.9 √*oqueht* (*coqueht*) ‘bounce, jump’

This verb, with the specific manner ‘bounce’ or ‘jump’, is another that seems to require that directed motion be described in a separate clause, as in (97):

- (97) ... *toquéht, hast ihmáa z it [hant] tooit ma, ...*
 it.jumped rock other a on/to(it) it.landed DS
- ‘... it jumped and went to another rock...’ (DS2005, coquéht)

3.3.3.10 √*paainj* (*cpaainj*) ‘roll’

Surprisingly, the verb √*paainj*, which has a fairly specific manner (‘roll’), does seem to indicate directed, perhaps even telic, motion when it takes a P-element in the following context (*iiqui* for singular complements, *ano* for plural):

- (98) *Hast quij [mino] spaainj aha.*
 rock the.Cm 2P-in Ir.Id-roll Aux-Decl
- ‘The rock will roll over into you.’ (DS2005, ano)

More examples of this verb would help clarify its usage.

3.3.3.11 ‘Carry’ Verbs

‘Carry’ is generally expected to be a semantically complex type of Motion verb,²⁰ but certain Seri verbs typically glossed ‘carry’ are never used in the texts to describe directed motion. Included in this group are those shown in Table 3.

Table 3: Seri ‘Carry’ verbs

√aazi (caazi)	carry
√oon (coon)	carry (several things or substance)
√ahasquim (cahásquim)	carry, transport (in truck or boat)
√sanj (csanj)	carry (on back)
√iip (quiip)	carry (on head)

The verbs in this group are not used with a locative direct object in any of the texts, and it appears that a sentence employing one of these verbs must also have a separate clause including a motion verb in order to indicate directed motion. These verbs indicate, rather than motion, the fact of an Agent’s containment, along with the manner of that containment. In

(99) √aazi ‘carry’ is used to describe only holding, not transporting.

- (99) *Haaonam* *quij* *hinol aapa* *cop* *cohyaazi* *ha.*
 hat the my.right.hand the what.I.carry Decl
 ‘I have a hat in my right hand.’ (Hablemos, p. 15)

(100) and (101) use √oon ‘carry (several things)’ to describe holding objects, but the actual fact of motion is given by the verbs √aanpx ‘return home’ and √iin ‘return’, respectively.

- (100) *Itoonec,* *taanipxat,* *heme* *miizcam ...*
 they.carried.them they.went.home camp they.arrived
 ‘They took them, they went back, they returned to camp, ...’ (Brothers 21.1-3)

²⁰ As mentioned above, ‘carry’ involves an Agent acting on a Figure; in English, this action would be to cause the Figure to move by means of whole-body translocation of the Agent.

- (101) ... *taax* *an* *itaquim,* ***itoon,***
 there in/to.(it) he.put.them he.carried.them

[hant z iiqui] ***tiin,*** ...
 place a with/toward(it) he.returned/went

‘... he put them in, he took them, he went away...’ (Brothers 67.5-7)

Examples (102) (*√ahasquim* ‘carry, transport (in truck or boat)’), (103) (*√sanj* ‘carry (on back)’) and (104) (*√iip* ‘carry (on head)’) similarly use additional verbs to express the fact of motion.

- (102) *Xapoo* *coi* *anxö* *itacötoj,* ***itahasjoj,***
 sea.lion the much they.killed.them they.took.them.by.boat

[toc] ***cömomat.***
 there they.were.coming/came

‘They had killed lots of sea lions, they were taking them in the reed boats, they were coming.’ (Cöquimáxp 20.1-3)

- (103) *Hiin tsanj,* *hax* *ta* *ma,* *[haa]* ***nthamat.***
 he.carried.me.on.back rather/very Aux DS there we.went

‘He carried me on his back, we went there.’ (Topete 123)

- (104) *Itaxi,* *itfain,* ***itiip,***
 she.finished/finishes.it she.tied/ties.it she.carried/carries.it.on.head

maanpx.
 she.returns/ed.home

‘When she has finished, she ties it up, carries it on her head, (and) returns home.’ (Basketmaker 10.1)

3.3.4 *Figure Verbs*

The Figure verbs covered in this section fall into two groups: location verbs and ‘Put’ verbs. Each group comprises six verbs; these verbs correspond (approximately) to a six-way noun class system currently developing in Seri. This system has its origins in the profile or orientation of the item in question (Marlett in preparation). It is a completely pervasive

system; a given Figure will always be describable by at least one of the six verbs in either group. All Figure verbs can take a path phrase.

3.3.4.1 Location Verbs

Although for the most part this thesis ignores Motion events of location, this section is the exception. Some of these verbs can be used to indicate the manner in which an item (mainly people or large land mammals) is located—i.e. seated, standing, or lying—but they are also used to describe objects that cannot agentively do these things and instead have a typical profile. These profiles are listed in Table 4.

Table 4: Seri location verbs

Verb root (citation form)	Gloss
√ahca (caahca)	be located
√iij (quiij)	be seated/be (compact profile)
√ap (caap)	be standing/be (vertical profile, liquid or knife-like item)
√oom (coom)	be lying/be (horizontal profile)
√iih (quiih)	be (flexible item)
√oii (coii)	be (plural items)

All of the location verbs can be immediately preceded by a locative phrase (which can consist of P-elements or location nouns, pronouns or adverbs).

(105) shows a typical usage of √ahca ‘be located’. Note the use of the Path verb √yaai ‘go to’ to denote the motion in this event.

(105) [Hant iicx] caahca z inyaai ha xo ...
 place near located a not.going Decl but

‘He didn’t go to close places but...’ (Glutton 215)

Examples (106) and (107) show the verb √iij ‘be seated/be (compact profile)’ as it is applied to humans and an inanimate object, respectively.

- (106) *[Himcac ano]* ***tquij***,
 that/there.(far) in/from/to.(it/them) one.is/was.seated

coenzil quih mahqueecöl.
 musicians the they.are.listened.to

‘There were people there listening to the musicians.’ (ALIM, p. 29)

- (107) *Hamcanoiin quij [hant quih it com iti]* ***quij*** *iha.*
 pot the corner the on/to(it) seated Decl

‘The cooking pot is in that corner.’ (ALIM, p. 84)

The next three pairs of examples ((108) and (109), (110) and (111), (112) and (113)) show the same thing: first the verb is used for a person or other mammal, then an object of the correct type, for the verbs \sqrt{ap} ‘be standing/be (vertical profile)’, \sqrt{oom} ‘be lying/be (horizontal profile)’, and $\sqrt{i ih}$ ‘be (flexible item)’ respectively.

- (108) ... *tfit*, *hax* *ta*, *[hant]* ***tap***, ...
 he.stands/stood.up rather/very Aux place he.is/was.(standing)
 ‘... he stood up, he was standing there, ...’ (Glutton 509-510)

- (109) *Eenim caacoj quih [hant com iti]* ***caap*** *iha.*
 machete the earth the on/to(it) standing Decl
 ‘The machete is on the ground.’ (ALIM, p. 84)

- (110) ... *hapxa zo [toc]* ***copom*** *iho* *x*, ...
 cottontail.rabbit a there will.lie.down/be.lying Decl *
 ‘... a cottontail rabbit was there lying down, ...’ (Rabbit_Coyote 7)

- (111) *Imam com [haa]* ***coom*** *iha* *xo* ...
 its.ripe.fruit the there lying Decl but
 ‘There was fruit, but...’ (Glutton 421)

- (112) ... [hant com ano] **tihtim** x, ...
 place the in/to.(it/them) he.is/was *
 ‘... he was there in various places, ...’ (Glutton 236)

- (113) [Coopa quij] hax z [an] **imi** iha.
 drinking.glass the water a in/from/to.(it) not.being Decl
 ‘The glass does not have water in it; it is empty.’ (Hablemos, p. 17)

√*oii* ‘be (plural items)’ only seems to be used for inanimate items, as in (114).

- (114) *Xiica is cquihjö* coi [hamcanoiin quih ano] **coi** ha.
 beans the pot the in.(it) being.(pl.) ha
 ‘The beans are in the cooking pot.’ (ALIM, p. 86)

Three of the verbs (√*ij* ‘be seated’ (115), √*oom* ‘be lying’ (which has the plural stem √*oiti*) (116), and √*ap* ‘be standing’ (117)) can also be used to describe moving into a posture. This usage is based on purely on context.

- (115) *Juan quih [hehe iti iquicolim quij it hant] xij.*
 Juan the chair the on/to(it) down he.sat
 ‘Juan sat on the chair.’ (ALIM, p. 157)

- (116) ... *cmaax mos [hipi ptiihax iicx] tooiti,*
 now also same/alone together near they.lay.down

yoque, xiica tahac cōquiihtolca quih.
 it.is.said things/stuff that/there those.who.were the
 ‘... they lay down with them.’ (Brothers 22.3)

Example (117) illustrates this particularly well because it uses the imperative form, thereby eliminating a static interpretation of the verb.

- (117) *Xiica coi [imac hac ano] cap, ...*
 thing.Pl the.Pl 3P-midst the.Lc 3P.in Im-stand
 ‘Stand up in the midst of them, ... (Grammar 13.4.6)

Two of the verbs (\sqrt{ap} ‘be standing’ and $\sqrt{i ih}$ ‘be (flexible)’) can also be used in conjunction with a limited set of path phrases (certain location nouns and adverbs only) to indicate directed motion. For example, (118) indicates descent; (119) and (120) indicate exiting.

