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PART III
—
THE TYPOLOGY OF MOTION EVENTS

1. TALMY'S TYPOLOGY

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The initial version of Talmy's typology of motion events and its evolution are presented in the following sections. One motivation for this lengthy presentation is that Talmy's typology is sometimes misunderstood and described erroneously (for ex. Croft et al., to appear), with the consequence that some of the objections raised against it miss their target. Another motivation, opposed to the first, is that Talmy's theory harbors difficulties that are seldom recognized.

III.1. TALMY'S FIRST THEORY (1972)

Talmy's first theory aims at comparing the structure of English with a polysynthetic language of California. Perhaps because deep syntactic structures in the generative style were not well-suited for this purpose, Talmy goes to a deeper, semantic, level (like Wallace Chafe, who was facing the same problem with Onondaga, another polysynthetic language ; cf. Chafe 1970).

Talmy's point of departure is the notion of *translatory situation*. A *translatory situation* (an event in which a Figure moves along a path) is decomposed into a fixed structure (*translatory structure*) of 4 components :

Figure : "the object which is considered as moving or located with respect to another object." (F)
Ground : "the object with respect to which a 1st is considered as moving or located." (G)
Directional : "the respect with which one object is considered as moving or located to another object." (D)
Motive : "the moving or located state which one object is considered to be in with respect to another object" (M).

COMPONENTS :
F : Figure
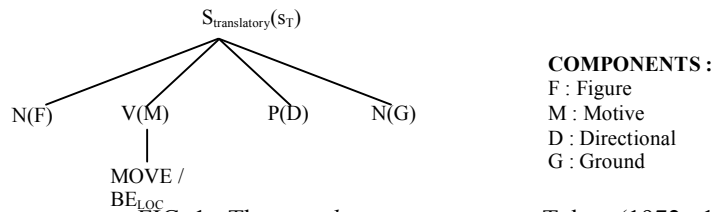M : Motive
D : Directional
G : Ground

FIG. 1 : The *translatory structure* ap. Talmy (1972 : 13)

Some components internal to the translatory structure or external to it may merge with components of this structure, by an operation of **conflation**, defined as "any syntactic process — whether a long derivation involving many deletions and insertions, or just a single lexical insertion — whereby a more complex construction turns into a simpler one" (Tamy 1972 : 257). For ex. resulting from *adjunction* :
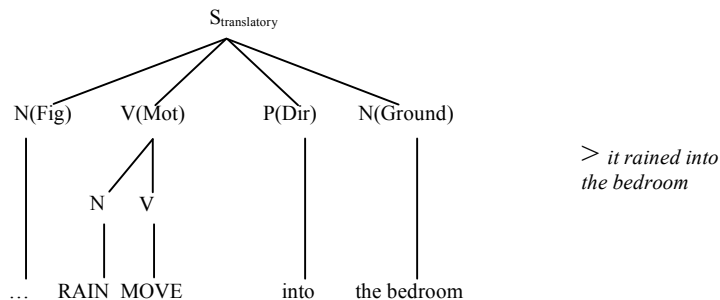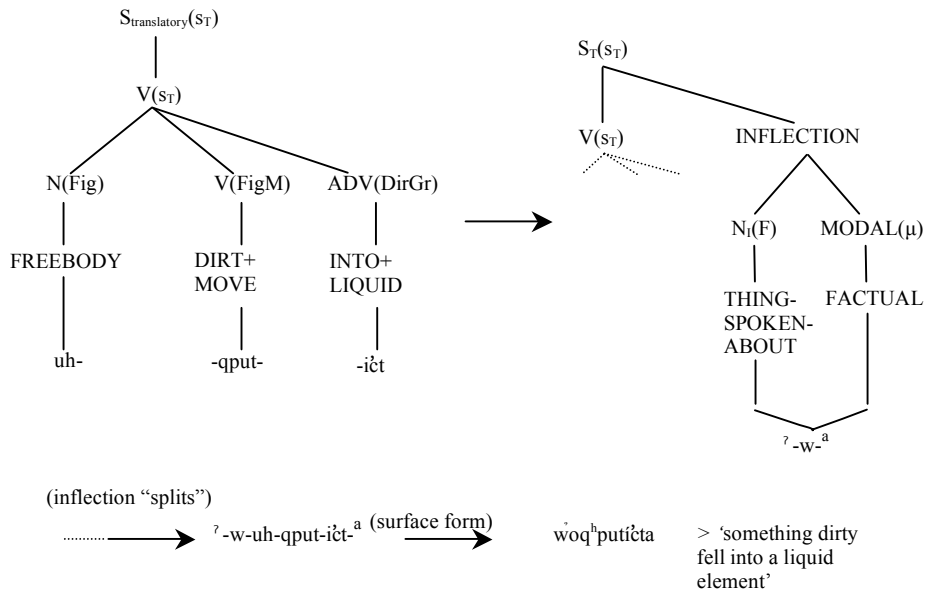

> *it rained into the bedroom*

FIG. 2 : an example of an *adjunction* (conflation)

Example (simplified) of a derivation of the core of an Atsugewi sentential verb[1] :

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[1] The core of an Atsugewi verb has the following structure : prefixes (F or G specifying elements, FROM / BY-clause replacing elements) – Root – suffixes (Directional + Ground specifying). Aspectual, evidentials and manner morphemes are in the inner periphery and in the outer layer are morphemes relating to mode, person, number. "FROM / BY clause replacing elements" involve elements that describe the manner in which a result is brought about. There is for inst. a prefix *-ma-*

(inflection "splits")

··········→ ʔ-w-uh-qput-ičt-ᵃ (surface form) →→ w̓oqʰputíčta > 'something dirty fell into a liquid element'

In Atsugewi, some aspects of the Figure typically conflate with the Motive (resulting in "FM" verbs, cf. English *to rain*). Other conflations yield MDG conflating verbs (English *to box*, Atsugewi verb root -*spaq*- 'move-into-mud'; 1972 : 209s) or FMDG verbs (English *to peel*, Atsugewi -*luc*- 'sth that has grown naturally detached from a body'; 1972 : 213s).

Talmy observes that in other languages the Motive component typically conflates[2] with a Manner component (noted "m" and corresponding to a deep adverb moved into adjunction to the Motive), and yields a Mm verb, for ex. in English in *the bottle floated into the cove* < DS: 'the bottle moved afloat into the cove' (Talmy 1972 : 19). Cf. also Mm verbs in Russian : *on v-bežal v dom* ('he ran-in into the house').
In English and Russian, some elements are closer to the V than prepositions, for ex. *by* in *he drove by past it* (cf. **he drove past it by*). Russian *v*- or English *by* in *he drove by past it* are called **satellite**s[3]. There are "deep" satellites : by analogy with German *er ging ins Haus hinein*, Talmy analyzes *he walked into the room* as the end product of a derivation from a S_T that reads MOVE TO-IN$_{SAT}$ TO-IN$_{PREP}$ (1972 : 269). Therefore, in *he walked into the room*, *walk* conflates motion, manner and path.
Like English or Russian, Spanish conflates M and D in the verb : *entrar* 'enter', but does not conflate manner. At this stage of the theory, the crucial difference between Spanish and English lies in the manner component : this component is conflated with the main V of translatory situation in English but is peripheral in Spanish (or goes unmentioned).

The typical constructions are the following :

Loci of semantic components of a translatory situation (Talmy 1972 : 300)	
By conflation with the MOTIVE verb	**By assatellation (i.e. adjunction as above)**
Atsugewi FIGURE (FM root)	FIGURE (other aspects of a F)
	GROUND (DG suffix like -*ičt* 'into liquid' above)
	INST (prefixes specifying an INSTR, for ex. 'by foot')
English MANNER (Mm verb)	DIRECTIONAL (D satellites)
Spanish DIRECTIONAL (MD verb)	(some manner expressions may be close to the verb, ex. *flotando* or *a patadas* 'by kicking')

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glossed as 'from an entity's feet acting on the Figure'. Attached to *qput-ičt* the resulting stem would mean something like 'footly-dirty-in-liquid', translatable as 'kick sth into a liquid' (Talmy 1972 : 176).
[2] Conflation : "any syntactic process – whether a long derivation involving many deletions and insertions, or just a lexical insertion – whereby a more complex construction turns into a simpler one" (Talmy 1972 : 257). For inst. TO a POINT which is OF the SURFACE OF conflates into *onto* (words in caps stand for semantic primitives).
[3] The term "satellite" may have been borrowed from Pittman (1948), although Talmy is silent on this point. Other authors using this term are Seiler (1960) and Frei (1968).

III.1.2. THE NEXT THEORY : LEXICALIZATION PATTERNS (Talmy 1985 [2000], 1991 [2000])

A Motion Event (= the former "Translatory Situation") is a pattern of 4 components :
FIGURE MOTION PATH GROUND (MOTION= MOVE or BE$_{LOC}$).
Talmy gives up derivations in the generative semantics style.
In Talmy (1985), Talmy surveys **verbal conflation types** vs **conflations in satellites.**

VERBAL CONFLATIONS

Zero-conflation : Spanish *estar* 'BE$_{LOC}$'. Theoretically possible for nonstatic situations but little discussed by Talmy, who, however, cites a few instances of constructions close to zero-conflations : **MOTION+minimally specified component** : Southwest Pomo : *-w/-ʔda/-pʰil* 'for one / two or three / several … together to move' (1985 [2000] : 63)
[cf. English : *He moved carefully out of the bed, the last thing he wanted was to wake her up*].

Some languages typically conflate **Motion + Path**, for ex. Spanish (1985 [2000 : 49]) :
La botella entró a la cueva (flotando) 'the bottle entered the cave by (floating)'.
Saqué el corcho de la botella retorciéndolo 'I remove the cork (by twisting it)'.[4]
There are also path conflating verbs in English (*arrive, enter, exit, ascend…*), but they are not dominant (they are loans from Romance). Other languages of this type are Semitic and Polynesian lang., Nez Perce, Caddo, Tamil, Turkish, Japanese, Korean.
Atsugewi typically conflates **Motion and Figure**.
Examples of multiple conflations are : CS+M+P+G : *to shelve* ; CS+M+F+P : *to powder*.

SATELLITES

Satellite : "It is 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." Examples include English verb particles, Latin, Russian and German verb prefixes, Chinese verb complements, Caddo incorporated nouns ('water-enter' : Talmy 1985 [2000] : 113), Atsugewi affixes.
In Talmy's new framework, constructions that describe motion events are classified according to whether they lexicalize path in a verb or in a satellite (or possibly in both) :
"Path appears in the verb root in "verb-framed" languages such as Spanish, and it appears in the satellite in "satellite-framed" languages such as English and Atsugewi." (Talmy 1985 [2000] : 117-8).
Greek is a **parallel system**, i.e. uses S-framed and V-framed constructions to a comparable degree (Talmy 1985 [2000] : 66) :

(1) *etreksa   mesa   (s-to   spiti).*
I.ran   in   to-the   house.ACC
'I ran in(-to the house).'   [S-framed]

(2) *bika   (trekhondas)   (s-to   spiti).*
I.entered   running   to-the   house
'I entered (the house) (running).'   [V-framed]

Note 1 : note the evolution : Talmy no longer says that English conflates Path in an Mm V (as in 1972). Instead, he says that English tends to express Path in a satellite.

Note 2 : in order to compare things that are comparable, Talmy puts in parallel *entrar* with *float in*, not *entrar* and *float into the cave*. Since the full PP is not encoded in *entrar*, it falls out of the comparison ; as a consequence, *the bottle floated into the cave* is neither verb-framed nor satellite-framed (since it contains no satellite *stricto sensu*). Further, a language with constructions like *the bottle floated into the cave* but no satellites (directional particles or preverbs) would not be satellite-framed. Because S-framed languages are also languages that have constructions like *the bottle floated into the cave*, many studies in the wake of Talmy collapse satellites and AP into a single super-category (expressions outside the verb and which refer to a path component).

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[4] Note that the path is not only specified in the verb, since it is expressed in *entró* and also in *a*, and in *saqué* and *de*; we will return to this problem in III.3.2.

Note 3 : since satellites can be verbs (Sp. *flotando*, or Jap. manner V in coordinated V), Matsumoto (2003) objects that the verb / satellite opposition is potentially misleading. Further, since it is desirable to extend the notion of satellite to AP (see note 2), Matsumoto suggests to use ***Head- / Nonhead-framed*** in replacement of V- / S-framed. However, because Talmy's terminology has come to prevail, and given that Talmy now views verbhood as gradient, it is best to stick to the common usage.

Beavers et al. (to appear) object that satellites are not proper constituents, but that AP are. The *it*-clefting test shows that satellites are not proper constituents :

(3) *It was <u>out of the house</u> that I went, not into the house*.

(4) * *It was <u>out</u> that I went of the house, not in*.

This diagnostic invalidates Talmy's definition (for whom satellites are constituents), and it nullifies the distinction between satellites and prepositions (satellites are intransitive prepositions). As a consequence, the authors choose not to distinguish satellites stricto sensu and AP and define a satellite as "any constituent that is sister to or adjoined to the verb (root)." This is the position advocated here.

Note 4 : Spanish is classified as V-framed above but as a **split-system** in another place (1985 [2000 : 65]) :

"…a language can characteristically employ one conflation type for one type of Motion event and characteristically employ a different conflation type for another type of Motion event. This can be called a "split" or "complementary" system of conflation.