(118) [Hehe cop hant] **cöyoop.**
 plant the down he.stood
 ‘He got down out of the tree.’ (DS2005, caap)

(119) [Haaco cop hapx] **cömiip,** he sacaaixaj ta tax.
 house the outside s/he/it.is.was.(standing) to.greet.me because
 ‘S/he came out of the house to greet me.’ (ALIM, p. 134)

(120) ... itoozj quih tmam, toc cötiih ma,
 its.intestine the it.was.cooked/ripe there it.is/was DS

[hapx] **tiih** ma, ...
 outside it.was DS

‘... its cooked intestines came out...’ (Topete 113)

3.3.4.2 ‘Put’ Verbs

The ‘Put’ verbs are more semantically complex than most of the other verbs treated in this thesis in that they subcategorize for, in addition to a Figure, an Agent acting upon that Figure.²¹ (See also the ‘Carry’ verbs, section 3.3.3.11.) The Figure component is indicated in the verb root. They are presented in Table 5 with their glosses.

Table 5: Seri ‘Put’ verbs

Verb root (citation form)	Gloss
\sqrt{ah} (quih)	put (flexible thing)
\sqrt{aquim} (quiquim)	put (small loose item)
\sqrt{caaix} (ccaaix)	put (compact thing)
\sqrt{axquim} (quixquim)	put (long item)
\sqrt{aca} (quica)	put (liquid or knife)
\sqrt{zam} (czam)	put (tall item)

²¹ Talmy defines ‘put’ as “an Agent’s controlledly moving an object through body part movements but without whole-body translocation.” (Talmy 2000b:38)

These verbs must be directly preceded by a telic directional phrase of some sort. This phrase can be a location noun, as in (121) (the verb is \sqrt{ah}):

- (121) ... *itoozalca* *quih* [*hapx*] ***itahtoj***, ...
 its.intestines the outside he.put.them
 ‘... he took out its intestines...’ (Glutton 153)

It can also be a P-element, as in (122)-(125) (the verbs are \sqrt{aquim} , \sqrt{caaix} , \sqrt{axquim} and \sqrt{aca} , respectively):

- (122) [*Ziix yacoso caaixaj* *cop* *iti*] ***hpooquim***, *ihsacaatax aha*.
 burro the on/to(it) I.will.put.it I.will.take.it
 ‘I am going to carry it on the mule.’ † (ALIM, p. 153)

- (123) ... [*hamac* *quih* *iti*] ***imcaaix***
 fire the on/to(it) she.put(s).it
 ‘... she puts it on the fire.’ (Basketmaker 28)

- (124) ... [*izcapxla* *hac* *an*] ***itaxquim*** *ma*, ...
 his. armpit the in/from/to.(it) he.put.it.[long.thing] DS
 ‘... he put him in his armpit, ...’ (Brothers 66.13)

- (125) [*Hamcanoiin* *quij*] *hax* *pac* [*ano*] ***caca***, *hapoct!*
 pot the water some in/from/to.(it) put.it.(liquid)! fill.it!
 ‘Fill the cooking pot with water!’ (ALIM, p. 154)

Or it can be an oblique object (126) (the verb is \sqrt{zam}):

- (126) ... [*hamac* *quij*] ***cöitzam***, ...
 fire the he.put.it
 ‘... he stood it next to the fire, ...’ (Glutton 491)

3.3.5 Two-component Verbs

Some of the verbs encountered in Seri do not fit any of the above groups: that is, they seem to have two components rather than just one. The following is a sampling of these

verbs. It is not proposed that these form a system, as the other groups appear to, but it is nevertheless interesting to see what their individual behavior is.

3.3.5.1 \sqrt{aanpx} (*caanpx*) ‘return home’

\sqrt{aanpx} ‘return home’ incorporates the two components Path (‘back to’) and Ground (‘home’). For this reason, it seems that it cannot be used with a path phrase; in this corpus it never appears with an additional ground and is not used in conjunction with any other path components. (127) also appears to illustrate that ‘arrival’ is a separate concept and must be expressed in an additional clause.

(127) *Ctam* *cop* *taanpx,* *yaaco* *cop*
 man/male the he.returns/ed.home his.house the

ano *tafp, ...*
 in/from/to.(it/them) he.arrives/arrived

‘The man goes home, when he arrives at his house...’ (Basketmaker 44.1)

3.3.5.2 \sqrt{iipax} (*cöquiipax*) ‘climb’

\sqrt{iipax} ‘climb’ incorporates two components: the Path ‘up’ and the Manner ‘climb’. It cannot be used to describe a ‘down’ movement, nor is it used to describe an ‘up’ movement with a manner other than ‘climb’ (Marlett, personal communication). (128) shows a typical usage of the verb while (129) illustrates one way a down movement could be described using a different construction.

(128) *Miist tintica hehe cop cöquiipax iha.*
 cat the plant the climbing Decl

‘The cat climbed the tree.’ (ALIM, p. 156)

(129) *Miist tintica hehe cop hant cöxoops.*
 cat the plant the down it.is.(standing)

‘The cat came down out of the tree.’ (ALIM, p. 156)

It is used with a path phrase. It takes a locational noun phrase as a direct object, and can also be used with the P-element *iti* (130).

(130) *Hanso hant ihttápcax, [yaiij com iti]*
 just I.slipped.down dune the on/to(it)

cöiquípax ihyomá.
 to.climb I.couldn't

‘I just slipped and couldn’t climb the sand dune.’ (DS2005, ctapzx)

Although it is unclear whether (128) and (130) are telic, (131) does seem to be telic.

(131) *Hehe cap [iyat hac iti] conscmúipax*
 tree the its.tip the on/to(it/him/her) you.should.not.climb.up

aha, iiselca coi imáaixaj iha tax.
 Aux-Decl branches the it.is.not.strong Decl because

‘Don’t climb up to the tree top because the branches aren’t strong.’ (DS2005, cöquiipax)

√iipax therefore appears to have the syntactic properties of a path verb.

3.3.5.3 *√ixö (quixö) ‘jump over’*

√ixö ‘jump over’ is another verb that incorporates Path (‘over’) and Manner (‘jump’).

Like *√iipax*, it also has the syntactic properties of a Path verb, taking a path phrase (a direct object in (132) and an oblique object in (133)).

(132) *[Iizax qui] itixö ma, ...*
 moon the.Cm 3:3-RI-jump.over DS

‘He jumped over the moon...’ (Moon 11)

(133) *Hap tintica [hant hazáain com] iyixö.*
 mule.deer the fenced-in.area the it.jumped.over

‘The mule deer jumped over the fence.’ (DS2005, quixö)

3.3.5.4 $\sqrt{\text{zeemj\ddot{o}}}$ (*coczéemj*) ‘dive’

$\sqrt{\text{zeemj\ddot{o}}}$ is a third verb incorporating Path (‘into’) and Manner (‘dive’). It too takes a Path phrase, patterning with the Path verbs.

- (134) ... [xepe cyaaail com] *cõtzeemj*, ...
 sea deep the he.dove
 ‘... he dove into the deep sea ...’ (DS2005, *coczéemj*)

3.3.6 *Seri’s Motion-actuating Type*

According to the information above, there are at least four separate verb systems²² for expressing Motion events in Seri: Path; Manner; and the two Figure types, location and ‘Put’. The Path verbs are the characteristic type for directed motion, but a few Manner verbs can be used to describe atelic, non-boundary-crossing motion. The location verbs are used to describe static (or locative) Motion events, but interestingly some of these verbs can also be used to describe two other types of Motion events: postural and directed. Finally, the ‘Put’ verbs are used for another type of Motion event, in which an Agent moves a Figure without full-body translocation.

Technically then, according to Talmy, Seri would have a “split system of conflation.” This label applies when a language “characteristically employ[s] one conflation type for one type of Motion event, and ... a different conflation type for another type of Motion event” (2000b:64). Seri employs all three conflation types for various types of Motion events: Path for all types of directed motion, Manner for directed (but atelic) motion, Figure for locative events, and Figure again for ‘Put’ events. Therefore, the “split” label technically applies, but it hardly does justice to the complexities we see in Seri, since it merely acknowledges the use of more than one system but is not descriptive of those systems.

²² Five, if the pure motion verbs are counted as separate from the Path verbs.

3.4 Satellites

Sections 2.3 and 3.2 have already discussed the difficulties inherent in identifying the satellites of a language. This section will determine what words will be treated as satellites in Seri based on two criteria that I am using. First, the syntactic category the word belongs to must appear in the verb phrase “in a sister relation to the verb root” (although recall Talmy’s specification that this excludes postpositional phrase and noun phrase complements; refer to section 2.3 for the complete definition of a satellite). Second, it must be possible for the word to appear in a verb phrase expressing motion or location—in other words, we will look only at those satellites appearing in Motion events.²³

Seri has a number of categories of words that fit these parameters. These include the deictic prefixes (*mo-* toward and *nt-* away), P-elements, adverbs, and certain location nouns and pronouns that act like adverbs. We will be examining only those adverbs that relate to motion or location. These categories, and the semantic components they each typically contain, are summarized in Table 6.

Table 6: Seri satellites and their semantic components

Satellite type	Semantic component
Deictic prefix	Path
P-element	Path
Location noun	Ground
Location pronoun	Path
Location adverb	Path

3.4.1 Deictic Prefixes

The prefixes *mo-* toward and *nt-* away (also discussed in section 3.3.1) appear on only a few verbs, as seen in Table 7.

²³ Talmy’s concept of satellite does not limit its appearance to events of Motion, but since this thesis is concerned only with Motion events it will simplify the task to use this criterion.

Table 7: Seri verbs with deictic prefixes

Verb root	Gloss	With <i>mo-</i>	Gloss	With <i>nt-</i>	Gloss
√a	go	moca	come	intica	go (away)
√ooit	arrive	imcooit	arrive	--	--
√oozi	take	imcoozi	send close	intcoozi	send away
√queetx	take back	mocqueetx	bring back, return	--	--

These prefixes lexicalize the deictic portion of Path, but often the verbs using these prefixes occur with a further path phrase to elaborate the path.

(135) and (136) show the *mo-* and *nt-* prefixes with the verb √a.

- (135) *Canóaa zo [haa] moca ha.*
 boat a there Twd-SN-move Decl

‘There comes a boat.’ (DS2005, haa)

- (136) *Caahit quih [hant zo] contíta x, ...*
 fisherman the.Fl place a 3IO-Aw-RI-move UT

‘When a fisherman goes to his fishing spot, ...’ (DS2005, caapjöquij)

(137) illustrates the use of √ooit with the *mo-* prefix.

- (137) *Haapa quih inyaait, moxima.*
 northwest.wind the.Fl Twd-Dt-arrive yesterday

‘The northwest wind came up yesterday.’ (DS2005, imcóoit)

(138) and (139) show the combination of √oozi with the *mo-* and *nt-* prefixes, respectively:

- (138) ... *[haa] mihoози cah, cöitamjc...*
 there his/her.sending.it the.Foc she.brought.it.to.him

‘... they sent it and she delivered it to him...’ (Barrel 60)

- (139) *[Hehe án com] contitoozi ma x, ...*
 countryside the he.took.them DS *

‘He took them to the countryside, ...’ (Glutton 192)

And (140) illustrates *mocqueetx* (*mo-* √queetx):

- (140) *Hant ihamíjz quih quiso quih mitcomquéetx iho.*
 rake the borrower the he.has.not.returned.it Decl

‘The person who borrowed the rake hasn’t returned it.’ (DS2005, mocquéetx)

3.4.2 P-elements

Seri P-elements (also discussed in section 3.3) are a class of words similar to what other researchers have called “relational preverbs” (Hale and Craig 1988). In the situations we are considering in this thesis, they obligatorily occur in preverbal position and are part of the verb phrase. They subcategorize for a noun phrase complement, which may or may not be contiguous because it is merely a semantic complement, not a syntactic one (Marlett in preparation). Contrast (141) (contiguous) with (142) (non-contiguous).

(141) ... *hehe án com iiqui tiin, ...*
 countryside the toward.(it) she.went
 ‘... she was going to the countryside ...’ (Glutton 8)

(142) [*Haaco himcop*] *ziix quih ano caahca*
 house that thing the in/from/to.(it/them) what.is.located

 quih miizj hocoho ha.
 the well the.one/what.I.have.seen Decl
 ‘I saw what happened in that house.’ (ALIM, p. 122)

Table 8 shows all the Seri P-elements, though some of them are uncommon. They all contain a Path component.

Table 8: Seri P-elements

P-element	Gloss
ano	in, to, on, from
iica	next to, beside
iicx	near
iihax	with (sg.)
iicot	with (pl.)
iiqui	toward, against
itaai	to (meet)
iti	on

The Seri P-elements can appear with Path verbs (\sqrt{apf} ‘arrive’ in (143)) as well as verbs of pure motion (\sqrt{a} ‘go’ in (144)) and location (\sqrt{ahca} ‘be located’ in (145), and \sqrt{ap} ‘be standing’ in (146)).

- (143) *Juan quih ihyaaco cop ano miifp, ...*
 Juan the my.house the in/from/to.(it/them) he.arrived
 ‘Juan arrived at my house ...’ (ALIM, p. 159)

- (144) ... *Haaca Caacoj quih Inoohcö quij hant xah, tiix*
 (name of camp) the place and that.one

ano ntita, ...
 in/from/to.(it/them) he.went

‘... he went through the area around “Big Crucillo Bush Bay”, ...’ (Seahorse 12.2)

- (145) *Coteexoj com hax toii ttazlc,*
 jumping.cholla.skeleton the very it.was.punctured

iti yoohjoj.
 on/to(it/him/her) they.were.located

‘The cholla cactus was full of holes, there they were.’ (Seahorse 18.1-2)

- (146) ... *cmaax comcaac coi quiiicot tap x, ...*
 now Seri.people the with.them he.is/was.(standing) *
 ‘... then he was with the people, ...’ (Glutton 190)

P-elements can also appear with many verbs in ways that produce a new, not necessarily transparent meaning. Sometimes they do this with an otherwise non-motion verb to produce a

motion meaning. See *ano quimoz* ('in/from', √*imoz* 'have heart') 'turned upside down' (147), *iiqui cochéezj* ('toward', √*neezi* 'mash') 'spread on' (148), and *ano caháama* ('in/from', √*ahaama* 'put in liquid') 'put in, pour in (liquid)' (149):

- (147) *Haaco cop áno mimoz.*
house the it.fell.in

'The roof of the house fell in.' (ALIM, p. 166)

- (148) *Siimet ihyáa quih panáal quih iiqui cohyonéezj.*
bread my the honey the I.spread.it.on

'I spread the honey on my bread.' (DS2005, cneezi)

- (149) *Hitróoqui quij hasáaiti coozlil quih ano*
1P-vehicle the.Cm lubricating.oil the.Fl 3P.in

hsaháama *ha.*
1SgS.Tr-Ir-Id-cause.trickle Aux-Decl

'I am going to put oil in my car.' (DS2005, caháama)

At other times, P-elements combine idiomatically with a motion or location verb to produce an extension of a motion meaning or even a non-motion meaning. See *iti moca*

('on/to', √*a* 'go') 'come from' (150) and *iica coom* ('next to', √*oom* 'lie') 'belong' (151):

- (150) *Caar ina quih caar cop iti moca ha.*
wool the sheep the on/to(it)/while coming Decl

'Wool comes from sheep.' (Hablemos, p. 99)

- (151) *Queelx caacoj quih canóaa cheel quih iica coom iha.*
paddle big the boat red the it.belongs.to Decl

'The large paddle belongs to the red boat.' (DS2005, coom)

Still other combinations with motion or location verbs result in an idiomatic meaning that is still motion-related. See *hapx iiqui cpanzx* ('outside toward', √*panzx* 'run') 'take off running' (152) and *itáai caafp* ('to (meet)', √*afp* 'arrive') 'meet (someone who is arriving)' (153):

- (152) *Tojoz ma, --- hapx iiqui tpanzx ma, ...*
 he.fled DS he.took.off.running DS
 ‘He (Puma) fled --- he ran away, ...’ (Rabbit_Puma 16.1)

- (153) *¡Canóaa quih itáai cafp! ¡Hoocta! ¿Áz itámjc?*
 boat the go.to.meet.it look.at.it what did.he.bring
 ‘Go meet the boat! What did it bring?’ (DS2005, caafp)

3.4.3 Location Nouns

Seri has a small set of nouns, called location nouns, that can occur inside the verb phrase. These are nouns that act like typical nouns when they are not in a verb phrase, but within a verb phrase they do not have determiners and are not cross-referenced on the verb (Marlett in preparation).

Table 9: Seri location nouns

Noun	Gloss
hant	land, ground, earth
hapx	place outside
haxoj	shore
heme	home, camp
zaaj	cave

The location nouns each express Ground. They can be used transparently in conjunction with some of the Path verbs (154), location verbs (155), and ‘Put’ (156) verbs:

- (154) *Cmaam quij heme tafp, ...*
 female the.Cm camp RI-arrive
 ‘When the woman arrives at camp, ...’ (Basketmaker 26.1)

- (155) *Satoj coi ah anxö hapx toi, ...*
 mussel(s) the Focus much outside they.are/were
 ‘The mussel shells were lying out there, ...’ (Glutton 364)

- (156) *Haxoj itáxquim, canóaa com cötcap, iyóoix.*
 shore he.put.it(long.thing) boat the he.jumped.from.it he.left.it
 ‘He beached the boat, jumped from it and left it.’ (DS2005, quixquim)

However, at other times, their use with a Path verb produces a (motion-related) idiomatic expression. See *hapx hant cooit* ('outside down', √*ooit* 'arrive') 'rush out' (157), *hapx cooit* ('outside', √*ooit* 'arrive') 'emerge [like sound]' (158), *haxoj caafp* ('shore', √*afp* 'arrive') 'arrive at land' (159), and *zaaj cooit* ('cave', √*ooit* 'arrive') 'go toward the sea from inland' (160):

(157) ... *hapxa* *coi* *mos* ***hapx*** ***hant*** ***cõteme***, ...
 cotton-tail.rabbit the.Pl also outside down 3IO-RI-arrive-Pl
 '... the rabbits also rushed out...' (Rabbit_Puma 16.2)

(158) *Cmaacoj* *cop* *isxéen oo caaitom* *iha* *xo*, ***hapx yaait***.
 old.man the he.was.whispering Decl but it.emerged
 'The old man whispered but his voice was heard.' (DS2005, *cooit*)

(159) *Hant* *hac* *iti* ***haxoj tafp***, ...
 earth the on/to(it) he.landed.(from.sea)
 'He arrived at land, ...' (Brothers 61.3)

(160) ... ***zaaj tooit***, *xepe* *an hant sooit* *ta*, ...
 he.arrived.at.the.sea sea he.will.descend.into.it Aux
 '... he arrived at the beach, (and) as he was going to enter the sea, ...'
 (Seahorse 12.3)

Furthermore, the combination of a location noun with a location verb can, in the right contexts, produce a directed motion interpretation (see also section 3.3.4.1). (161) is a directed motion event but (162) is not; also compare (155) (above) with (163).