As suggested earlier, Spanish has such a split system with respect to a state of Motion. For a locative situation with an underlying BE_{LOC}, Spanish characteristically uses the zero-conflation pattern. But for an event of actual motion with an underlying MOVE, we have seen Spanish characteristically to use Path conflation. Even within this MOVE type, though, a further split can be seen. Aske (1989) and Slobin and Hoiting (1994) have observed that motion events whose paths are conceptualized as crossing a boundary — as would be typical for 'into' and 'out of' — are the ones that are represented with the Path conflation pattern. But motion events with a path conceptualized as not crossing a boundary — as would be typical for 'from', 'to', and 'toward' — are characteristically represented with the Co-event conflation pattern, just like in English, as in *Corrí de mi casa a la escuela*, 'I ran from my house to the school'."

Another kind of split system is illustrated by Tzeltal, which typically conflates Figure-related information in static descriptions (i.e. in its positional verbs) but is

III.1.3. GENERALIZATION OF TALMY'S TYPOLOGY

A Motion Event is a particular kind of **framing event** (Talmy 1991 [2000]) :
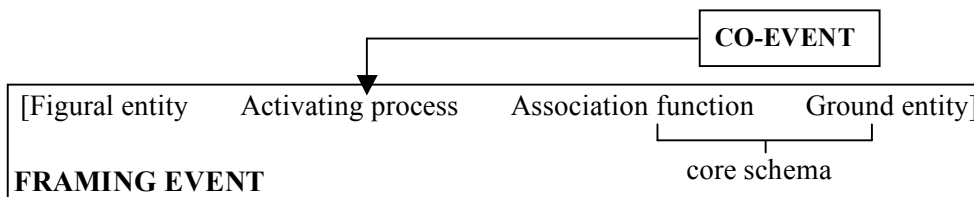
A co-event involving manner or cause may conflate with the "activating process". For ex., in *the napkin blew off the table*, *blew off* conflates the causal Co-event WIND BLOWING with the Framing (Motion) event NAPKIN FALLING OFF (the sentence can be paraphrased as *the napkin came off the table from the wind blowing on it*).

MACRO EVENT = FRAMING EVENT + CO-EVENT
When the domain is space :
MACRO EVENT = MOTION EVENT + CO-EVENT

A framing event determines the temporal-aspectual course of an event, is domain-specific (e.g. space), determines the argument structure of the macro-event, is the informational focus :
The framing event "determines at least the overall temporal framework and thereby determines the aspect of the sentence that expresses the macro event. It also generally determines the overall spatial framework where a physical setting is involved — or some analogous reference frame where another conceptual domain is involved. Further, the framing event determines all or most of the argument structure and semantic character of the

arguments overall within the macro-event, as well as determining all or most of the syntactic complement structure in the sentence that expresses the macro-event. In addition, the framing event constitutes the central import or main point (…) relative to the whole macro-event. That is to say, it is the framing event that is asserted in a positive declarative sentence, that is denied under negation, that is demanded in an imperative, and that is asked about in an interrogative." (Talmy 2000 [1991] : 219).

(5) *he walked in* : "temporal" course, aspect : bounded event (*walk* alone is atelic).

> argument structure : *in* (even covertly) adds an argument.
> domain : *in* specifies a relation in space (vs "temporal contouring", see below)
> focus : *did he walk in?* asks first about whether he went *in* or not.

The notions of **verb-framed / satellite-framed** are re-introduced in 1991 [2000 : 222] :
A construction which expresses the core schema in the verb is verb-framed (the verb is a framing verb). Languages for which this pattern is *predominant* are verb-framed.
A construction which maps the core schema onto a satellite is satellite-framed. Languages that *characteristically* use this pattern are satellite-framed.

Problems : The definition of S-framed languages implies that a satellite can be an AP (since the core schema includes the G). Yet, Talmy sticks to his definition of satellite (which excludes AP).
In the case of motion events, the term *association function* is potentially misleading, or ambiguous. It does not only apply to the expression of path, but also to the relation of the F to the G, independently of the path : a marker may associate the G with the F + activating process without thereby specifying a path, that is without specifying the direction of the vector (FROM, TO) nor the shape of the vector (OVER). In Jakaltek, for inst., adpositions perform an association function, but do not encode path (they encode a static relation that is neither source- nor goal-oriented ; Grinevald 2010, to appear b):

(6) *a'-ok-toj*	*q'ap*	*kamixhe*	*y-ul*	*te'*	*kaxha*.
move-in-CFUG	CL/cloth	shirt	its-in	CL/wood	chest

'Put the shirt in the chest!'

(7) *a'-el-tij*	*q'ap*	*kamixhe*	*y-ul*	*te'*	*kaxha*.
move-out-CPET	CL/cloth	shirt	its-in	CL/wood	chest

'Take the shirt out of the chest!'

Conclusion: association function and path marking are two different things.

Finally, Talmy extends his typology to other domains, esp. to "temporal contouring" :
Conflation of completion in the verb in Spanish : *Terminé de escribir la carta* vs Co-event conflation in the verb and conflation of completion in a satellite in German : *Ich habe den Brief fertiggeschrieben*. Idem : *volví a comer / Ich habe noch mal gegessen*.

III.1.4. PRECURSORS OF TALMY

Malblanc (1963 : 66) : ""Le navire entre dans le port" ['the ship enters the harbor'] "L'enfant entre dans la chambre" ['the child enters the bedroom'] "L'oiseau entre dans le buisson" ['the bird enters the bush'] (…) One verb in French, three in German. *"Das Schiff laüft in den Hafen ein". "Das Kind tritt in das Zimmer ein". "Der Vogel fliegt in das Gebüsch hinein"*. French has only one verb because it has retained, in this verb, but one element, the direction of motion, which is the same in all three cases. German has three compound verbs because, in addition to the direction of motion, it indicates the nature of this motion, and this nature, which differs for the three cases above, is expressed by the verb proper." Besides *entrer*, Malblanc extends his comparison to other French and German verbs like *vider* 'empty' (*aus-trinken, aus-giessen…*), *ouvrir* 'open' (*auf-machen, auf-klappen…*) etc.

Tesnière (1965 : 303) : "Whereas the most concrete circumstantial element, in Latin, German and Russian, functions as a structural centre and is therefore represented as a verb, in French, the same circumstantial element cannot assume a role other than that of circumstantial element."
Tesnière goes on to mention : Cf. *Antonius modo profectus est / Anton ist eben fortgegangen / Anton tolko chto uchiol* ['Anthony just left'] vs *Antoine vient de partir* ; or : *lesen Sie weiter* vs *continuez de lire*.

Regarding motion events, Tesnière makes the following remark :

"Take, for instance, the German sentence *Anton schwimmt über den Fluss*, in which the verb *schwimmt* conveys motion but the circumstantial *über den Fluss* expresses the change of place. Its French counterpart can by no means be *Antoine nage à travers le fleuve*, because French prepositions like *à travers* cannot take on the resultative value of their German counterparts, a value which affords German a straightforward way of expressing a change of place, the final result. Since, the only kind of French words which can express a change of place is the verb, we are compelled to say *Antoine traverse le fleuve à la nage* or *Antoine traverse le fleuve en nageant*, a sentence in which the change of place is rendered by the verb *traverser* (…). True enough, motion is subsidiary, to the point that another action connected with the change of place can substitute for it. Thus, one might say in German : *er bimmelte die Strasse hinauf.*"

Other predecessors (cited in Koch 2001 : 1170) : Charles Bally, Vinay & Darbelnet (1964), Wandruszka (1969 : 460-469), Schwarze (1983 : 205s), Schepping (1985 : 191), Blumenthal (1997 : 11, 70s).

PART III

THE TYPOLOGY OF MOTION EVENTS

2. NARRATIVE STYLES, FRAMING TYPES AND COGNITION : SLOBIN et al.

The backdrop to Slobin's line of research was studies in the development of narratives, pioneered by Hickmann and Karmiloff-Smith (with an emphasis on reference-tracking, for ex. pronominalization ; see Berman 2009).
Some material (a picture book, the *Frog Story*) that a student of Slobin, Michael Bamberg (1987, from his dissertation on German) had originally exploited to elicit narratives in children was used for collecting descriptions of motion events in various languages (Guo & Lieven 2009 : 3). The framework and the results were presented in two collective volumes (Berman & Slobin 1994, Strömqvist & Verhoeven 2004).
• The stories were collected from speakers of 21 languages (Arrernte, Basque, Dutch, English, French, German, Hebrew, Icelandic, Italian, Mandarin, Polish, Portuguese, Russian, Serbo-Croatian, Spanish, Swedish, Tzeltal, Thai, Turkish, Warlpiri, West Greenlandic).
• 3 age ranges : preschoolers (3-5 yrs), school-age children (6-11), adults.

III.2.1. SLOBIN ET AL.'S RESULTS

• Speakers of V-framed languages never express the crossing of a boundary in a satellite. They never say, for inst., that *an owl flies out of a hole in a tree*. In other words, 'into' and 'out of' are lexicalized in verbs (after Aske 1989, who speaks of telicity rather then of boundary crossing; cf. section III.1.4, and the citation of Tesnière).
• Speakers of S-framed languages use manner of motion V much more frequently than speakers of V-framed languages . Cf. Slobin (2004 : 224) :

V-framed languages:
a. Spanish: *Sale un buho*. (=**Exits** an owl.)
b. French: *D'un trou de l'arbre sort un hibou*. (=From a hole of the tree **exits** an owl.)
c. Italian: *Da quest' albero esce un gufo*. (=From that tree **exits** an owl.)
d. Turkish: *Oradan bir baykus çıkıyor.* (=From there an.owl **exits**.)
e. Hebrew: *Yaca mitox haxor yanšuf.* (=**Exits** from.inside the.hole owl.)

S-framed languages:
a. English: *An owl popped out*.
b. German: *...weil da eine Eule plötzlich raus-flattert*. (=...because there an owl suddenly **out-flaps**)
c. Dutch: *...omdat er een uil uit-vliegt*. (=...because there an owl **out-flies**)
d. Russian: *Tam vy-skočila sova*. (=There **out-jumped** owl.)
e. Mandarin: *Fēi-chū yī zhī māotóuyīng.* (=**Fly out** one owl.)

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Owl's Exit: Percentage of Narrators Using a Manner-of-Motion Verb
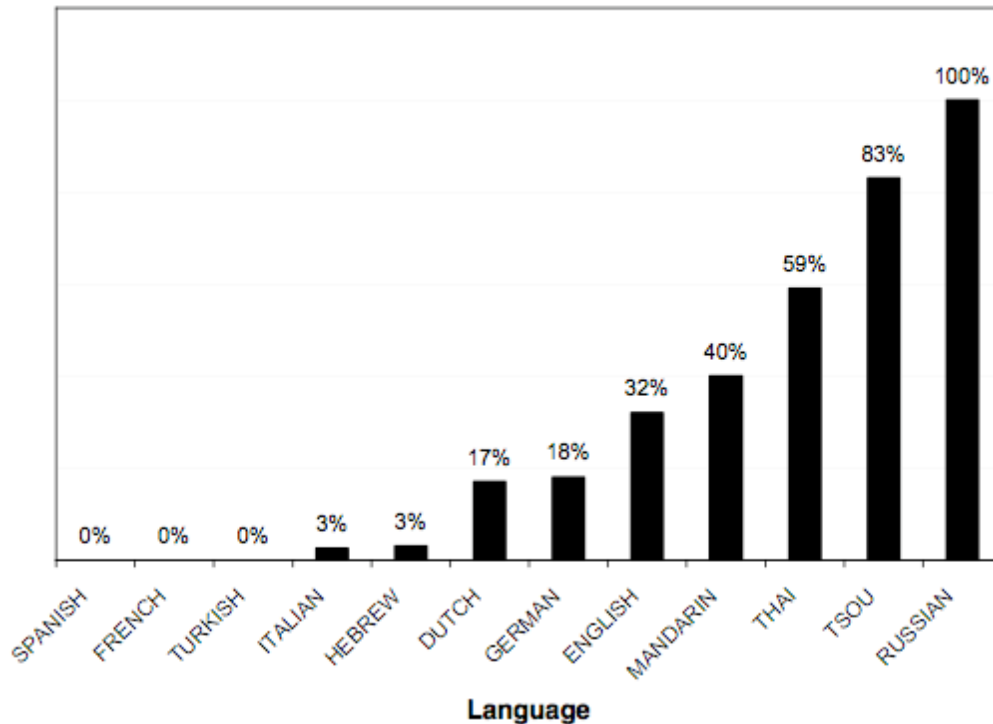
• Russian gets the highest score. It has very few path verbs : I have found only *vozvraschatsya / vernutsya* 'return' (there might be more !).
• Some speakers of V-framed languages use ideophones (e.g. Japanese) or make iconic gestures (e.g. flapping one's hands to depict flying).

• A survey of elicited data, of Spanish and English novels, and of translations between Spanish and English reveals that V-framing and S-framing (at least for Romance and Germanic languages), are associated with marked differences in the rhetorical styles of narratives :

Speakers of V-framed languages tend to omit more path components than speakers of S-framed languages. For instance, where an English speaker might say *he* [the deer, carrying a boy and a dog on its antlers] *starts running and he tips him* [the boy] *off over a cliff into the pond*, a Spanish speaker might just say *el ciervo tiró al perro y al niño al río*.

It could be the case that Spanish speakers compact less path information in a single clause, but mention the missing path segments in separate clauses. However, this is not observed : Spanish speakers simply omit more path segments of a trajectory, even across several clauses (Slobin 1996).