(161) *Hehe* *cop* ***hant*** ***cöyoop***.
 tree the earth/down he.stood
 'He got down out of the tree.' (DS2005, *caap*)

(162) ... *tfit*, *hax* *ta*, ***hant tafp***, ...
 he.stands/stood.up rather/very Aux place he.is/was.(standing)
 '... he stood up, he was standing there, ...' (Glutton 509-510)

(163) ... *itoozj* *quih* *tmam,* *toc* *cötiih* *ma,*
 its.intestine the it.was.cooked there it.is/was DS

hapx *tiih* *ma, ...*
 outside it.was DS

‘... its cooked intestines came out...’ (Topete 113)

3.4.4 Location Pronouns

Two words that occur only immediately before the verb in the verb phrase, *toc* ‘there’ and *hiz* ‘here’, “determine indirect/oblique object inflection on the verb” (Marlett in preparation) and are therefore classified as pronouns. These pronouns can only occur before the motion verb \sqrt{a} and the location verbs. They lexicalize the deictic portion of Path.

(164) and (165) show *hiz* with the verbs \sqrt{a} ‘go’ and \sqrt{ij} ‘be seated’, respectively.

(164) *Tosipxoj,* *hiz* *contima.*
 s/he.whistles/whistled here s/he/it.went.to.it
 ‘S/he went by, whistling.’ (ALIM, p. 147)

(165) *Cyaa* *quih* *hiz* *cötmüj* *iho.*
 owner the.Fl here 3IO-RI-N-sit Decl
 ‘The owner isn’t here.’ (DS2005, quijj)

(166), (167) and (168) show the combination of *toc* with \sqrt{a} ‘go’, \sqrt{oom} ‘be lying’, and \sqrt{iij} ‘be (flexible item)’, respectively.

(166) *Iicp hac iicp* *mota,* *toc* *cömoaya.*
 nearer it.is/was.coming/comes there it.is/was.coming/came
 ‘It was getting closer.’ (Cöquimáxp 37)

(167) ... *hapxa* *zo* *toc* *copom* *iho* *x, ...*
 cottontail.rabbit a there will.lie.down/be.lying Decl *
 ‘... a cottontail rabbit was there lying down, ...’ (Rabbit_Coyote 7)

(168) ... *toc* *cöihiihtim* *iti,* *hoo xah teme,* *tatax, ...*
 there he.is/was on/to(it/him/her) soon he.went
 ‘... while he was there, he soon went.’ (Brothers 63.2-3)

3.4.5 Location Adverbs

A number of adverbs appearing in a verb-phrase-initial position can be used in a Motion context (Marlett in preparation). These are given in Table 10. They can be used in conjunction with various types of verbs, although each adverb appears to have its own restrictions. In the context of a Motion event, the location adverbs, all of which are anaphoric, express Path.²⁴

Table 10: Seri location adverbs

Adverb	Gloss
aamo	far
cola	high
colx	way up high
haa	there
hacx	apart, alone
hantáxl	near
hantx	at the base
hapx	out
haquix	there
himo	elsewhere
hiza	elsewhere, towards elsewhere
hizx	aside
iicp	towards
iicx	near
iij	elsewhere, differently
toii	toward somewhere else
toox	far

Some can appear with the ‘go’ verbs \sqrt{a} , \sqrt{azquim} , and \sqrt{iin} . These include *aamo* ‘far’,²⁵ *haa* ‘there’ (169), *haquix* ‘there’ (170), *hiza* ‘elsewhere’ (171), *toii* ‘toward somewhere else’ (172), and *toox* ‘far’ (173).

- (169) *Hiin tsanj, hacx ta ma, haa nthamat.*
he.carried.me.on.back rather/very Aux DS there we.went
‘He carried me on his back, we went there.’ (Topete 123)

²⁴ Since Talmy does not specifically address adverbs, deciding how to make this determination involved some deduction. See section 2.4 for details.

²⁵ No example is available for *aamo* but *aamo cazquim* is cited in the 2005 dictionary as meaning ‘go far’.

(170) ... *hehe án com án cõtazquim, haquix intica ha.*
 countryside the she.entered there going Decl
 ‘... she went into the countryside, she was going there.’ (Glutton 12-13)

(171) ... *hiza hayitóoj.*
 elsewhere we.went
 ‘... we went in another direction.’ (DS2005, camóotj)

(172) ... *toiï iquiin itcmamzo*
 toward.somewhere.else go he.does/did.not.want.it
 ‘... he didn’t want to keep going.’ (ALIM, p. 159)

(173) *Hap cõhaisx tintica toox ipi tmazquim ma,*
 mule.deer injured the far it.didn’t.go DS

iháait quih cõtootij ma, mooxi.
 blood the it.dried DS it.died

‘The injured mule deer didn’t go far. It lost a lot of blood and died.’
 (DS2005, cazquim)

Most of the adverbs can be used with the various Path and ‘Put’-type verbs to express a Motion event. (174) shows *cola* ‘high’ with \sqrt{axquim} ‘put (long item)’.

(174) *Cola nsiixquim aha.*
 high 2SgS-Ir.Id-put.Hz Aux-Decl
 ‘You should put it up high.’ (Grammar 24.4.2)

In the next two examples we see \sqrt{afp} ‘arrive’ with two adverbs: *haa* ‘there’ (175) and *hantáxal* ‘near’ (176).

(175) *Haa hpyomafp, comcaac quih tatxo ma.*
 there I.didn’t.arrive Seri.people the they.are/were.many DS
 ‘I didn’t arrive there because there were lots of people.’ (ALIM, p.29)

(176) *Zaxt quisiil tiquij itaho, ityaai,*
 baby that she.sees/saw.him she.was.going.to.it,

hantaxal xah cõtafp, ...
 somewhat.near she.arrived.to.him

‘She saw that baby, she was going to it, she got fairly close to him, ...’
 (Glutton 28-30)

In (177) the verb is $\sqrt{\text{panzx}}$ ‘run’.

(177) ... *hiza yopanzx.*
 elsewhere Dt-run

‘... it ran in a different direction. (DS2005, hiza)

(178) uses the ‘put’ verb $\sqrt{\text{aca}}$ ‘put (liquid)’:

(178) *¡Hizx caca!*
 aside Im-put.Lq

‘Take it away!’ (Grammar 24.4.2)

(179) uses a verb that is probably etymologically related to $\sqrt{\text{ifin}}$ ‘encircle, go around’

(section 3.3.2.10), along with the adverb *toi* ‘toward somewhere else’. The actual verb used here is $\sqrt{\text{oofin}}$ ‘pass’.

(179) *Haaco cop toi cõsoofin caha.*
 house the she.will.go.around Aux-Decl

‘She is going around to the other side of the house.’ (DS2005, coofin)

Other adverbs form less straightforward constructions. (180) is an example of a “motion” in which there is no actual movement, but there is a metaphorical or potential motion ‘towards somewhere else’.

(180) ... *zaaj hizac toi hmeetol*
 cave this toward.somewhere.else I.push.it

‘... I am pushing on this cave.’ (Rabbit_Coyote 29)

(181) presents a similar situation, but in this case the Figure is subject to motion within itself.

(181) ... *oot tintica iisax quij cõtap ma,*
 coyote the moon the he.flew.to.it DS

toii tahahaatox ma, ...
 toward.somewhere.else it.was.stretched DS

‘... Coyote flew toward the moon, it was stretched out.’ (Moon 33)

Another metaphorical use of motion is seen in (182), with *√iyat* ‘reach’ being used to refer to an object staying in place but covering a certain area.

(182) *Haaco cop colx quiyat iha.*
 house the very.high it.reaches Decl

‘The house is very tall.’ (DS2005, colx)

In (183), the adverb *colx* ‘high’ refers to the peak of the motion, since the verb *√anáaij* ‘make return’ describes an arcing path.

(183) *Ziix hapx coom com yamác quih colx ixanaaaaj.*
 whale the.Hz 3P-blow the.Fl high 3:3-Em-make.return

‘A whale makes its spout go very high.’ (DS2005, yamác)

Almost all the location adverbs can be used with the location verbs mentioned in 3.3.4.1.²⁶ In these cases, they express the stationary form of Path, site. (184) shows *aamo* with *√iij* ‘be seated’.

(184) *Trooqui quij cói aamo oo miij.*
 vehicle the.Cm still far DI Px-sit

‘It is still a bit in the distance.’ (DS2005, aamo)

(185) is *cola* with *√ahca* ‘be located’:

²⁶ The exceptions appear to be *himo* elsewhere, *hizx* aside, and *toii* toward somewhere else; no examples were found of these adverbs occurring with location verbs. For *himo* this is not surprising as it is presently “not used much except with certain verbs” (Moser and Marlett 2005).