Since they package less path segments into a single clause, Spanish speakers distribute these path segments over several clauses and, in particular, they often introduce grounds in separate and static descriptions. For inst. they would say *el ciervo le llevó hasta un sitio donde debajo había un río*. *Entonces el ciervo tiró al perro y al niño al río*. The phrase *donde debajo había un río* "sets the stage" for the ensuing motion event. Another Spanish strategy would be to express in a relative clause some of the path components, instead of adjoining them to the verb : for inst. *andó por un sendero que conducía al pueblo* instead of *walked along a path to the town* (Slobin 1996).

• There is some diversity in the way V-framed languages package information on path. In Basque (a V-framed language), speakers tend to mention both Source and Goal (Basque has a rich case system). Basque speakers typically describe a complete path, with a directional rather than an initial + a final Ground (Ibarretxe-Antuñano 2004 : 96) :

(1) ...*Txuri*   *txakurra*   *leihotik*   *behera*   *joan*   *zan.*
Txuri   dog.ABS   window.ABL   below.ALL   go.PFV   AUX
'Txuri the dog went down from the window.'

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A consequence is that the narrative style of Basque is different from the Spanish one : generally, Basque speakers do not "set the stage" in a separate clause (ibid. : 98).

In Tzeltal, path descriptions do not include both Source and Goal ('The boy went from the tree to the rock' would be 'The boy, he was at the tree, and then he left, and then he arrived at the rock'). There are also cultural factors at play : in Arrernte, great attention is paid to path details (journeys are an important aspect of narratives).

• Inventories of manner V in V-framed languages are comparatively small (French does not have verbs that distinguish manners of walking as finely as English does :

"Why, for example, is the following sign quite normal (albeit amusing) in the San Diego Zoo, whereas it would be inconceivable in Le Parc Zoologique de Paris?

DO NOT TREAD, MOSEY, HOP, TRAMPLE, STEP, PLOT, TIPTOE, TROT, TRAIPSE, MEANDER, CREEP, PRANCE, AMBLE, JOB, TRUDGE, MARCH, STOMP, TODDLE, JUMP, STUMBLE, TROD, SPRING, OR WALK ON THE PLANTS" (Slobin 2006 : 66)

However, there is again much diversity here : Polish has fewer manner V than English (for ex. one verb meaning 'jump', *skoczić / skakać* while English has *bound, hop, hurdle, jump, leap, spring and vault* ; Kopecka 2010).

S-framed languages may have few path conflating verbs (Polish may have only 5 : *mijać / minąć* 'bypass', *wracać / wrócić* 'go back', *oddalać się / oddalić się* 'go further', *zbliżać się / zbliżyć się* 'go nearer', *opuszczać / opuszczić* 'leave' (A. Kopecka, p. c.). English has more (*approach, arrive, ascend, come, decamp, depart, enter, exit, go, leave, pass, proceed, reach, retreat, return, trespass,* perhaps more). There is apparently no straightforward relation between inventories and typological category (English has many manner-V, more than Polish, but is less S-framed than Polish, because it also has many path V).

• To recapitulate, V-framed and S-framed languages were found to differ along the following parameters (after Zlatev & Yangklang 2004 : 187) :

Parameter	V-language	S-language
Core schema	V	S
Co-event	Adverbial	V
Boundary-crossing constraint	Yes	No
Several path segments per clause	No	Yes
Manner-V use	Low	High
Ground specification	Lower	Higher
Event granularity across clauses	Lower	Higher
Scene setting	Yes	No

III.2.2. THE PROBLEM OF "EQUIPOLLENTLY-FRAMED LANGUAGES"

• Slobin (2004) objects that Talmy's typology should be revised to take into account languages with serial verbs (often manner V + path V), bipartite verbs (e.g. Algonquian and Hokan) and languages with manner preverb + path preverb + V (Jaminjungan languages)[5]. Perhaps these languages should be assigned to a third class, that of **equipollently-framed languages** (Slobin 2004 : 228).

Serial V[6] : Ex. Thai (Zlatev & Yangklang 2004 : 165 & 160) :

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[5] These languages will be examined in part III.3.4.2.

[6] For definitions of serial verbs, cf. :

Bisang (1995 : 138) : "Verb serialization is the unmarked juxtaposition of two or more verbs or verb phrases (with or without subject and/or object) each of which would also be able to form a sentence on its own."

Déchaine (1993 : 799): "A serial verb construction is a succession of verbs and their complements (if any) in a single clause with one subject and one tense or aspect value."

Comrie (1995 : 25): "Many languages have a phenomenon whereby a sentence may contain a chain of verbs, sometimes separated by other elements, such that of the verbs in the chain either only one shows the full range of tense-aspect-mood oppositions or all the verbs are required to have the same values for (some) tense-aspect-mood oppositions."

Durie (1997 : 290): "The archetypal serial verb construction consists of a sequence of two or more verbs which in various (rather than strong) senses, together act like a single verb."

Aikhenvald & Dixon (à paraître): "A serial verb construction is a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination or syntactic dependency of any sort."

(2)   *chán   dəən   khâw   paj*
        I   walk   enter   go
        'I am walking in (away from DC).'

(3)   *chán   dəən   khâam   thanŏn   khâw   paj   naj   sŭan.*
        I   walk   cross   road   enter   go   in   park
        'I walked across the road and into the park.'

According to Zlatev and Yangklang, an argument for considering that 'walk', 'enter' and 'go' have an equal status (hence, that 'enter' and 'go' are not satellites) is that they occur as independent verbs. In fact, they occur independently more often than in serial V constructions of the kind above. On this account, Thai could be considered as a V-framed language (path is encoded in the verb, even if manner cooccurs). This would make Thai an atypical V-framed language : it has a large inventory of manner V, manner is frequently coexpressed with path, and many path segments are mentioned in a single clause, though often with the ground being omitted (Thai tends to zero anaphora). However, it is not obvious that verbs of serial constructions are all real verbs. The discussion of serial verbs is deferred to the next part of this course (section III.3.4.1).

III.2.3. SLOBIN'S PROPOSAL

There are two ways to envisage Talmy's typology : either it is about the locus (V or S) where path is encoded ; or it is about what is characteristically encoded in the description of a motion event. The first angle tends to impose discrete distinctions : in its simplest form, the typology says that path is either in the V or in the S. The second approach, advocated by Slobin, is more flexible and leaves room for gradual distinctions. Since manner of motion is what is typically missing from motion descriptions in V-framed languages and what is typically coexpressed in S-framed languages, it is proposed that languages be put on **a cline of manner salience** (Slobin 2004 : 250) :

— **high manner salient languages** make a slot available for manner (main V in S-languages, manner V in serial V languages, manner morphemes in bipartite V, coverbs, ideophones)
— in **low manner salient languages** manner is subordinated to path or left out altogether.

There are problems with this typology: it involves several factors (number of manner V, availability of a slot for manner, frequency of manner specification) that do not necessarily covary ; it collapses very different strategies of motion description ; it does not distinguish criterial parameters from typical features, unlike the V-/S-/Equi-trichotomy (realization of the core schema in the V is criterial for a V-framed language, but low ground specification is only typical) ; it is in fact as dichotomous as the typology it sought to replace (Slobin's enumeration of structures under high / low manner salient languages merely redistributes constructions into two new categories, so that his classification is actually binary : high vs low manner salient languages) ; finally, Slobin correlates the V-framed / S-framed dichotomy with manner salience and path elaboration anyway (for ex. 2005, 2006), which corroborates Talmy's typology (but obfuscates the status of languages that are atypical with respect to these correlations ; cf. III.3.6).

III.2.4. "THINKING FOR SPEAKING"

Slobin's observation that some facets of an event are not elaborated to the same degree in different languages suggests that for speakers these facets are not equally salient.
More precisely, according to Slobin (1996b), two kinds of facets may be differentially attended to :
(1) those facets that can be perceived and are "objectively" present in the event (for ex. the path of a Figure) and have consequences for our practical dealings with the world ;
(2) distinctions that are linguistically relevant but cannot be read off from the perceived event (for ex. distinctions pertaining to aspect, definiteness, voice etc.). The latter distinctions correspond to categories that are obligatorily marked but are not part of our nonlinguistic "image" of an object or event.

Talmy's typology is about the way the former, "objective" aspects of a motion event are encoded.
Slobin's hypothesis is that speakers of different languages do not attend to manner, path, setting, and resultant locative states to an equal degree because their language does not make these facets of a motion event equally salient. When communicating, speakers construe situations in terms of those dimensions privileged in their own language :

"the expression of experience in linguistic terms constitutes *thinking for speaking* – a special form of thought mobilized for communication. (…) We encounter the contents of the mind in a special way when they are being accessed for *use*. That is, the activity of thinking takes on a particular quality when it is employed in the activity of speaking. In the evanescent time frame of constructing utterances in discourse one fits one's thoughts into available linguistic frames. "Thinking for speaking" involves picking those characteristics of objects and events that (a) fit some conceptualization of the event, and (b) are readily encodable in the language" (Slobin 1996b : 76).

Slobin's claim is weaker than Levinson's relativist stance : for Levinson, thinking is shaped by language-specific needs even when no communicative activity is going on and therefore language-specific constraints should manifest themselves even in nonlinguistic tasks.

III.2.5.   SOME EXPERIMENTAL INVESTIGATION OF THE NEO-WHORFIAN STANCES

One way of testing the "thinking for speaking" hypothesis is to observe whether speakers of a V-framed language, because they pay less attention to manner, would be more prone than S-framed language speakers to ignore differences in manner of motion when viewing two otherwise identical events (Gennari et al. 2002, with English and Spanish speakers). For instance, in a recognition task, they would be more inclined to say that the "same path" (third pic.) alternate of the first event below is the same as the previously viewed target (first pic.).
The results of Gennari et al. did not confirm this hypothesis. The only effect attributable to linguistic coding was in a judgment of similarity, when speakers had to judge which of the two alternates was more similar to the target. Spanish speakers chose the "same path" alternate more often than English speakers, but only when they had verbally described the target during an initial "encoding" phase of the experiment. According to Gennari et al. their results support the weaker form (Slobin's) of linguistic influence on nonlinguistic performance, or even the still weaker hypothesis that Spanish subjects did attend to manner but chose path as the dimension of similarity because path was the dimension they had attended to in the encoding phase of the experiment (*Language-as-Strategy hyp*.).

| Target | same manner | same path |

Another way of testing the influence of linguistic framing on cognition would be to see whether "the online allocation of attention while perceiving an event might be shaped by those aspects of the event that are typically encoded in the observer's native language, especially in verbs" (Papafragou et al. 2008 : 161). If language influences perception at an early stage, it is hypothesized that speakers of V-framed languages would direct their looks (more or first) to regions of the visual field having to do with path information, and would pay less attention than speakers of S-framed languages to regions related to the manner component. Papafragou et al.'s experiment was performed with English and Greek speakers (it is questionable that Greek is V-framed, as we saw above ; Talmy classifies Greek as a parallel system).
The results confirmed the hypothesis, but only in the condition where speakers knew they had to describe the event thereafter. In this condition, Greek speakers directed their attention to goals when the motion event started ; English speakers did look at the goals, but later. When subjects were instructed to memorize the event but were not told they would have to describe it, no difference in eye movement was observed, except at the end, when the video froze : during this last stage, speakers attended to information that was "assatellated" in their own language (path for English speakers, manner for Greek speakers).

Pursuing this line of research, Soroli and Hickmann (to appear) used both the eye-tracking technique and tasks of categorization with English-speaking and French-speaking subjects. Concerning eye movements, they found an effect of linguistic framing with one type of visual material, namely cartoons (2nd picture below), and with

French subjects. In this condition, French speakers directed their looks to the path region more than English speakers.
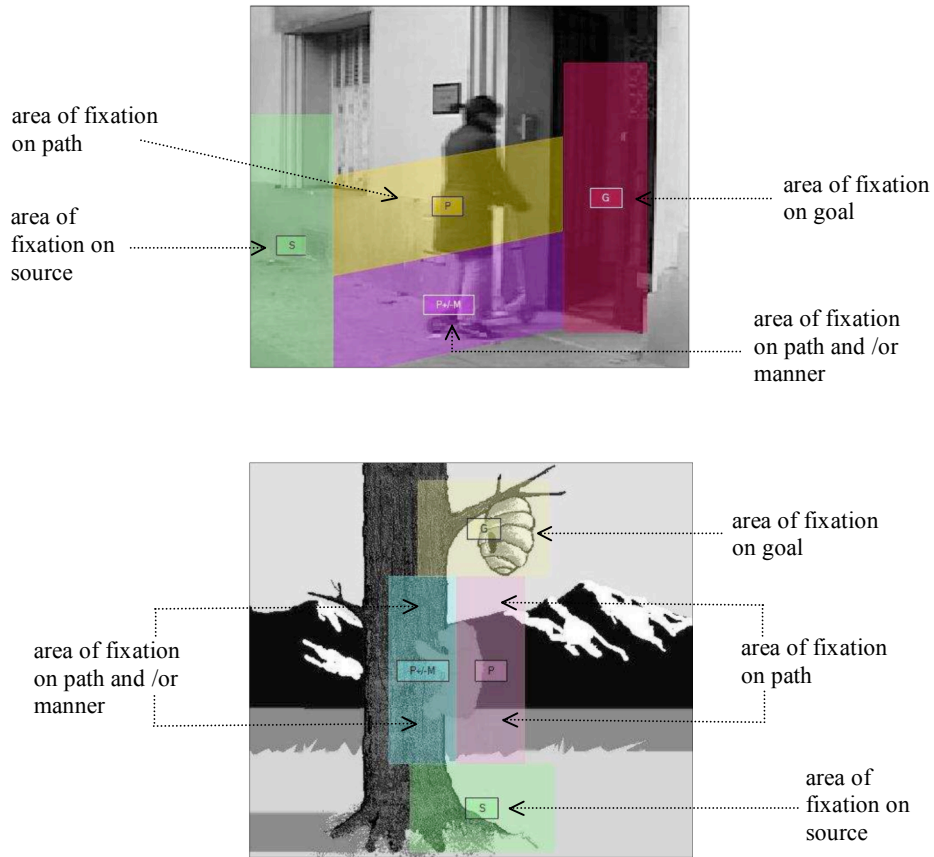
In the categorization tasks, participants were asked to choose the variant that looked most like the target and to press a key as fast as they could to indicate their choice.

target video

or **target sentence** :
"There is someone cycling in"

"On voit quelqu'un qui entre à vélo"

choose most similar video

same path, different manner

same manner, different path
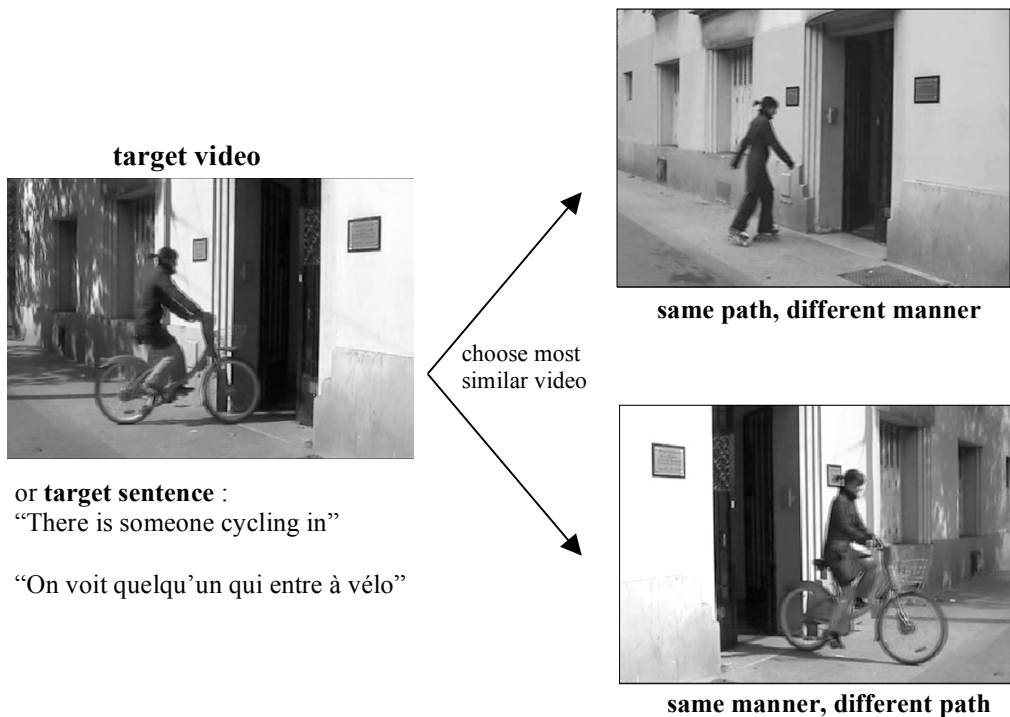
When the target was visual, French speakers picked out the "same path / different manner" significantly more often than English-speaking subjects, who chose each alternate with equal frequency. In the verbal condition, there was an increase in the number of "same manner / different path" for speakers of both languages, and more so for English speakers. French speakers, however, remained more focused on path, in spite of this increase in manner choices (note that the verbal target made reference to manner in both languages).

These findings support the view that linguistic framing has an effect on nonlinguistic tasks and that such effect is not restricted to situations in which verbalization occurs. As for the cartoon effect, it might be due to the fact that cartoons told a miniature story, thus enhancing the relevance of path.

CONCLUSION

The three experiments reviewed here do not support the view that linguistic framing has an effect in all tasks, including nonverbal ones. The study of Soroli and Hickmann is the only one to have found an effect of linguistic framing in tasks where no verbalization is required. Overall, the results bear out the thinking for speaking hypothesis and provide incipient evidence for a slightly stronger version of this hypothesis, according to which linguistic framing may affect the processing of some (but not all) nonverbal tasks.

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PART III

THE TYPOLOGY OF MOTION EVENTS

3. PROBLEMS OF TALMY'S TYPOLOGY

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We will be concerned here with the objections that have been or can be raised against Talmy's typology.

III.3.1. DIFFICULTIES ENCOUNTERED BY TALMY'S TYPOLOGY

Seven kinds of objections have been or can be raised against Talmy's typology :

(1) if path is expressed both in the verb and in a satellite, the construction does not qualify for being V-framed nor S-framed. This is the problem of "**double framing"** (Croft et al. to appear).

(2) some languages which are predominantly V-framed exhibit cases of S-framed constructions (and conversely). This is the problem of "**split systems**". This problem will be illustrated with French, Italian and Spanish.

(3) the regular coexpression of manner and path in verbs (or within a verb, in verbal stems), or the availability of a slot for manner in the clause does not mesh with the V-framed / S-framed distinction, because V-framed languages typically do not coexpress manner and path is not expressed in verbs in S-framed languages. This problem motivated the introduction of a third class by Slobin (**equipollently-framed lang**.). Croft et al. group serial verbs (e.g. Thai, Mandarin), coordinated verbs (e.g. Japanese) and complex stems (e.g. Kiowa, Klamath) in the class of **symmetric constructions**. Are symmetric constructions a special type?

(4) Another complication comes from languages that have both V-framed and S-framed constructions for expressing the very same motion event and do not favor one over the other for structural reasons. This is the problem of **alternate framing**.

(5) Some V-framed languages have features that deviate from the canonical V-framed type. This is the problem of **atypical languages**. Examples of atypical V-framed languages are the following :

V-framed languages that cumulate many path components in a single clause : Chantyal, Basque, Tzeltal.

V-framed languages which frequently co-express manner, or in which the co-expression of manner is not marked : Japanese "coordinated" verbs, ideophones, adverbials etc. (Japanese, Tiriyó).

(6) The spatial information conveyed in an utterance cannot be exhaustively localized on particular morphemes. Identifying the loci where spatial information is encoded is not a realistic prospect : "spatial relational semantic information — the "linguistically conceptualized spatial relational referential situation" — is irreducible to the individual contributions of members of any single lexical form class" (Sinha & Kuteva 1995 : 193). This is the problem of **distributed semantics**.

(7) Finally, some constructions have been left out of the typology of motion events, or little examined within this framework. These constructions include : (1) verbless clauses; (2) S-framed constructions which have no motional component; (3) Applicatives ; (4) MOVE and PATH coded by voice.

III.3.2. THE "DOUBLE-FRAMING" PROBLEM

Croft et al. call "double framing" a construction in which the path component of a motion event is redundantly expressed. This collapses two types of constructions into one:

French

(1) *elle est <u>montée</u> <u>en haut</u>.*

(lit.) 'She ascended up.' [path in V and path in S]

Russian

(2)   *ja*   <u>*vy-bežal*</u>   <u>*iz*</u>   *doma.*

      I   out-ran   from   house.GEN

'I ran out of the house.' [path in S and path in PREP]

However, French and Russian are very different : in French, in the unmarked case (see below, "split systems"), a path S must be "propped" on a path V. In Russian, there are no path V (except *vozvraschatsya / vernutsya* 'go back') and both *vy-* and *iz* are satellites. The term *double framing* is therefore misleading for Russian (there is only one kind of framing, namely satellite-framing).

We have noted (III.1.2) that Talmy classifies as V-framed some constructions which appear to be instances of double framing : *la botella <u>entró</u> <u>a</u> la cueva (flotando)* 'the bottle entered the cave by (floating)', *<u>saqué</u> el corcho <u>de</u> la botella retorciéndolo* 'I remove the cork (by twisting it)'.
In Spanish, *a* is goal-oriented and *de* is source-oriented. Since they specify the direction of the vector, *a* and *de* are path markers.
Talmy seems to make the assumption that constructions in which the path satellite is *dependent* on a path verb fall under the V-framed pattern. Under this assumption, "double framing" is no reason for changing the existing classification.

NB : there might be some disagreement as to whether a satellite qualifies as a path satellite or expresses a static relation. For ex., Vandeloise (1987) considers that French *à* is not dynamic, even in motional contexts like *Pierre part à Paris* ('Pierre is leaving for Paris'). However, *à* (or *dans*, *sur*) is clearly goal-oriented when used in a motional context (*à Paris* does not designate the place of departure ; compare with Jakaltek adpositions, which are clearly direction-neutral), with few exceptions (*il a pris sa chemise dans l'armoire* 'he took his shirt from the wardrobe'). *A, dans or sur* should therefore be considered as path satellites.

III.3.3. THE PROBLEM OF "SPLIT SYSTEMS"

The objection is that V- / S-framed dichotomy is too rigid to accommodate languages that display both types of constructions (cf. Croft et al., to appear ; Beavers et al., to appear). For ex. French and Italian are both predominantly V-framed, but they show signs of S-framing too. This was observed by Aske and Slobin and later recognized by Talmy (2000 : 65), who described Spanish as a "split system" (and Greek as a "parallel system", that is, a split system where S-framed and V-framed constructions are equally frequent). According to Slobin & Hoiting (expanding on Aske), the crucial factor would be the crossing of a boundary : split systems (at least those of the Romance type) would rely on the V-framed strategy when a F crosses a boundary. However, crossing of a boundary neither is a necessary nor a sufficient condition for the use of a V-framed construction : it is not a sufficient condition since the crossing of a boundary may be expressed in a satellite : *il a sauté dehors* 'he jumped out', *il a couru dans la maison* 'he ran into the house, *il s'est enfui hors de la maison* 'he flew out of the house'. It is not a necessary condition either, since V-framed constructions occur with non-boundary crossing events : *il a parcouru la France* (V-F) lit. 'he criss-crossed France' i.e. 'he went all over France' or *il a monté l'escalier* (lit.) 'he ascended the stairs' i.e. 'he went up the stairs'.
The situation is in fact more complex.

In French, and in Italian and Spanish too, some manner-of-motion V enter into a S-framed pattern with unmarked prepositions :

Folli (2008 : 205).

(3) *Gianni*	*è*	*corso*	*a*	*casa* //	*Jean*	*a*	*couru*	*à*	*la*	*maison*.
G.	is	run	to	house //	J.	has	run	to	the	house

'Gianni ran home.'

(4) *Marco*	*è*	*scivolato*	*nel*	*buco* //	*M.*	*a*	*glissé*	*dans*	*le*	*trou*.
M.	is	slid	in.the	hole //	M.	has	slid	in	the	hole

'Marco slid into the hole.'

(5) *la*	*palla*	*è*	*rimbalzata*	*sotto*	*il*	*tavolo*.
the	ball	is	bounced	under	the	table

'The ball bounced under the table.' [lative]

Italian V that allow a lative reading	Italian V that disallow a lative reading
Correre 'run'	Galleggiare 'float'
Rotolare 'roll'	Camminare 'walk'
Rimbalzare 'bounce'	Galoppare 'gallop'
Scivolare 'glide, slide'	Danzare 'dance'
Gattonare 'crawl'	Nuotare 'swim'
Saltare 'jump'	Sciare 'ski'
Volare 'fly'	Passeggiare 'walk around'
Saltellare 'hop'	Vagabondare 'wander'

French V that allow a lative reading	French V that disallow a lative reading
Courir 'run'	Flotter 'float'
Rouler 'roll'	Marcher 'walk'
(Re)bondir 'bounce'	Galoper 'gallop'
Glisser 'glide, slide'	Danser 'dance'
Ramper 'crawl'	Nager 'swim'
Sauter 'jump'	Skier 'ski'
Voler 'fly'	Se promener 'walk around'
Sauter 'hop'	Vagabonder 'wander'

Spanish seems to behave somewhat differently from French and Italian for certain verbs (cited in Fábregas 2007 : 168) :

(6) <u>camina</u>   *al*   *baño.*
     walks   to.the   bathroom
     'He walks to the bathroom'
(Jaime Bayly, *La mujer de mi hermano*, pp. 144)

(7) *la nave del gran faraón* Tutankamon, *que también* <u>*navegaba*</u> *a* Iemenu
ART ship of.the great pharaon T which also sailed to I.
'The ship of the great pharaon Tutankamaon which also sailed to Iemenu.'
(Terenci Moix, *El arpista ciego*, p. 287)

Overall, however, Spanish manner-of-motion verbs are quite similar to their French and Italian counterparts (i.e. fall into two classes).

B. Some *float*-type V receive a "lative" interpretation in some restricted contexts (*marcher à l'échafaud* 'walk to the scaffolds', *marcher à l'ennemi* (lit.) 'walk to the enemy' i.e. 'march against the enemy').