(185) *Hehe an icáaij quij hant cola caahca z*
 barrel the place high be.located a

iti tiij, ...
 on/to(it/him/her) it.is/was(seated)

‘The barrel was up high...’ (DS2005, caháahnij)

In (186) *hantaxl* appears before \sqrt{ap} ‘be standing’.

(186) *Zacaam cop hahoot hac hantaxl cöcaap iha.*
 young.woman the door the near standing Decl

‘The girl is near the door.’ (Hablemos, p. 11)

(187) shows how *hantx* ‘base’ and *iicx* ‘near’ are used with the verb \sqrt{ap} ‘be standing’ to form the idiom *hantx iicx caap* ‘be lower’:

(187) *Hehe hipcop hantx iicx yoop.*
 plant/wood this it.is.lower

‘This stick is lower.’ (DS2005, caap)

(188) is referring to a blanket that has been torn into strips; the adverb *ijj* ‘elsewhere, differently’ is used with the verb \sqrt{oom} ‘be lying’ to describe the way the blanket is lying.

(188) ... *ijj toiitoj, xaasj ticop*
 in.a.different.way they.are/were.(lying) sahuoso that(one)

iti miih.
 on/to(it/him/her) it.was

‘...it was lying haphazardly in pieces in the sahuoso cactus.’ † (Topete 95)

(189) uses *hiza* ‘elsewhere’ with the verb $\sqrt{i ih}$ ‘be (flexible item)’ to give the general meaning of ‘being around’:

(189) *Cooza hant ipot coii*
 ones.who.talk earth down.inside being.(pl.)

hiza toi ma, ...
 somewhere.else they.are/were DS

‘The ones who are talking under the earth are around, ...’ (Stinkbug 11)

Often, the adverbs are found to express location in conjunction with verbs that are not location verbs. Three examples follow: (190) uses the verb \sqrt{eec} ‘plant’; (191) uses \sqrt{iho} ‘see’; and (192) uses \sqrt{ixaa} ‘have roots’.

- (190) *Ctam ticop haa teec,*
 man that(one) there he.is/was.planting
- haa tap ma, hamiht.*
 there he.is/was.(standing) DS we.found/saw.him
- ‘That is the man whom we saw planting.’ (ALIM, p. 165)

- (191) ... *hantáxl hayomáht.*
 near we.did.not.see.them
- ‘... we couldn’t see them up close.’ (DS2005, cahójoz)

- (192) *Haas cop hehe hantx quixáa ha.*
 mesquite the plant deeply what.has.roots Decl
- ‘The mesquite tree has very deep roots.’ (DS2005, hantx)

Sometimes, as in (193), adverbs express the location (not the path) of a motion.

- (193) *Ziic tintica colx xeectim.*
 bird Md-Aw way.up.high Em-travel
- ‘The bird is flying way up high.’ (Grammar 24.4.2)

(194) uses the verb \sqrt{ocom} ‘lie down on’ in the idiom *iti cola cocom* ‘float on’. Although the English word ‘float’ can be used to express directed motion, this sentence uses the ‘float’ idiom only to describe Manner, employing the verb \sqrt{afp} ‘arrive’ to express the motion.

- (194) *Ctamcō coi paailc pac iti cola cōtooiti,*
 men the driftwood some they.were.floating on.it
- Tahéjōc quij cōcaazcam iha.*
 Tiburon.Island the they.arrived Decl
- ‘The men arrived at Tiburon Island on driftwood.’ (More literally: ‘Floating on some driftwood, the men arrived at Tiburon Island.’ †) (DS2005, cocom)

A further variation of what these adverbs can do, also discussed in 3.3.4.1, is the expression of motion (directed or postural) using location verbs plus adverbs. (195) shows postural motion with an idiom using the verb \sqrt{loom} ‘be lying’.

- (195) *¡Hantx iicx hoom!*
 at.base near Im-lie
 ‘Stoop down!’ (DS2005, iicx)

The next three examples (196)-(198) show directed motion with various adverbs and location verbs. (196) uses the idiom *hant caap* (‘down’, \sqrt{ap} ‘stand’), ‘descend’.

- (196) *Hehe cop hant cöyoop.*
 plant the down he.stood
 ‘He got down out of the tree.’ (DS2005, caap)

Examples (197) and (198) both use *hapx* ‘outside’ to convey an exiting motion, with the verbs \sqrt{iih} ‘be’ and \sqrt{ap} ‘stand’ respectively.

- (197) ... *itoozj quih tmam, toc cötiih ma,*
 its.intestine the it.was.cooked there it.is/was DS

hapx tiih ma, ...
 outside it.was DS

‘... its cooked intestines came out...’ (Topete 113)

- (198) *Haaco cop hapx cömiip, he sacaaxaj ta tax.*
 house the outside s/he/it.is.was.(standing) to.greet.me because

‘S/he came out of the house to greet me.’ (ALIM, p. 134)

3.4.6 *Seri’s Motion-framing Type*

The motion-framing type of a language is decided based upon whether it characteristically lexicalizes Path in the verb or in the satellite. We have already determined that the most characteristic verb type for the expression of Motion is a Path verb; now we have seen that most satellites also express Path, even in conjunction with Path verbs. At least

two possible explanations for this conjunction come to mind. One is that perhaps when what appears to be a Path satellite is used with a Path verb, it is not really a satellite. Recall Talmy's uncertainty about what should qualify as a satellite and add to that the fact that a "set of forms that can function as satellites in a language often overlaps partially, but not wholly, with a set of forms in another grammatical category in that language" (Talmy 2000b:102)—our method for defining Seri satellites might be flawed. This could of course be true, but since we have no other reason to change our definition, to do so only on this basis seems like an evasion of the question. Another possibility is that the verbs used with Path satellites are not actually lexicalizing Path in that context; this hypothesis is supported by the many appearances of \sqrt{a} , \sqrt{iin} , and \sqrt{azquim} (all verbs that can mean simply 'go') with Path satellites, muddied by the many appearances of \sqrt{afp} and \sqrt{ooit} (both 'arrive') and rendered improbable by the occasional appearances of verbs like \sqrt{ooftin} 'pass' and \sqrt{yaai} 'go to'.

No matter which hypothesis is correct, the fact that Path occurs in both verbs and satellites is indisputable. This leaves us with a question which we have run out of tools to answer: which is more "characteristic"? We are forced to conclude that Seri's motion-framing type cannot be determined with Talmy's criteria. This is not a problem I have seen highlighted in discussions of other languages.

3.5 Typological Conclusions

In short, Seri does not fit neatly into Talmy's typology. There are a number of what Talmy calls "systems": the plain Motion verb, which is very frequent; the Path verbs, which are probably the most "characteristic" form of Motion expression but do not form an entirely pervasive system; the Figure verbs, both location and 'Put'; and the Manner verbs, which vary in their ability to be verbs of directed motion. The satellites are all either Path or

Ground, which seems counterintuitive or redundant for a language whose most characteristic verbal expression of Motion is Path.

This leaves us with a split motion-actuating type and an undetermined motion-framing type, as well as some puzzles: Why does Seri use Path in both satellites and verbs? Why can the same construction sometimes be viewed as locative, and sometimes as directed motion, depending on context? What exactly are the rules for constructing a Motion event? The next chapter will discuss further developments of the motion typologies with the aim of assessing their relevance to Seri and their ability to resolve these lingering questions.

CHAPTER 4

AMENDING THE TYPOLOGY

Having seen the mixed success with which Talmy's typology has been applied to the Seri language, we now discuss the ways in which the typology might be amended to better suit Seri and other languages for which it also falls short. Talmy himself has made some improvements to the typology since its inception. This thesis has applied the typology in its most recent form (Talmy 2000b), but in order for us to understand the direction it has taken, section 4.1 will review the changes Talmy made and what prompted them.

Further sections will discuss outside critiques of the typology and suggestions that have been made to improve it. Section 4.2 addresses critiques of the Motion component itself (also discussed in 2.1). Section 4.3 describes suggestions that would alter the nature of the typologies, while section 4.4 discusses some suggestions for additional parameters for language typing with regard to motion events. These latter three sections will also, as a test, attempt to apply the changes suggested to Seri to see whether the suggestions are productive or merely confuse the issue. Section 4.5 will draw some conclusions based on the findings of this chapter and the thesis in general.

4.1 Talmy's Improvements

Talmy's two-volume work on cognitive semantics (Talmy 2000b) includes updated versions of the 1985 and 1991 articles. One of the changes made was to clarify some definitions. In the 1985 article, for instance, "Motion" is defined as referring to "the presence *per se* in the event of motion or location" (1985:61); in 2000, this is changed to "the presence

per se of motion or locatedness in the event” with the clarification added: “The Motion component refers to the occurrence (MOVE) or nonoccurrence (BE_{Loc}) specifically of **translational motion**” (2000b:25). A section discussing translational and self-contained motion was also added. This is a helpful clarification, since the 1985 definition left the door open to unintended interpretations: it was unclear what kinds of motion qualified as motion events (walking in place, wiggling one’s fingers, and spinning would all technically qualify under the 1985 definition but not the 2000 one).²⁷

Another clarified definition was that of the satellite. This changed from “certain immediate constituents of a verb root other than inflections, auxiliaries, or nominal arguments. They relate to the verb root as periphery (or modifiers) to a head” (1985:102) to “the grammatical category of any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb root. It relates to the verb root as a dependent to a head” (2000b:102). There are two changes of note, here: first, the satellite is promoted to a “grammatical category”; furthermore, the kinds of constituents that can be a satellite are updated.²⁸

Talmy also introduced the term Co-event in the 2000 article; previously, he had either referred to individual types of Co-events (Manner and Cause) or, as in the 1991 article, called it a “supporting event” with a relation to the framing event called the “S-relation” (1991:484).

These definitional updates are small but significant and each constitutes an improvement over the older version. Talmy also made another major change in the motion-actuating typology in response to criticisms: whereas in 1985 he refers to the three main language types

²⁷ Although this clarification was helpful, it did not clear up all the issues with the definition of Motion events; section 2.1 discusses this in detail.

²⁸ The 2000 article also adds the clarification on Path + Ground satellites (that they are not anaphoric or deictic) which helped to resolve the issue presented in section 2.4.

(Motion + Manner/Cause, Motion + Path, and Motion + Figure) as constituting an “apparently exhaustive typology” (1985:62), in 2000 he calls them merely “typologically principal” and adds a number of other types. Included in that acknowledgment was a concept originated by Aske (1989) and developed by Slobin (Slobin and Hoiting 1994; Slobin 2004a) to which we will now turn.

4.1.1 *Restrictions on Manner Verbs in Verb-framed Languages*

Aske’s 1989 paper challenged Talmy’s classification of Spanish as a purely Path-type language. He noted that under certain circumstances, Spanish constructions using Manner verbs with a path phrase were permitted; the following are two examples given in that paper:

(199) *La botella flotó hacia la cueva*
‘The bottle floated towards the cave.’

(200) *El libro se deslizó hasta el suelo*
‘The book slid down to the floor.’

Aske proposed that the reason some constructions were blocked while others were permitted was due to a more general restriction in Spanish on “resultative non-verbal predicates”—that is, while one can say *Juan comió la carne cruda*, ‘Juan ate the meat raw’ (which is depictive), one cannot say anything comparable to ‘Pat kicked the door open’ (which is resultative). In a Motion event, this translates to a prohibition on telic path phrases, those that predicate an end-point location of the Figure argument; locative (or atelic) path phrases, those that predicate a location for the whole proposition, are permitted.

Slobin and Hoiting (1994) developed a similar proposal during their work with Sign Language of the Netherlands (SLN), a path-type, verb-framed language. They found that with three types of paths (entering, exiting, and crossing) SLN used **two** path verbs to represent the event: one to represent the actual entering, exiting, or crossing, and one to represent the

approach to (or path away from) the other part of the event. They hypothesized that what set these events apart from other motion events needing only one path verb was the following: the three special events depict a motion event in which the image schema includes a boundary that, in the course of the event, is crossed.

Slobin and Hoiting also noted that spoken path-type, verb-framed languages (like Spanish) can use a manner verb to depict a motion event as long as no boundary is crossed. Thus, examples (199) and (200) above are acceptable because they do not involve a boundary crossing, but the depiction of a boundary-crossing event necessitates a path verb.

A later article (Slobin 2004a) develops the reason for the boundary-crossing constraint. Slobin makes the claim that “[p]erhaps the most salient characteristic of [verb-framed] languages is the preference to mark a change of state with a verb, rather than by some other device” (2004a:226). Since boundary-crossing events are changes of state, they fall under this constraint. However, in certain cases manner verbs can be used in boundary-crossing situations, but they must be “those that are not readily conceived of as activities, but, rather, as ‘instantaneous’ acts. Thus one can ‘throw oneself into a room’ but one generally can’t ‘crawl into a room’ in [verb-framed] languages” (2004a:226).²⁹

Seri is definitely subject to the boundary-crossing constraint, as seen especially in the section on Manner verbs, 3.3.3; this aligns with its overall pattern of path-type language, and points to its being verb-framed as well.

²⁹ In a further elaboration of this idea, Filipović (Filipović 2006) proposes a three-way representation of what she calls “situation types”, based on her study of Serbian/Croatian: boundary-crossing, boundary-reaching, and non-boundary-crossing.

4.2 Criticizing the Motion component

A few authors have criticized Talmy's presentation of the Motion component of the Motion event, for various reasons. One of these was discussed in section 2.1. Narasimhan (2003) proposed that, contrary to Talmy's assertions, the Motion component is not necessarily lexicalized in a given verb, but is rather associated with a particular construction that the verb might appear in.³⁰ This seems to be true of Seri, although context—not just construction—also seems to play a role, especially with verbs of location that can take on a directed motion interpretation in certain contexts (see sections 3.3.4.1, 3.4.3, and 3.4.5).

Kita (1999) had a different criticism: he took issue with Talmy's presentation of Motion as a two-way distinction between directed motion and location. He proposed a third type of Motion, “discrete change of state”, supporting his proposal with data from Japanese. His claim was that *hairu* ‘enter’ and *deru* ‘exit’ do not encode an analogue change of state (that is, they do not encode how the change of state came about, or the movement from the inside to the outside, or vice versa) but instead predicate “that a certain spatial configuration holds up to Time 1, and another spatial configuration holds after Time 2” (1999:310)—in other words, a discrete change of state. We do not have a way to apply Kita's tests for this to Seri using only texts, but this seems like an interesting avenue for exploration.

4.3 Altered Typologies

Some basic alterations to the typologies have also been proposed. Section 2.3 discussed Matsumoto's (2003) suggestion that the verb-framed/satellite-framed terminology be amended to head-framed/non-head-framed in order to eliminate situations in which an event is framed by neither a verb nor a satellite (for instance, a prepositional phrase). Using the

³⁰ A variation of this idea is presented by Sinha and Kuteva (1995) under the term “distributed spatial semantics.” They point out that in some cases, the meaning of a particular spatial component is not expressed in a particular lexical item but is distributed over a particular construction.

definition chosen to determine Seri's satellites, this issue was not problematic in this thesis, although a difficulty still arose in determining the typical framing category for Seri (see 3.3.6 for details). Matsumoto's suggestion does not seem to be of use in this case.

Another alteration was suggested by the research of Zlatev and Yangklang (2004) and developed by Slobin (2004a). In their research in Thai, a serial verb language, Zlatev and Yangklang found that although Thai is, by Talmy's definition, a verb-framed language, it did not behave like a typical language of that type, since it did not need to choose between Path and Manner verbs and did not obey the boundary-crossing constraint (as presented by Slobin and Hoiting). They proposed the addition of a third type to the motion-framing typology, one that would cover serial verb languages.

Slobin (2004a) formalized this idea with the proposal of a third type which he called "equipollently-framed". In this type, "path and manner are expressed by equivalent grammatical forms" (2004a:249). This includes, according to his proposal, serial verb languages using a Manner verb plus a Path verb; bipartite verb languages using a Manner + Path verb, and Jaminjung languages using a Manner preverb plus a path preverb plus a verb. Seri does not fit into any of these categories, so the proposal of a third type with this definition does not resolve any of the difficulties presented here. However, Slobin himself says:

"Such a proposal is not particularly satisfying for discourse analysis, because what is most interesting is the impact of various additional options on the structure of the narrative and the allocation of attention—especially to features of path and manner. Rather than put language into typological categories, it might be more profitable to lay out the collection of factors that, together, interact to contribute to particular rhetorical styles." (2004a:248)

This observation leads us to the last area of discussion, the presentation of the Motion event as a whole.

4.4 Presentation of the Motion Event

A number of authors, Slobin in particular, advance the general criticism that Talmy's typologies are too narrow to adequately characterize the presentation of Motion events (especially in the context of a narrative) in any language. They claim that there are a number of factors contributing to this presentation in a given language, and they are all equally worth exploring. We will look at three factors as they relate to Seri: the salience and categorization of Manner (4.4.1), the granularity of Path (4.4.2), and the clause segmentation of the "journey" (4.4.3).

4.4.1 Manner

Since Talmy's typologies focus on the Motion event, they do not provide the tools to thoroughly investigate the Manner (or Co-event) component, particularly in Path-framed languages. Slobin (2004a) and Matsumoto (2003) both offer suggestions for the exploration of the role of the Manner component in Motion events across languages.

4.4.1.1 Slobin: Manner Salience

Slobin (2004a) proposes a cline of manner salience in order to answer the typological question: "How easy or natural is it to add manner information to path expressions in a particular language?" The defining feature of a high-manner-salient language is "an accessible slot for manner in the language, made available in various ways." This slot would be the main verb in a satellite-framed language; a manner verb in serial-verb languages; a manner morpheme in languages with bipartite verbs; a manner preverb in Jaminjung languages; or ideophones.

None of these are true of Seri. Although manner can be presented in the main verb, that slot is most often reserved for path verbs. None of the other slots proposed by Slobin are relevant to Seri.

In a low-manner-salient language, Slobin says, “manner is subordinated to path,” and “several factors seem to conspire” against the regular presentation of manner. In these cases, the presentation of manner requires “additional morphology, such as gerunds, converbs, or adverbial expressions.” Low-manner-salient languages also have a boundary-crossing constraint of some kind.

In Seri, manner is typically subordinated to path. Although manner verbs can be independent (main) verbs, they more typically present themselves in a verb in a dependent clause. Whether this qualifies as “additional morphology” is questionable, since Seri sentence structure is typically a series of several dependent clauses followed by an independent clause, so adding manner information does not necessarily involve extra effort. On the other hand, it might also not be accurate to class this method of presenting manner with the other “slot” types Slobin proposes. Seri does have one hindrance to manner presentation, which is its boundary-crossing constraint; however, this is easily overcome by placing the manner verb in a dependent clause.