C. In addition, French has a number of V constructed with preverbs, some of them with lative readings, for ex. *accourir* (< ad-currere, // Italian *accorrere* or Russian *pri-bejat'* 'arrive by running') or *s'envoler* 'to fly away'. Other prefixed V focus on the medial phase of the motion event (for ex. *parcourir* 'go all over' or *survoler* 'fly over'). The list of preverbs which are susceptible of having a spatial meaning is given below (from Kopecka 2006 : 86) :

prefix	meaning	examples
a(d)-	'to, toward'	*ac-courir* 'run to', *at-terrir* 'land, touch down'
dé(s)-/dis-	'un-, from, off, apart'	*dé-crocher* 'unhook', *dé-coller* 'unstick'
é-/ex-	'out of'	*s'é-couler* 'flow out'
em-/en- (Lat. inde)	'away, off'	*s'en-voler* 'fly away', *s'en-fuir* 'run away'
em-/en- (Lat. in)	'in, into'	*en-fouir* 'bury in', *en-fermer* 'enclose'
entre-/inter-	'between, among'	*entre-poser* 'put in' / *inter-caler* 'insert'
par-	'by, all over'	*par-courir* 'go all over', *par-semer* 'sprinkle all over'
ré-/re-	'back, backwards'	*re-tourner* 'return, turn over', *re-venir* 'come back'
sou(s)-	'under'	*sou-tirer* 'get sth out of sb, decant'
sur-	'on, over'	*sur-voler* 'fly over'
tra-/trans-/tre-	'across, through'	*trans-porter* 'transport', *trans-percer* 'pierce, go through'

These V are vestiges of a stage when S-framed constructions were much more common and French made an extensive use of preverbs and directionals (Kopecka 2009). In Modern French, two prefixes only are still

productive : *dé-* and *re-* (the latter with an iterative meaning ; Kopecka 2006). Nothing to compare with, for ex., Russian verbs.

D. All manner of motion verbs (including *float*-type V) may receive a lative interpretation (i.e. enter into a S-framed construction) with marked (complex) prepositions like *depuis* 'from', *jusqu'à* 'up to' or *vers* 'toward :

(8)	*nous*	*avons*	*nagé*	**à / jusqu'à*	*la*	*rive*	*en*	*dix*	*minutes.*
	we	have	swum	to / up.to	the	bank	in	ten	minutes

'We swam to the bank in 10 minutes.'

Italian behaves like French in this respect :

(9) *la*	*barca*	*è*	*galleggiata*	*fino*	*al*	*ponte*	*in*	*un*	*secondo.*
the	boat	is	floated	up	to.the	bridge	in	a	second

'The boat floated to the bridge in a second.'

Note that in Italian *sotto* may refer to a change of place if combined with *a* (i.e. Italian can do without *fino* in some cases, whereas in French the reaching of a goal with a *float*-type V requires *jusque*) :

(10) *la*	*barca*	*è*	*galleggiata*	*sotto*	*al*	*ponte*	*in*	*un*	*secondo.*
the	boat	is	floated	under	to.the	bridge	in	a	second

'The boat floated (TO) under the bridge in a second.'

The same strategy of "S-framing" with a marked adposition is observable in other V-framed languages : Japanese[7] :

(11) *(watasi-wa)*	**hasi-ni / hasi-made*	*oyoi-da.*
1st-TH	bridge-to / bridge-up.to	swim-TAM

'I swam to the bridge.' [the unmarked postp. is *-ni*]

Tagalog :

(12) *nag-lakad*	*kami*	*sa / hangga-ng*	*sa*	*Banaue.*
VAC.PERF-walk	1P.PL.EXCL	at / up.to-LNK	PREP	Banaue.

'We walked around/to Banaue.' [*hanggang* forces a lative interpretation, the unmarked prep. is *sa*]

Turkish (O. Kemal, in Özçalışkan & Slobin 2003: 264) :

(13) *kaya-dan*	*kaya-ya*	*atla-yarak*	*uc-a*	*kadar*	*gel-di.*
rock-ABL	rock-DAT	jump-PROG	front- DAT	until	come-PST

'Jumping from rock to rock, he came all the way to the front.'

Note however that *jusqu'à* and *to* do not function alike in *Jean a marché jusque dans la chambre* and *John walked into the bedroom*. Like Japanese *-made*, *jusqu'à* focuses on the extent of John's path (with readings like 'John managed to walk as far as in the bedroom', or 'there are footprints that show that John went everywhere, even in the bedroom') and both can be used as intensifiers meaning 'as much as, even' (Kita 2006, Fortis 2007). Thus, the extent of John's path is focused on in *Jean a marché jusque dans la chambre*, whereas this is not so in *John walked into the bedroom*.

E. Finally, Italian is in the process of developing S-framed constructions with satellites like *via* 'away', *dentro* 'in', *fuori* 'out', *su* 'up' and *giù* 'down' (Iacobini & Masini 2006, who call these constructions Verb Particle Constructions, VPCs). VPCs constitute relatively cohesive structures : non clitic direct objects cannot generally be interposed (see below), the VPC functions like a constituent and the particle cannot undergo dislocation nor be topicalized (**è via che Irene ha buttato…*).

(14) *Irene*	*ha*	*butta-to*	*via*	*la*	*bambola.*
Irene	has	thrown	away	the	doll

'Irene has thrown the doll away.'

(15) *?? Irene*	*ha*	*buttato*	*la*	*bambola*	*via.*
Irene	has	thrown	the	doll	away

According to Iacobini and Masini, S-framed constructions compete with V-framed patterns to the point of becoming the major lexicalization type of motion events. Thus, besides *salire / scendere*, Italian has *andare su /*

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[7] Miyuki Ishibashi (p. c., JMF)

giù, 'go up / down' besides *entrare / uscire* it has *andare dentro / fuori* 'go in / out' etc. VPCs occur with manner-of-motion verbs, often with a telicizing effect :

(16) *l'-uccello   è   volato   <u>via</u>.*
the-bird   is   flown   away
'The bird flew away.' [note the change in auxiliary compared to *l'uccello <u>ha</u> volato per due ore*, where the aux. is *avere* 'have']

VPCs may have their source in Latin (cf. *ire via(m)* 'go away') and may have been later strengthened by Germanic influences, as is testified by the fact that they are more frequent in Northern dialects (Iacobini & Masini 2009).

CONCLUSION : In summary, French, Italian and Spanish are split-systems. They are predominantly V-framed (or arguably so for It.) but have four types of S-framed constructions : (1) verbs with path preverbs; (2) unmarked S-framed constructions with RUN-type manner verbs ; (3) marked S-framed constructions with *jusqu'à / fino a / hasta* and other prepositions ; (4) constructions with path particles (Italian).

III.3.4.   THE "EQUIPOLLENT-FRAMING" PROBLEM

Equipollently-framed constructions include serial verb constructions, constructions with coverbs and verbs, verbs with complex stems.

III.3.4.1.   SERIAL VERBS – VERBAL "COORDINATIONS"

Languages with serial verb constructions (SVCs) and "coordinated" verbs have motivated the objection that SVC are neither S-framed nor V-framed but exemplify a third type of construction (namely, in Slobin's terms, *equipollent framing*). In the following, it is shown that both Talmy's and Slobin's initial accounts run into problems.
The first problem met by Talmy's and Slobin's acount is that at least some languages with SVCs are typologically complex : some serial verb languages have both S-framed and V-framed constructions. The second problem is that languages with SVC differ from each other, and that languages with SVCs cannot be uniformly described as either S-framed or E-framed.

1st problem : Some languages with SVCs are typologically complex :
There is considerable disagreement on the proper way to analyze SVCs in general and Mandarin (or Thai) SVCs in particular (see Beavers et al. : 36-7 for references). Slobin classifies Mandarin (and Thai) as an equipollently-framed language. He assumes (Slobin 2004 : 224), therefore, that in

(17)   <u>*fēi*</u>   <u>*chū*</u>   *yī zhī*   *māotóuyīng*
         fly   exit   one   owl
'An owl flew out.'

chū is a verb, not a preposition-like satellite. On the other hand, Talmy (1991 [2000] : 108-9) analyzes *chū* as a satellite.
If *chū* is a verb, then the SVC is V-framed. The reason why Slobin et al. do not want to call it V-framed is that this SVC does not exhibit the kind of V / S and path / manner asymmetry found in more "typical" (Romance-type, for ex.) languages.
Talmy's latest view on the matter (Talmy 2005, 2009) is to consider that Mandarin has more than one lexicalization pattern (a conclusion already endorsed by Li & Thompson 1974 for structures V_1 (NP) V_2 (NP) where V_1 is a "co-verb", in fact, according to Li & Thompson, either a preposition or a verb. Thus, homophonous forms in V_1 position either are univocally verbs in all contexts, or verbs in some contexts and prepositions in others. For ex. *cháo* 'face, facing' can be a verb or a preposition (Li & Thompson 1974 : 262) :

(18)   *tā   <u>cháo</u>   nán   xià-bài.*
         He   facing   south   worship
         'He worships facing south.'
[does not mean what two consecutive verbs would mean, i.e. 'he faces south in order to worship', or 'he faces south and then worships', or 'he faces south and worships alternatively']

(19)   *tāde*   *wūzi*   <u>*cháo*</u>   *hǎi.*
          His   room   faces   sea
          His room faces the sea.'

Mandarin has E-framed constructions whenever the V2 also occurs alone (V0) with the same meaning as in SVCs. This is the case for *jìn* in (Talmy 2009 : 398) :

(20)   *tā*   *zǒu*   <u>*jìn*</u>   *le*   *gōng-yuán.*
          s/he   walk   enter   PERF   park
          'S/he walked into the park.'

(21)   *tā*   <u>*jìn*</u>   *le*   *gōng-yuán.*
          s/he   enter   PERF   park
          'S/he entered the park.'

On the other hand, according to Talmy (2009), instances where V2 does not have the same meaning as its V0 counterpart are cases of S-framed constructions. Further, the degree to which speakers "sense" V2 as being a verb or a satellite depends on the degree to which an item in V2 position receives the same construal as its V0 counterparts (Talmy lists other criteria as well, see the appendix of this part).
Though Talmy himself does not use the term for Mandarin, Mandarin could be classified as a **split system**.

That different kinds of SVCs can be found in one and the same language has been established in other studies (for ex. Vittrant 2006 is an in depth analysis of different types of SVCs in Burmese).
Thai could be another example, *contra* Zlatev & Yangklang (2004), for whom it is E-framed. It would be hard to argue, for ex., that *jàak* is a verb in the following sentence, which in turn casts doubts on the claim that *jàak* is an element of an E-framed construction in the next sentence (Warotamasikkhadit 1988 : 7, cited in Hagège 2010 : 169) :

(22) *bâan*   *khǎw*   *yùu*   *klay*   *jàak*   *bân*   *chǎn.*
house   3SG   be   far   leave   house   1SG.F
'His house is far from my house.'

(23) *khǎw*   *rîiprɔ́ɔn*   *dəən*   *jàak*   *raw*   *pay.*
3SG   hurry   walk   leave   1PL   go
'He hurriedly walked away from us.'

Ewe is taken by Ameka & Essegbey (2006 : 394) to be another exception to the V- / S-framed dichotomy. The following sentence is intended to be an example of an E-framed construction :

(24) *é-*<u>*tá*</u>   <u>*do*</u>   *le*   *xɔ-a*   *me.*
3SG-crawl   exit   LOC   building   containing region
[lit.] 'S/he crawled exiting the inside of room' i.e. 'S/he crawled out of the room.'

The criterial property for distinguishing V from prepositions, according to Ameka & Essegbey (2006 : 367) is the ability to accept the habitual suffix *-na*. Since both V1 and V2 can carry this suffix, they must be verbs :

(25) *ɖevi-a*   *tá-*<u>*ná*</u>   *yi-*<u>*na*</u>   *xɔ-a*   *me.*
child-DEF   crawl-HAB   go-HAB   room-DEF   containing region
'The child crawls into the room.' (Ameka & Essegbey, in press)

Because V1 and V2 are both verbs, they have an equal status, hence the construction is a case of equipollent framing. It may be noted, however, that in the examples given by Ameka & Essegbey a manner V never refers to a change a place without the support of a path V (having a manner V + path satellite construction would be theoretically possible in Ewe since the language has pre- and postpositions). And Talmy's typology is not about the status of manner V but about the locus where path is encoded. In the spirit of Talmy's typology (not of Slobin's), Ewe constructions above are V-framed.

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Another arguments for claiming that Ewe does not fit into the V-framed / S-framed typology is the fact that Ewe has also symmetric and V-framed constructions :

Symmetric : *do go* 'exit outside'

V-framed :
(26) *é-ɖó*   *vu-a.*
3SG-arrive   vehicle
'S/he boarded the vehicle.' (ibid. : 392)

But once again, these examples conform to the V-framed pattern (expressing path requires a path V).

Ewe also has generic verbs which are little more specific than the MOVE component.
Manner is currently expressed in a satellite or in a complement (dir. obj.) e.g. *move-limbs-in-a-medium course*$_{obj}$ = 'run'.
Moreover, Ewe has 4 general motion verbs *kplɔ* 'move, move with', *zɔ* 'move, travel', *fú* 'move limbs in a medium' and *tsa* 'move about, wander' have very general meanings and take on more specific meanings in context (Ameka & Essegbey 2006 : 389-90). For ex. in the following sentence *zɔ* 'move, travel' does not encode path and functions as a support for an ideophone :

(27) *mi-zɔ*   *minyamiya*   *mía-vá-kpɔ́-e*   *ɖá.*
2PL-move   IDEO   1PL-VENT-see-3SG   in the distance
'Walk stealthily and we go have a look.'
Ewe, therefore, displays cases of minimally specified

Conclusion : the claim that Ewe displays several types of constructions and is typologically hybrid is not warranted. Ewe does not seem to constitute an objection to the typological classification proposed by Talmy and appears to be predominantly V-framed, with elements of verbally minimally specified constructions.