Seri, therefore, would seem to fall somewhere in the middle of Slobin’s cline. Manner does not have a “slot” per se and is subordinated to path. However, including manner information does not involve much, if any, extra effort.

4.4.1.2 Matsumoto: Manner Categorization

Matsumoto (2003) addresses another side of the issue with his proposed “manner categorization parameter.” This parameter “concerns the lexical categories in which manner is coded” (whereas Talmy’s framing typology concerns the syntactic encoding of path, i.e.

main verb versus satellite). Matsumoto proposes two types: manner-in-verb, in which verbs bear the weight of manner distinctions (English, German, and perhaps French are the examples given), and manner-in-adverb, in which those distinctions are primarily made by adverbials (Japanese is the exemplar). The parameter “may well be a matter of degree, without a clear-cut line between the two types.”

In Seri, there are only a handful of adverbs that describe manner. Adverbs are a small, mostly closed class of words, and there are many more adverbs of location than of manner. However, verbs are commonly modified using clausal expressions; manner can be expressed in this way. These can be dependent clauses, postpositional phrases, or even main verbs. However, when a manner verb co-occurs with a motion verb, the manner verb is usually not the main verb.

Seri, then, would seem to fit best into Matsumoto’s manner-in-verb type, supporting his statement that “the richness of manner-of-motion verbs can be independent of framing typology.”

4.4.2 *Path Granularity*

The Path component can also be the subject of deeper scrutiny. Slobin (2004a) points out two kinds of differences languages can have with regard to the expression of Path. One is the “segmentation of an event into path components” or “the degree of granularity of an event description, that is, how many sub-trajectories combine into an overall trajectory.” The second (which will be addressed in section 4.4.3) relates to how path components are distributed in the clauses of a narrative episode.

Slobin says that verb-framed languages must use separate path verbs for each boundary-crossing event, or whenever a change of path direction occurs. He gives the following two examples based on an episode from *Frog, Where Are You?* (Mayer 1969):

(201) *the frog escaped*

(202) *the frog exited the jar, passed through the window, and entered the woods*

These examples describe the same basic event, though (202) gives more details. This is an interesting issue. However, to explore it in Seri, we would need to compare at least two texts telling the same story: at least one in Seri and at least one in another language.

Granularity can only be determined in comparison with something else.

4.4.3 *Journey*

We can, however, look at the presentation of Motion events as a whole, within the context of a narrative. Slobin (1996a) notes that simple Motion events are often part of a more complex event with milestones and subgoals, perhaps situated in a medium (along a road, through the water). He uses the term “journey” to describe this kind of “extended path” (1996a:202). Later he drops the use of this term, but highlights the issue of the “distribution of path components in clauses of a narrative episode” (2004a). This thesis will adopt the term “journey” to refer to any complete directed motion event, simple or complex, including source, goal, any milestones, subgoals, or mediums encountered during the journey.

Although an in-depth study of this issue cannot be done at this time, a number of general observations can be made about journeys in Seri. As mentioned earlier, Seri makes frequent use of clause chaining, so it is very common to have a journey made up of numerous clauses. There appears to never be more than one Ground per verb—if both source and goal are included, they are not presented in the same clause in any of the texts. Example (203) has two clauses, with source in the first and goal in the second.

(203)	<i>Cocsar</i> non-Indian.Mexican	<i>ctam</i> man	<i>zo</i> a	<i>Hezitmisoj</i> Hermosillo	<i>quij</i> the
	Figure			Ground (source)	
	1				
	<i>ano</i> in/from/to.(it)	<i>mota,</i> he.is/was.coming/came/comes		<i>Haxöl Iihom</i> Desemboque	<i>cötafp, ...</i> he.arrived.to.it
	Path	Motion (MOVE)		Ground (Goal)	Motion (MOVE) + Path
	1 (continued)			2	

‘A Mexican man came from Hermosillo, he arrived to Desemboque, ...’
(Basketmaker 43.1)

Manner can also be included in a series of clauses, as in (204), in which a source clause is followed by a Manner clause and then the medium in which the event occurs.

(204)	<i>Hona</i> (place name)	<i>iti</i> on/to(it)	<i>hptiij,</i> I.am/was.(seated)	<i>ihptácat,</i> I.swam
	Ground (source)	Path	BeLoc	Manner
	1			2
	<i>Xepe Coosot</i> Infiernillo	<i>tintica</i> the	<i>toi</i> toward.somewhere.else	<i>hyictim.</i> I.crossed.it
	Ground (medium)	Path		Move
	3			

‘I was at Campo Hona and swam across the Infiernillo.’ (DS2005, quiictim)

It is rare for the only Motion clause in a sentence to have a Manner verb, but it is possible, as in (205):

(205)	<i>Ziix</i> thing	<i>cop</i> the	<i>ai</i> still	<i>ihacoxl</i> he.was.with.him	<i>iti,</i> on/to(it/him/her)	<i>hapx iiqi yopanzx.</i> he.took.off.running
	‘While he (Coyote) was still with him, he (Coyote) took off running.’ (Stinkbug 23.1)					

Interestingly, the concept of “arrival” almost always merits its own clause, as in (206) and (207).

(206)	<i>Zaxt quisiil</i> baby	<i>tiquij</i> that	<i>itaho,</i> she.sees/saw.him	<i>ityaai,</i> she.was.going.to.it, Move + Path
				1

<i>hantaxal</i> near	<i>xah</i> Atten	<i>cötafp, ...</i> she.arrived.to.it Move + Path
Path		
2		

‘She saw that baby, she was going to it, she got fairly close to him, ...’
(Glutton 28-30)

(207)	<i>Itoonec,</i> they.carried.them Manner	<i>taanipxat,</i> they.went.home Move + Path + Ground	<i>heme</i> camp Ground	<i>miizcam ...</i> they.arrived Move + Path
1		2	3	

‘They took them, they went back, they returned to camp, ...’ (Brothers 21.1-3)

(208) is interesting in that it employs two verbs (motion verb \sqrt{a} and \sqrt{azquim} , enter) to describe an entrance. This is an event to which boundary-crossing restraints would apply, but why is \sqrt{azquim} , a Path verb, not used alone? The analysis so far has not given us a satisfactory answer; one may lie in further discourse analysis, outside the scope of this thesis.

(208)	<i>Hahóot</i> Abs-entrance	<i>hac</i> the.Lc	<i>ah</i> Foc	<i>contita,</i> 3IO-Aw-RI-move	<i>cömiizquim.</i> 3IO-Px-enter
‘S/he entered by the door.’ (DS2005, ah)					

Two narrative devices used in Seri can result in the frequent repetition of the Motion concept. The first device is a general tendency to introduce characters in a story using a motion or location verb. This can result in sentences like (209) and (210), in which the first clause presents the event of motion or location and the second clause expresses the fact of existence of the character; though the fact of Motion in the second clause is true, it is not particularly interesting (since it is already known) and the motion is not meant to be highlighted.

(209) *Conteetxyat, tiix haaho com iti tiij,*
 stinkbug that.one road the on/to(it/him/her) he.is/was(seated)

toc cöquij iha.
 there seated Decl

‘Stinkbug, he was on the road, there he was.’ (Stinkbug 1-2)

(210) *Oot timoca mos haaho timoca itaa,*
 coyote the also road the he.passed/passed.it

toc cömoca ha.
 there coming Decl

‘Coyote was passing along the road, there he came.’ (Stinkbug 3)

The second narrative device is the frequent use of tail-head linkage in Seri. This practice also often results in the repetition of motion verbs across sentences, as the last clause of a sentence is repeated to become the first clause of the next sentence. (211) illustrates this, as well as a general tendency towards repetition.

(211) ... *cmaax tiix isixö ta ma,*
 now that.one he.will.jump.over.it Aux DS

toc cötahca ma, cmaax tiix toc
 it.happens/happened/was.necessary DS now that.one there

contita, imixö. Iisax quij itixö ma, ...
 he.was.going he.jumps.over.it moon the he.jumped.over.it DS

‘... then he was about to jump over it, then he went and jumped over it. He jumped over the moon, ...’ (Moon 9-11)

In summary, journeys in Seri frequently consist of multiple clauses, with one Path or Manner verb per clause, and appear to have no more than one Ground component per clause. The Path verb is generally but not always the main verb. Seri makes regular use of repetition (Marlett in preparation), so elements of a complex Motion event are frequently repeated two or more times during the description of a journey.

4.5 Conclusion

The end of chapter three left us with a number of unresolved questions about Seri's treatment of Motion events. At the end of this chapter, we are able to say that, because of its boundary-crossing constraint, Seri patterns with other verb-framed languages and can probably be classified as such. We have no further answers to the question of why Path components occur in both satellites and verbs, although we know this is true of other languages as well. We know that the construction of a clause can sometimes determine the interpretation of its components, and we can add to that the context in which a clause appears (as when Seri locative verbs have a directed motion interpretation). We have seen some of the patterns Seri displays in the general presentation of complex Motion events, or journeys.