2nd problem : serializing languages are not typologically homogeneous : there are arguments for saying that Fon (close to Ewe) is S-framed and that Japanese is V-framed.
Fon (Lambert-Bretière 2009 : 14) :
(28) *cùkú*   *ɔ́*   *lɔ́*   *tɔ́n*   *sín*   *xɔ̀*   *ɔ́*   *mὲ.*
dog   DEF   jump   exit   from   room   DEF   in
'The dog jumped out of the room.'

Lambert-Bretière argues that Fon is S-framed language. Her reasons are :
    First, the path V can be out of the scope of the aspectual marker *wὲ*, which Lambert-Bretière regards as a sign that the path V has a different status (is less verbal than the V1) :

(29) *cùkú*   *ɔ́*   *ɖò*   *lì-lɔ̀n*   *wὲ*   *tɔ́n*   *sín*   *xɔ̀*   *ɔ́*   *mὲ.*
dog   DEF   be.at   RED-jump   POSTP   exit   from   room   DEF   in
'The dog is jumping out of the room.'
Ewe would thus have a better claim to being characterized as an equipollently framed language.

    Second, several path components can be packed in a single clause. Recall that this is a typical property of S-framed languages :

(30) *cùkú* *ɔ́* *lɔn* *tɔ́n* *sín* *xɔ̀* *mὲ* *gbɔ́n* *flétὲ*   *ɔ́* *nù.*
dog   DEF jump exit from room in pass.by window   DEF edge
'The dog jumped out of the room through the window.'

    Third, degree of membership overlap : if V2 are satellites, the verbs occurring in V2 position should constitute a much more limited class than verbs that can be used as main predicates.
    Ex. *xá* 'go up' is a path V, but it cannot be used as V2 in an SVC :

(31)   *é*   *xá*   *àlyá*   *ɔ́.*
        3SG   go.up   stairs   DEF
        'He went up the stairs.'

(32)   *é   kán-wèzùn   xá   àlyá   ɔ́.
         3SG   take-run   go.up   stairs   DEF
         'He ran up the stairs.'

Degree of semantic-syntactic overlap : *gbɔ̀n* 'pass by' can be used transitively (with an instrumental meaning) in an SVC, but cannot have a direct object nor receive an instrumental interpretation in a simple sentence:

(33)   *mɛ̀*   ɔ́   *wǎ*   *gbɔ̀n*   *jɔ̀mɛ̀hún.*
         person   DEF   come   pass.by   plane
         'The person arrived by plane.'

(34)   * *mɛ̀* ɔ́   *gbɔ̀n*   *jɔ̀mɛ̀hún.*
         person DEF pass.by   plane
         'The person passed by a plane.'

V2 do not conflate MOVE because they cannot coerce some manner V into a "translocation event frame" [i.e. a construction that expresses a change of place].
Suppose that the V2 conflates MOVE and PATH. Why can it not coerce every V1 into a motion event frame? For ex. Lambert-Bretière (2009 : 15) notes that in Fon the following sentence with a V_{man}-V_{path} sequence is unacceptable :

(35)   *yě   ɖù-wè   tɔ́n   sìn   xwé   ɔ́   mɛ̀.
         3PL   move-dance   exit   from   house   DEF   in
         'They went out of the house, dancing' or 'They danced (while) going out of the house.'

(36)   *kòklósí   lɛ   lìlɛ   kɛ   gbɔ́n   jìkpamɛ   ɔ́.
          hen   PL   turn   cackle pass.by   yard def   DEF
'The hens passed through the yard squawking.' or
'The hens squawked (while) passing through the yard.'

Lambert-Bretière reasons that the path V cannot coerce the manner V into a translocation event frame because it does not conflate MOVE and therefore is not a verb but a satellite. However, languages with *bona fide* satellites do not behave alike with respect to coercion. Bulgarian, an S-framed language, is like Fon, and English differs from both (though it is probably less S-framed than Bulgarian) :

I danced across the street =

(37) *tancuvax*   *dokato*   *presičax*   *ulicata*
dance.IMPF.AOR   while   across.cut.IMPF.IMPERF.1SG   street
'I danced while I was crossing the street.' (from Croft et al., *to appear*) [*across…* cannot be a satellite of 'dance']

Unlike Fon, English does license V of sound emission in V_{man}-S_{path} constructions, yet S_{path} is not a verb :

(38) *the ball swished through the net.*
(39) *the voices echoed through the hall.*
(40) *Sedgwick often clanked into town in sabre and spurs from the cavalry camp.* (cited by Levin & Rappaport Hovav 1995 : 190).

The conclusion is that the capacity to coerce a manner V into a translocation event frame is no evidence for the verbal status of the path component. There is much linguistic variability here (as will be further discussed below), and this variability does not seem to be clearly related to the S-framed / V-framed distinction (or to the degree of S-framing). Croft et al. argue that coercion into a tightly integrated syntactic frame depends on the degree of event integration (*run out > dance out > yell out > ponder out*).
However, even if the argument from coercion does not hold, a good case can be made that Fon is S-framed.

"Coordinated" verbs : Japanese (Shibatani 2003 ; Morita 2009)

Japanese has three types of SVCs marked with three different connectors (*-i, -te, -nagara*). These connectors express varying degrees of syntactic and semantic solidarity between the verbs of an SVC (Morita 2009, whose syntactic analysis is based on the RRG framework).

For a manner V to refer to a change of place, the locative complement must be headed by a marked postposition (specifying the extent of a path and functioning as an intensifier, and therefore similar to French *jusqu'à / depuis*) or be embedded in an coordination whose framing V is a path V (or a deictic V) :

(41) *(watasi-wa)*   *hasi-ni* / *hasi-<u>made</u>*   *oyoi-da.*
1SG-TOP   bridge-to / bridge-up to   swim-PST
'I swam to / up to the bridge.' (Fortis 2007)

(42) **Ken-wa*   *gakkoo-ni*   *arui-ta.*
Ken-TOP   school-to   walk-PST
'Ken walked to school.'

(43) *Ken-wa*   *gakkoo-ni*   *arui-te*   *it-ta.*
Ken-TOP   school-to   walk-CNC   go-PST
'Ken went to school walking.' (Shibatani 2003)

Verb-framed constructions are therefore predominant in Japanese. However, SVCs make it possible to coexpress manner and path in a clause, something that Japanese does much more frequently than, for ex., Romance languages (Morita 2009).

Conclusion on SVC : Slobin's claim that serial verb languages exemplify a third type of framing is an oversimplification. From the point of view of Talmy's typology, languages with SVCs are heterogeneous. Mandarin and Thai have a claim to being split systems, but Fon is apparently S-framed and Japanese V-framed. Lastly, Ewe should be classified as V-framed.

III.3.4.2. COVERBS

Jaminjung (Schultze-Berndt 2000, 2006)
A hallmark of Jaminjung is its very limited set of verbs and its numerous coverbs (according to Schultze-Berndt, it has 26 well attested verbs, with 9 additional marginal members). Coverbs encode positions, relations between a F and a G, properties (like adjectives in I-E languages), activities, internal states (for ex. emotions)…
Syntactically, coverbs can enter into an Aux-Inflected V construction (they bear the bulk of the lexical content), some of them can receive a continuative marker, can be used as imperatives, or in narrative sequences as "semi-independent" predicates. They are also used as resultative / depictive secondary predicates (for ex. CARRY$_V$ AT-A-GALLOP$_{CV}$). They are adynamic in the sense that the same invariable form is used in sentences that refer to the fact of being in a position / relation, assuming a position / relation, being induced to assume a position / relation and maintaining this position / relation (see also ADPOSITIONS : the source / goal / location distinction is not encoded with the coverb but is marked on the nominal; Schultze-Berndt 2000 : 427) :

(44) *<u>marrug</u>*   *buny-<u>agba</u>=rnu.*
      hidden   3du-BE.PST=3SG.OBL
      'The two were hiding from him' [CoV BE : being in a static position]

(45) *<u>marrug</u>*   *ga-<u>rdba</u>-ny.*
      hidden   3SG-FALL-PST
      'she hid (e.g. behind a tree).' [CoV FALL : assuming a position distant from the initial one]

In such instances, the main verbs BE, FALL, PUT (causing sb / sth to assume a position / relation) and HAVE (maintaining a position / relation) have a causal / aspectual import.
Coverbs also combine with motion verbs (GO, COME), in which case they denote a position / relation that holds at the goal of a motion event or that is sustained while this event is going on.
In the description of motion events, only a handful of main V are used (GO, COME, TAKE, BRING, LEAVE, APPROACH, FOLLOW) and further specification of the path and of the manner of motion is left to coverbs (Schultze-Berndt 2000 : 465 & 2006 : 93 and 83) :

(46) *wamam*   *ga-ram*   *walnginy*.
      facing   3sg-COME.PRES   walk
'He comes walking facing us.' [CoVs of orientation and manner]

(47) *bunburr*   *yurru-w-ijga*   *yagbali-bina*   *buru*.
      take.off.multiply   1PL.INCL-POT-GO   place-ALL   return
'Let's all take off to go back to the camp.' [CoVs of path]

(48) *jalig-malang*   *yugung* *walig*   *ga-jga-ny-nu*.
      child-GIVEN   run   around   3SG-GO-PST-3SG.OBL
'The child ran around for him.' [CoVs of manner and path]

[Note that *ijga* 'go' can be "used in descriptions of undirected motion" (Schultze-Berndt 2006 : 84) that is for motion toward as well as away from the deictic centre. Such constructions are close to the zero-conflation pattern].

Schultze-Berndt concludes that "…Jaminjung falls outside the verb-framed / satellite-framed typology as it is currently conceived, since this does not account for a language with a closed class of verbs, where both path and manner are encoded externally to the verb, by members of the same major class of non-inflecting elements" (Schultze-Berndt 2006 : 102).

However, the case of Jaminjung had been anticipated by Talmy (see III.1.2 : Zero-conflation, and **Minimally Specified**).

Talmy's latest view is to draw a list of criteria for main V status and, in dubious cases, to decide whether a language is V- / S-framed etc. by identifying those items that are resp. more / less verb-like see the appendix here).

For inst., Jaminjung verbs are more verb-like than coverbs because they take inflections. They are less verb-like than coverbs because they form a closed class and have less substantive content (are more "grammatical"). On this acount, according to Talmy, Jaminjung is a split system (Talmy 2009 : 400). Now, and concurrently, Talmy argues that since path specification depends on the presence of a path V and path coverbs have a certain degree of verbhood, Jaminjung can be classified as V-framed.

I would rather be faithful to Talmy's original suggestion and rely on the latter criterion (i.e. whether path specification must have the support of path V or not). On this view, Jaminjung should be classified as V-framed, and further characterized as Minimally Specified. A simpler designation could be **Generic V-framing**.

Note : one finds in Icelandic a pattern reminiscent of Jaminjung (though not as widespread as in Jaminjung), with a semanticaly depleted verb as head and two satellites, one of manner and one of path (Croft et al., to appear) :

(49) *Ég*   *fór*   *dansandi*   *yfir*   *götuna*.
     I.NOM   went   dancing   across   street.the.ACC
'I went dancing across the street.'

III.3.4.3. BIPARTITE STEMS

Slobin (2004) claims that bipartite stems[8] illustrate what would be Equipollent Framing at the word level. This strategy has been observed in languages of Northern America. For Talmy, they fall into the V-framed category (as his glosses below make clear) :

Nez Perce (Talmy 2000 : 113)
(50) *hi-*   *ququ̅·-*   *láhsa-e*.   [hiqqoláhsaya]
     3SG   galloping-   go.up-PST
     'He / she ascended galloping' i.e. 'He / she galloped uphill.'

It can be recalled that Talmy analyzes Atsugewi (close to Nez Perce) as having stems of unequal status. According to him, the Figure-specifying stem is the main verb root (hence his contention that the Figure-specifying stem conflates with the Motive, i.e. the MOVE component). In support of this claim, Talmy (2009) gives several arguments which appeal to his new conception of verbhood (see the appendix at the end of this

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[8] The term *bipartite stem* was coined by Jacobsen (1980) for the Washo language.

part) : Figure-specifying stems are phonologically more diverse, more numerous, more semantically specific and diverse and occur in a wider range of constructions types than other stems.

On the other hand, DeLancey claims that in Klamath (close to Atsugewi), stems have equal status. Therefore, in the following sentence, 'in water' is not a satellite but a stem :

Klamath (DeLancey 2003)
(51)   *wac'aak*   *ʔa*   *ks-ew-a.*
        dog   IND   living.obj-in.water-IND
        'The dog is in the water / fell into the water / someone put the dog in the water.'[9]

Similarly, the combination of a motional stem (not of a classifying one like 'living object') followed by an LDS is analyzed as composed of two stems with equal status (DeLancey 2003 : 73-4) :

(52) {g^v} 'go' + {abaatn} 'to shore' > *gabaata* 'go to shore'

As is apparent, there is disagreement on the proper way to analyze languages with complex stems.
DeLancey considers that the two motional morphemes glossed as *galloping* and *go up* are in fact stems (resp. "lexical prefix" and "lexical directional stem" or LDS). He treats what Talmy recognizes as the main verb root in Atsugewi as a "lexical prefix". In short, Talmy's root is DeLancey's prefix in Atsugewi, while Talmy's satellite in Nez Perce is for DeLancey a lexical stem.
In Klamath, DeLancey argues that neither the lexical prefix, the stem nor the LDS is identifiable as the verb : "In a bipartite stem with a motional LP, such as ***holhi*** '**run** inside', both Manner ({hod} 'run, jump') and Path ({oLy} 'inside (a house)') are obligatory elements of the verb and neither can be shown to be morphologically or syntactically subordinate to either" (DeLancey 2007 : 145).

III.3.5. ALTERNATE FRAMING

Alternate framing is the free alternation (pragmatic or information structure considerations aside) of S-framed and V-framed constructions. In Shona (Schaefer & Gaines 1997 : 213s), a manner V can be deranked to participial status in a clause whose main V is a path V. But the reverse situation happens too : the manner V can be the main clause predicate and the path V be deranked to participial status :

(53) *mu-ana*   *u-aka-pinda*   *mumba*   *a-chi-mahnya.*   [manner V deranked, "satellite"]
1-child   1-PST-enter   room   1-PRT-run
'The child entered the room while he ran' i.e. 'the child ran into the room.'

(54) *mu-ana*   *u-aka-mhanya*   *a-chi-pinda*   *mumba.*   [path V deranked, "satellite"]
1-child   1-PST-run   1-PRT-enter   room
'The child ran while he entered the room.' (Schaefer & Gaines 1997 : 213-4)

Shona has another S-framed construction which employs an applicative suffix. The applicative suffix augments the valence of a manner V by allowing a directional complement :

(55) *mu-ana*   *u-aka-mhany-era mumba.*   [path V deranked, "satellite"]
1-child   1-PST-run-APPL room
'The child ran while he entered the room.' (Schaefer & Gaines 1997 : 213-4)

It is therefore unclear whether Shona is S-framed or V-framed. Since the relative ranking of path and manner V is apparently more variable and free than in Split Systems (of the Romance type, for ex.), it is perhaps best to assign it to a specific category (**parallel systems**, following Talmy 1985 [2000] : 66, who illustrates parallel systems with Greek).

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[9] According to DeLancey, verbs with a classifying lexical prefix ('living object') followed by a LDS are indifferently stative, eventive, intransitive and transitive.

III.3.6. ATYPICAL LANGUAGES

In Slobin's account (2004, 2005 ; also Zlatev and Yangklang 2004), the lexicalization pattern characteristic a language (i.e. whether it is S-/V- or E-framed) correlates with other properties of this language. These correlations are recalled in the following table (repeated from II.2.1). Exceptions to these correlations are indicated in italics.

Languages that are atypical from the standpoint of the correlations below have been argued to belong to another class, that of Equipolllently-framed languages. The problem is that since some V-framed and S-framed languages also lack properties supposedly typical of V-framed and S-framed languages, there is a serious threat that lexicalization patterns lose all relevance and that the typology dissolves into clines of manner-salience or path-salience (Ibarretxe-Antuñano 2009).

Parameter	V-language	S-language
Core schema	V	S
Co-event	Adverbial *(no, cf. Japanese)*	V
Boundary-crossing constraint	Yes *(no, cf. French)*	No
Several path segments per clause	No *(yes, cf. Basque)*	Yes
Manner-V use	Low *(high, cf. Japanese)*	High
Ground specification	Lower *(higher, cf. Chantyal)*	Higher
Event granularity across clauses	Lower	Higher
Scene setting	Yes	No

Further, we have seen above that inventories do not neatly correlate with typological status :

A predominantly S-framed language may have many path V (English). A V-framed language may have few path V (for ex. Chantyal, perhaps no more than 5 : 'go', 'come', 'enter', 'exit', 'arrive' ; Noonan 2003), have many path satellites and a narrative style that parallels in some aspects (for ex. Ground specification) that of S-framed languages (as is again the case with Chantyal ; Ibarretxe-Antuñano 2009).

The properties above are often orthogonal to the V-/S-framed distinction. The posited correlations are therefore not very useful for classifying languages by structural type. They are of greater concern for a study of narrative styles.

III.3.7. DISTRIBUTED SEMANTICS

In Dutch, word order differentiates a "lative" interpretation from a locative one (ex. from Sinha & Kuteva 1995 : 173; see also Van Staden et al. 2006) :

(56) *de jonge loopt het bos <u>in</u>.*
the   boy   walks   the   woods   in
'The boy walks <u>into</u> the woods' [path: boy enters woods]

(57) *de jonge loopt <u>in</u> het bos.*
the   boy   walks   in   the   woods
'The boy walks <u>in</u> the woods' [non-lative: activity takes place in woods]

Both constructions are S-framed. However, the path is not encoded solely in the satellite. Whether the Figure changes place or not depends on the *position* of the path satellite in the sentence. Constructions of this type will be called here **S-framed constructional**.

III.3.8. SOME NEGLECTED CASES

There are at least 4 cases that have not been paid due attention : (1) verbless clauses; (2) S-framed constructions which, according to Talmy, would have no MOVE component; (3) Applicatives ; (4) MOVE and PATH coded by voice.

III.3.8.1 VERBLESS CLAUSES

Compared with what is observable in static location, verbless constructions of motion events seem to be exceptional. Cf. German: *herein* ! (and other imperatives : *Your feet off the desk, please! Everybody outside!* French *En voiture!* 'into the car!'). However, cf.:

Russian
(58) *Ja domoj* 'I (am going) home'.
(59) *Ja k vam* 'I'll go to your place'.

Spoken Indonesian (Hagège 2010: 247)
(60) *məreka   kə   bioskop.*
3PL   towards   movies
'They are going to the movies.'

Nunggubuyu (Heath 1980: 152 in Diessel 1999: 46):
(61) *yuwa:-gi:-'la.*   *yuwa:-gi:-yaj.*
DIST-NC-CPET   DIST-NC-TRANSV
'There he / she comes.'   'There he / she goes across.'
Cf. also French *la voilà* 'there she comes'.

These constructions are **radically S-framed constructions**.

Note 1: non V-headed construction ≠ ellipsis:
(62)
— *Do I put the vase inside the sideboard or on top of it ?*
— *Inside !*
Note 2: other (perhaps marginal) examples:
(63) *Pan sur la tête !*, (lit.) 'whack on the head!', and, more refined (head of undetermined category) :
(64) *Will they archly quiz and con us*
With a sideways glance upon us,
While our spurs Clink ! Clink ! up the Esplanade and down ! (verb ? Thomas Hardy, *The Hussar's Song*)

III.3.8.2. S-FRAMED CONST. WITH NO MOTIONAL COMPONENT

There are two kinds of "concrete" situations in which path satellites are used with verbs that do not refer to a characteristic of the Figure's motion :
(a) situations in which, although no change of place of the Figure occurs, the relation of the Figure to the Ground is construed dynamically :

(65) *she looked through the window into the room.*   [path of vision of the Figure]

(66) *xtiyoxhli-ah-tij   naj   tet   ix.*
saluted-up-CFUG   CL.man   E3.to   CL.woman
'He said hello (up away) to her.'   [path of communication]

Such situations are commonly designated as cases of "**fictive motion**" (Talmy 1996) or "**abstract motion**" (Gruber 1965 ; Langacker 1986a). S-framed constructions with manner of motion verbs and V-framed constructions may also refer to situations of fictive motion (resp. *the road runs through a gorge of granite boulders / the hill gently rises from the river*).

(b) situations in which a Figure moves along a path and in which what is expressed in the verb is not clearly related to the motion of the Figure (is not a "motional component"). We are concerned here with situations of the latter type.
A promising field of research would be to study the restrictions bearing on the verbs which can appear in this kind of S-framed constructions. What follows is merely a preliminary note pointing out a few interesting facts.

In our discussion of Fon, we saw that in some languages S-framed constructions can be headed by verbs of sound emission. The conditions under which a verb of sound emission can be "coerced" into a translocation event frame are still unclear. For ex., the following sentence is not acceptable :

(67) *He yelled down the street.* (Levin & Rappaport Hovav 1995 : 190)

Levin & Rappaport Hovav (1995 : 191) claim that "in order for a verb of sound emission to be used as a verb of directed motion, the sound must be emitted as a necessary concomitant of the motion", as for inst. in *Sedgwick often clanked into town in sabre and spurs from the cavalry camp* (the clanking is caused by Sedgwick's movement).
This account will not stand for German. Besides constructions with V of sound emission (*eben rattert die Strassenbahn der Linie 3 heran* 'as the tram of the Line 3 rattles by'), German licenses manner V that do not refer to an activity that can be construed as a concomitant of the F's motion, for ex. modal verbs :

(68) *Der frühere Musikproduzent (...)* <u>*muss*</u> *wegen Mordes und illegalen Waffenbesitzes für 19 Jahre ins Gefängnis.*
(lit.) 'The former music producer (…) <u>must</u> in jail because of murder and illegal firearm possession.'

(69) *Meine Eltern wollen zu den Amisch (...) Ich will aber nicht ins Mittelalter.*
'My parents want <to move> to the Amish (…) but I don't want <to go back> to the Middle-Ages.'

Or activity verbs that are refer to an activity that is simultaneous with the Figure's motion but is not concomitant with it in the sense advocated by Levin & Rappaport Hovav (i.e. is a physical accompaniment of the motion itself) :

(70) *ein erhabenes Schicksal sinnt den Kidron hinab* (Georg Trakl).
(lit.) 'A sublime destiny ponders the Cedron down.' [Jesus Christ walking down toward a brook, the Cedron, on the way to the Mount of Olives]

Or verbs describing an achievement which is not concomitant either with the change of place:

(71) *am abendweiher,*   'By the evening pond,
auf schwarzem Kahn   In a black boat
<u>*hinüberstarben*</u> *Liebende.*   Lovers have died crossing over.'
Trakl, *Abendland*   (lit.) died thither over (*hin*- CFUG, *über* 'over')

A tentative designation for such cases would be **S-framed coerced**. S-framed coerced constructions might be defined as constructions headed by a verb that does not refer to a physical process that is "concomitant" with the Figure's motion (in a causal relation with it). Obviously, languages differ as to their capacity to accept S-framed coerced constructions.

III.3.8.3. APPLICATIVES

The typology of motion events has concentrated thus far on "dedicated" spatial markers, or in other words on markers with a spatial meaning. However, there is evidence that dedicated spatial markers are not all the resources that a language can turn to for specifying path.
Applicatives are a case in point. Their semantics is not clearly spatial (although Michaelis & Ruppenhofer 2001 argue for a spatial prototypical meaning for the German applicative pattern in *be-* ; cf. *beschmieren* 'cover with smears'[10]). However, they do function like path satellites to the extent that they can coerce a manner of motion V into a translocation event frame.

In Zulu, manner of motion verbs do not take a source or goal argument, unless they are constructed with a path verb or suffixed with an applicative. (72) illustrates the path-verb solution, and (73) is an example of the applicative strategy. (74) shows that, lacking a path verb or an applicative, the locative complement of a manner of motion verb refers to a setting, not to a goal.
(72) *umfana   wagijima   waya   esikoleni.*
      boy   he-ran   he-went-to   school.LOC

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[10] Note that German *be-* derives from Gothic *bi* 'around something, with respect to something' (Wunderlich 1987, Brinkmann 1997 : 77-8).

(73) *umfana   ugijimele   esikoleni.*
    boy   he-ran-APPL   school-LOC
'The boy ran to school.'

(74) *umfana   ugijime   esikoleni.*
    Boy   he-ran   school-LOC
'The boy ran (around) inside the school.'

In (73) the applicative suffix contributes to specifying the relation that obtains between the Figure and the Ground. However, this suffix has no spatial meaning by itself. This is evidenced by the fact that it leads to a different, non spatial interpretation when the complement noun is not locativised :

(75) *umfana ugijimele   isikolo.*
    boy   he-ran-APPL   school
'The boy ran for the school' [e.g. the boy represented his school in a race]

As another example, consider Halkomelem (Gerdts 2004). One of the Halkomelem applicative suffixes (in Gerdts' terms, the "directional applicative" *-nəs*) has a function reminiscent of the Zulu applicative : when suffixed to some motion verbs, these verbs can have a goal complement without this necessitating the support of a directional verb. In other words, a goal complement no longer needs to be licensed by a directional verb if a directional applicative is suffixed to the motion verb :

(76)   *neṃ́ čtem neṃ́ ʔə t^θəń   men,   qeq.*
        go   crawl go   OBL DET.2POS father, baby
        'Go crawl to your dad, baby.'   [directional verb 'go' licenses a goal]

(77)   * *neṃ́   čtem   ʔə t^θəń   men,   qeq.*
        go   crawl   OBL DET.2POS father,   baby
        'Go crawl to your dad, baby.'   [absence of directional verb 'go' renders the sentence unacceptable]

(78)   *neṃ́ čtem- nəs   ʔə t^θəń   men,   qeq.*
        go   crawl-APPL   OBL DET.2POS father,   baby
        'Go crawl to your dad, baby.'   [goal complement allowed in the presence of an applicative suffix]

However, the directional applicative cannot be used with all motion verbs that can have a goal complement and is therefore limited in use. It seems to convey a purposive meaning and to be restricted to verbs whose subject argument is an agent.

In Haya (Grégoire 1998), an applicative makes the difference between a locative setting and a goal :

(79) *ngkagw' ómúnju.*
1SG.fell   18-9-house
'I fell down (when I was) in the house [at home].'