Clearly, there have been many good additions to Talmy's typologies over the years, some his own, others attributable to colleagues. As the typologies now stand, they provide useful tools for exploring the patterns of motion in a language, and we have successfully discovered a good deal of information about Seri using them. However, the problems that we have encountered in applying Talmy's typologies to Seri suggest that their usefulness is limited with respect to Seri, and others have come to similar conclusions for various languages. It may now be more helpful to ask different questions, and even question some of Talmy's assumptions, about motion. Instead of asking what the primary type of a language is, it might be more useful to look at the treatment of motion in more general terms, as we began to do in this chapter: Which constructions license a directed motion interpretation? Within those constructions, which components go in which slots? What is the overall narrative treatment of motion? The answers to these questions will be useful in dictionary-making, translating, and discourse analysis, and will provide a more complete picture of a language's treatment of motion than two-way and three-way typologies.

APPENDIX

Table 11 gives the names of the Seri texts and materials used in this study, along with the abbreviation used for the citation of each text and the approximate length of each text. The dictionary citations given are the entries under which the example sentence is found (as in: DS2005, moca). For texts with sentence or clause numbers, that number is given (as in: Glutton 148). For texts without sentence or clause numbers, the page number of the original version is given (as in: ALIM, p. 157). (This page number does not correspond with the pages of the documents available online, but it is given in the text of each document.)

The texts are available at:

lengamer.org/admin/language_folders/seri/user_uploaded_files/links/File/Textos/SeriTexts.htm

The dictionary is available at

lengamer.org/admin/language_folders/seri/user_uploaded_files/links/File/DiccionarioSeri2005.pdf

A draft of the Grammar is available at

www.und.nodak.edu/instruct/smarlett/GrammarDraft/grammar_outline.htm

Table 11: Sources of data used

Text Name	Abbreviation	No. of pages (with 4-7 lines of glossing/translation)
The seahorse's descent into the sea	Seahorse	13
The bluebottle fly's firemaking	Bluebottle	6
How Rabbit fooled Puma	Rabbit Puma	11
The death of Cöquimáxp	Cöquimáxp	30
Two brothers go away mad	Brothers	41
How Stinkbug fooled Coyote	Stinkbug	7
How Rabbit was given antlers	Rabbit Antlers	3
How Rabbit fooled Coyote	Rabbit Coyote	8
The orphan giant	Orphan	11
Basketmaker	Basketmaker	13
When Juan Topete got lost	Topete	57
The man named Barrel	Barrel	27
When Coyote was going to jump over the moon	Moon	11
The giant who was a glutton	Glutton	128
Archivo de Lenguas Indígenas de México	ALIM	146
Hablemos Español	Hablemos	80
The North Wind and the Sun	Wind Sun	5
Diccionario Seri	DS2005	n/a
Reference Grammar of Seri	Grammar	n/a

REFERENCES

- Aske, Jon. 1989. Path predicates in English and Spanish: A closer look. In *Proceedings of the Fifteenth Annual Meeting of the Berkeley Linguistics Society*. Berkeley: Berkeley Linguistics Society.
- Choi, Soonja, and Melissa Bowerman. 1991. Learning to express motion events in English and Korean: the influence of language-specific lexicalization patterns. *Cognition* 41:83-121.
- Filipović, Luna. 2006. Weaving the web of meaning. *Languages in Contrast* 6 (1):151-175.
- Hale, Kenneth L., and Colette Craig. 1988. Relational preverbs in some languages of the Americas. *Language* 64:312-44.
- Ibarretxe-Antuñano, Iraide. 2003. Entering in Spanish. *Annual review of cognitive linguistics* 1 (1):29-58.
- . 2004. Language typologies in our language use: The case of Basque motion events in adult oral narratives. *Cognitive Linguistics* 15 (3):317-349.
- . 2005. Leonard Talmy. A windowing to conceptual structure and language. Part 1: Lexicalisation and typology. *Annual review of cognitive linguistics* 3:325-347.
- Kita, Sotaro. 1999. Japanese enter/exit verbs without motion semantics. *Studies in Language* 23 (2):307-330.
- Levin, B., and M. Rappaport Hovav. 1992. The lexical semantics of verbs of motion: The perspective from unaccusativity. In *Thematic structure: its role in grammar*, ed. I. Roca. Berlin: Mouton de Gruyter.
- Lewis, M. Paul, ed. 2009. *Ethnologue: Languages of the World*. 16th ed. Dallas, Texas: SIL International.

- Linguist List* 13.899, Sum: Motion verbs and manner. 2002 [cited June 1, 2010. Available from <http://linguistlist.org/issues/13/13-899.html>.
- Marlett, Stephen. 1988. The syllable structure of Seri. *International Journal of American Linguistics* 54 (3):245-278.
- . 2005. A typological overview of the Seri language. *Linguistic Discovery* 3 (1).
- . 2006. La situación sociolingüística de la lengua seri en 2006. In *Situaciones sociolingüísticas de lenguas amerindias*. Lima: Universidad Ricardo Palma and SIL International.
- . in preparation. A reference grammar of Seri (Cmique Iitom). Tucson, Arizona: University of Arizona.
- Marlett, Stephen, F. Xavier Moreno Herrera, and Genaro G. Herrera Astorga. 2005. Illustrations of the IPA: Seri. *Journal of the International Phonetic Association* 35 (1):117-121.
- Matsumoto, Yo. 1996. Subjective motion and English and Japanese verbs. *Cognitive Linguistics* 7 (2):183-226.
- . 2003. Typologies of lexicalization patterns and event integration: clarifications and reformulations. In *Empirical and theoretical investigations into language: a festschrift for Masaru Kajita*, ed. S. Chiba, 403-418. Tokyo: Kaitakusha.
- Mayer, Mercer. 1969. *Frog, where are you?* New York: Dial Press.
- Moser, Mary Beck, and Stephen A. Marlett. 2005. Comcáac quih yaza quih hant ihiiip hac: Diccionario seri-español-inglés. Hermosillo, Sonora and Mexico City: Universidad de Sonora and Plaza y Valdés Editores.
- Naigles, L., A. Eisenberg, E. Kako, M. Hightler, and N. McGraw. 1998. Speaking of motion: Verb use in English and Spanish. *Language and Cognitive Processes* 13:521-549.

- Narasimhan, B. 2003. Motion events and the lexicon: A case study of Hindi. *Lingua* 133 (2):123-160.
- Olsen, M.B. 1991. Lexical semantic typology of motion verbs: Insight from translation. In *Papers from the Second Annual Meeting of the Formal Linguistic Society of Midamerica*, 255-71. Ann Arbor: Program in Linguistics, University of Michigan.
- Özçalışkan, Şeyda, and Dan Slobin. 2003. Codability effects on the expression of manner of motion in Turkish and English. In *Studies in Turkish linguistics*, ed. A. S. Özsoy, D. Akar, M. Nakipoğlu-Demiralp, E. Erguvanli-Taylan and A. Aksu-Koç, 259-270. Istanbul: Boğaziçi University Press.
- Sinha, C., and T. Kuteva. 1995. Distributed spatial semantics. *Nordic Journal of Linguistics* 18 (2):167-199.
- Slobin, D. 1996a. Two ways to travel: Verbs of motion in English and Spanish. In *Grammatical constructions: their form and meaning*, ed. M. Shibatani and S. Thompson, 195-219. Oxford: Clarendon Press.
- Slobin, Dan. 1991. Learning to think for speaking: Native language, cognition, and rhetorical style. *Pragmatics* 1:7-26.
- . 2004a. The many ways to search for a frog: Linguistic typology and the expression of motion events. In *Relating events in narrative: typological and contextual perspectives*, ed. S. Stromqvist and L. Verhoeven, 219-257. Mahwah, NJ: Lawrence Erlbaum.
- Slobin, Dan, and Nini Hoiting. 1994. Reference to movement in spoken and signed languages: typological considerations. In *Proceedings of the Twentieth Annual Meetings of the Berkeley Linguistic Society*, ed. S. Gahl, S. Dalbey and C. Johnson, 487-505. Berkeley, CA: Berkeley Linguistic Society.
- Talmy, Leonard. 1972. Semantic structures in English and Atsugewi. PhD. diss., Linguistics, University of California at Berkeley.

- . 1985. Lexicalization patterns: Semantic structure in lexical forms. In *Grammatical categories and the lexicon*, ed. T. Shopen, 57-149. Cambridge: Cambridge University Press.
- . 1991. Path to realization: A typology of event conflation. In *Papers of the Seventeenth Annual Meeting of the Berkeley Linguistics Society*, ed. L. A. Sutton, C. Johnson and R. Shields, 480-520. Berkeley: Berkeley Linguistics Society.
- . 2000a. *Toward a cognitive semantics: Concept structuring systems*. 2 vols. Vol. 1. Cambridge: MIT Press.
- . 2000b. *Toward a cognitive semantics: Typology and process in concept structuring*. 2 vols. Vol. 2. Cambridge: MIT Press.
- Tsujimura, Natsuko. 2002. Japanese enter/exit verbs revisited: A reply to Kita (1999). *Studies in Language* 26 (1):165-180.
- Velázquez-Castillo, Maura. 2004. Serial verb constructions in Paraguayan Guaraní. *International Journal of Applied Linguistics* 70 (2):187-213.
- Zlatev, Jordan, and Peerapat Yangklang. 2004. A third way to travel: The place of Thai (and other serial verb languages) in motion event typology. In *Relating events in narrative: typological and contextual perspectives*, ed. S. Stromqvist and L. Verhoeven, 159-190. Mahwah, NJ: Lawrence Erlbaum.