(80) *ngkagwel'   ómúnju.*
1SG.fell.APPL   18-9-house
'I fell down into the house.'

Creissels (1998 : 133-5) observes that in the context of locatives and motion events, the Tswana applicative correlates with the following effects :

— it licenses a goal for verbs of unoriented motion (such as 'run') :
(81) *o   tlaa   taboga.*
    si1   FUT   run
'He is going to run.'

(82) *o   tlaa   tabogela   kwa   tseleng.*
    si1   FUT   run.APPL   PREP   9road.LOC

'He is going to run to the road.'

— it "reverses" the polarity of a locative complement :
(83) *o   tlaa   boa / bo<u>e</u>la   Gaborone.*
is1   FUT   leave / leave.APPL   G
'He is going to leave Gaborone again / leave <u>for</u> Gaborone again.'

— it indicates that a location is where an activity usually takes place or that it is intended for this activity.

— it brings into argument-focus the locative argument (correlatively, the verb itself is not focused on).

Since applicative morphemes function like satellites, we can tentatively make V-appl constructions a specific type of S-framing ("**S-framed augmented**", since appl. morph. augment a verb's valence), keeping in mind that their status of *path* satellites is dubious.

III.3.8.4. TRANSLOCATION ENCODED BY VOICE

In Tagalog (and in other Philippine languages like Ilokano and Cebuano), a conveyance voice prefix *i-* attaches to a base and forms a verb which typically takes as subject argument an entity that is physically transferred to a location, or "abstractly" transferred, for instance in an act of judging (Fortis 2003).[11] The following examples illustrate both kinds of transfer:

(84) *i-bote   mo   ang   lambanog*.
CV.IRR-bottle   2SG.GEN   NOM   coconut wine
'Bottle the coconut wine.' [*bote* 'bottle' is an incorporated Ground]

(85) *i-binintang   nila   ang   sakuna'   sa   tsuper.*
CV-PERF.accuse   3PL.GEN   NOM   accident   PREP   driver
(lit.) 'The accident was imputed (transferred by accusation) to the driver' i.e. 'They charged the driver with the accident.'

The bases to which *i-* is prefixed have various meanings, but the combinations that result very frequently invoke a notion of transfer, whether concrete or metaphorical. Concrete motion is illustrated below. For each base, a characterization of its semantic type is given in capitals :

(86)
i-lahok 'be added as an ingredient to' < *lahok* 'ingredient' (KIND OF FIGURE)
i-lawit 'be hung to' < *lawit* 'hanging posture' (KIND OF POSTURE)
i-suksok 'be intercalated between' < *suksok* 'intercalated' (KIND OF CONFIGURATION)
i-baon 'be buried in' < *baon* 'buried' (KIND OF CONFIGURATION + KIND OF GROUND)
i-tali' 'be tied (to)' < *tali'* 'string, twine' (KIND OF INSTRUMENT)

The conveyance voice illustrates yet another type of construction, called here **V-framed inflectional** (V-framed since the base is not a verb before it is prefixed with the conveyance voice affix and functions like a verb in a clause; it is therefore the voice inflection and the base that form a verb).

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[11] I borrow the terms "conveyance voice" from Himmelmann (for ex. 2004a, 2004b). The classical Tagalog reference grammar of Schachter & Otanes (1972) speaks of Object Focus verbs.

APPENDIX: TALMY'S PROPOSAL FOR MAIN VERB STATUS

Talmy (2005, 2009: 391-2) lists the following criteria for main verb status :

"Factors that tend to mark a particular constituent type as the main verb (root)
Of two constituent types in a language that can be considered for having main verb status, one of them ranks higher for that status--
a. Morphology
   if it can take inflections or clitics for such semantic categories as tense, aspect, mood, evidentiality, negation, causation, voice, transitivity, or the person, number, and gender of the subject (and object).
b. Syntax
   if, as head, it directly or nestedly forms constructions with such other sentence constituents as: adverbs; particles for place, time, aspect, quantity (e.g., floats), negation, etc.; or a subject or object nominal.
c. Co-occurrence patterns
   if its presence is required across a range of construction types, while the other constituent type need not or can not be present in some of those construction types.
d. Class size
   if it has more morpheme members or is open-class while the other constituent has fewer morpheme members or is closed-class
e. Phonology
   1. if its morpheme members have a greater average phonological length.
   2. if its morpheme members vary over a greater range of phonological length or pattern.
   3. if its morpheme members include phonemes ranging over a greater portion of the phonemic inventory of the language.
f. Semantics
   1. if the meanings of its member morphemes tend to have more substantive content greater specificity, and a greater number of more varied conceptual components associated together in more intricate relationships, while those of the other constituent type tend to have less of these.
   2. if the meanings of its member morphemes range over a greater variety of concepts and types of concepts and trail off into more outlying conceptual areas, while those of the other constituent type tend to fit a more stereotyped semantic category."

In the case of verbs that can occur as V2 in an SVC and V that can be used alone, a V2 is a verb to the extent that it has (morphological and semantic) properties in common with its counterpart V (i.e. its homophonous or nearly homophonous form used as a single V).
More generally, classes overlap to a degree that is proportional to the following criteria:

(2) "If a language has two syntactically distinguishable constituent types that share some but not all of their morpheme members, then :
a. the degree of their divergence as distinct constituent types correlates with:
       a1. the proportion of non-overlap of their respective morpheme memberships and — for morphemes within the overlap —
       a2. the proportion of morphemes whose meanings differ in the two constituent types
       and
       a3. the degree of such differences in meaning.
b. a morpheme within the overlap that has basically the same meaning in both constituent types can seem to belong either to a meta-category that spans both constituent types or to the dominant category type even when functioning syntactically in the other type."
(Talmy 2009 : 397)

> ## PART III
>
> ## THE TYPOLOGY OF MOTION EVENTS
>
> ## 4. LOCATIVE COMPLEMENTS AND CONSTRUCTION TYPES

Regarding locative complements, we have two parameters of variation :
1. Can a verb have more than one path complement ?
2. Are path complements marked with path satellites or Ø marked ?

In the following, these parameters will be combined with the talmyan typology of constructions. Thus, constructions will be classified according to their typological status in this typology (V-framed, S-framed etc.) and according to their locative complements.

III.4.1. UNIPOLAR COMPLEMENTS WITH Ø PATH MARKING

"**Unipolar**" means that the verb can have no more than one path encoding complement.[12] Ø path marking means that the direction component of a path is not specified by a path morpheme : either there is no satellite, or the satellite does not specify direction, or is generic.

Of course, path V with one polar path complement and Ø marking are found in many languages. They often correspond to *transitive* verbs of motion (often with meanings such as REACH, BYPASS, PENETRATE, CROSS, CRISS-CROSS, OVERTAKE…; this would need to be substantiated). However, in these languages, transitive verbs are only a subclass of the total set of motion verbs. In the following cases, unipolar complements are the rule, not a characteristics of a subset of verbs.

No adnominal: In Swahili, Ø marked complements are congruent with the polarity of the verb (Silvia Ombuya, p. c.) :

(1a).   *ni-li-enda*   *Leipzig*.   (b). *ni-na-fika*   *Leipzig*.
      s1:1-PAST-go   Leipzig   s1:1-PRES-arrive   Leipzig
      'I went to Leipzig.'   'I arrive in Leipzig.'

Multipolar complements do not seem to be possible, unless verbs are concatenated:

(2) *ni-li-toka*   *bustani*   *ni-ka-enda*   *barabarani*
s1:1-PAST-leave   garden.LOC   s1:1-SUBSEC-go   street.LOC
'I went from the garden into the street.'

In Jabêm (Bisang 1986 : 139), a language with verb serialization, complements of motion verbs apparently take no adnominal and only one locative complement seems to occur with a verb :

(3) *ngac*   *tonang*   *gê-mêng*   *malac*.
man   DEM.ALLOPROX   3SG-come   village
'This man comes to the village.'

If need be, a path relation is further specified by a directional. For ex. 'go up into X' is expressed as 'up go X' (Bisang ibid.: 145) :

(4) *kê-pi*   *lôm*   *gê-ja*.
3SG-upward   men's house   3SG-go.CFUG
'He went up into the men's house.'

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[12] The notion of verbal polarity has gained wide currency in the French literature on motion verbs, since the seminal study of Boons (1987). A verb such as *arrive*, which brings in focus the final stage of a motion event, is said to have final polarity. Similarly, a verb like leave has initial polarity. Polar verbs make reference to stages of a motion event, while non-polar verbs, such as walk, do not.

The same observation holds for Skou (Donohue 2006).

Adnominal but does not specify direction : Creissels (2006) observes that in languages of Subsaharan Africa that do not distinguish source / goal / medial, "constructions in which a single motion verb combines with two locative expressions referring resp. to the source and the direction of motion are impossible" :

Tswana
(5) *monna   o   dule   motse-ng*.
1man   S3:1   leave.PFT   3village-LOC
'The man left the village'

(6) *monna   o   ile   noke-ng*.
1man   s3:1   go.PFT   9river-LOC
'The man went to the river'

Each path component is introduced as a complement of verb with which it is **congruent**. For example, a verb which makes reference to the *initial* stage of a motion event combines with a single complement expressing the *source* of the motion. Similarly, a verb which focuses on the *final* stage of an event takes as complement a nominal which refers to the *goal* of the motion:

(7) *monna   o   dule   motse-ng   a   ya   noke-ng*.
1man   S3:1   leave.PFT   3village-LOC   S3:1.SEQ   go   9river-LOC
 'The man went from the village to the river'

In Zapotec, topological prepositions are indifferent to direction (they "inherit" the polarity of the verb ; Laury 1989 : 139) :

(8) *leʔe-ž   č-a   la ʔayn   ta ʔa   tyend*.
Subj-1PL   POT-go   stomach   PL   store
'Lets go (shopping) in the stores.' [*stomach* = 'in']

(9) *b-ro ʔo   j ɨn   la ʔay   ž i ʔi-n*
COMP-leave   smoke   stomach   nose-3SG
'Smoke issued from his nose.'

When the complement is not congruent, it is marked with what Laury glosses as a verb ('leave') or the prep. *de* (borrowed from Spanish).

REMARK : Ø-marked locative arguments are characteristic of radically V-framed constructions. Assuming that inflections are not satellites, some languages have inflectionally marked constructions that eliminate satellites. Such is the case of voices promoting locative arguments to subject position. In Tagalog, a special marking on the verb signals that the subject argument is locative. The spatial relation referred to in the clause is not further specified and must therefore be inferred from the verb's semantics (and in some cases from the whole state of affairs, i.e. from the verb together with its arguments; Fortis 2003).

Tagalog, "locative voice", *-(h)an* suffix (Fortis 2003) :

(10) *na-latag-an   ng   mga   baging   ang   pader*.
PERF.APT-spread-LV   GEN   PL   vines   NOM   wall
'Vines were OVER the wall.'

(11) *sandal-an   mo   ang   silya*.
Lean-LV.INF   2SG.GEN   NOM   chair.
'Lean AGAINST the chair.'

(12) *ni-lipar-an   ng   eroplano   ang   mga   tao   sa   baba.*
PERF-fly-LV   GEN   plane   NOM   PL   people   PREP   below
'A/the plane flew ABOVE the people below.'

The examples that follow illustrate the case of the Malagasy "circumstantial voice", which, like the Tagalog locative voice, remains unspecific as to the spatial relation holding between a Figure and a Ground. The circumstantial voice merely indicates that the subject of the clause is a locative argument.
The circumstantial voice is marked with the circumfixes *i- / an-...ana* :

(13) *ilalaovan-'ny   ankizy   ny   tokotany.*
CIRCV.play-GEN.DEF   child   DEF   yard
'The children are playing in the yard.' (Dez, 1980, 323)

(14) *ampandroan'   i   Vao   an'   i   Soa   ny   rano-mafana.*
CIRC.CAUS.bathe   PM   V.   PREP   PM   S.   DEF   water-hot
'It is in hot water that Vao bathes Soa.' (Rabenilaina, 1985, cit. by Fugier, 1998 : 178).

These constructions are not radically V-framed *inflectional*, since the voice inflection remains unspecific with respect to path (path is coded in the verb, not in the inflection).

III.4.2.   UNIPOLAR COMPLEMENTS WITH PATH MARKING

I have not found a language where complements are obligatorily unipolar and path is specified in a satellite.

III.4.3.   MULTIPOLAR COMPLEMENTS

"Multipolar" means that a verb can have more than one path-encoding complement. For ex. (from the *Frog Story*) *he* [the deer, carrying a boy and a dog on its antlers] *starts running and he tips him* [the boy] *off over a cliff into the pond.*

III.4.4.   TOWARD AN INVENTORY OF CONSTRUCTIONS

The following table recapitulates the various construction types that have been observed so far. Locative complements have been included in the typology for two reasons :
   (1) AdnP have been de facto integrated into Talmy's typology ;
   (2) some languages disallow cumulated complements, or allow them under restricted conditions, while other languages license them, and our typology should acknowledge this.
It has to be emphasized that this typology is about constructions not about languages (see next section for a typology of languages).

The construction types are identified by a typical instance (1st and 2nd columns).
Ø (IN): the locative complement is Ø marked or is marked with an adnominal that does not specify direction.
FROM: stands for a path-specifying adnominal.
FROM… TO… : means that the verb can have more than one locative complement, incl. one that is not congruent with the verb's polarity.

Languages in which these constructions can be found are mentioned in the last column. It is not claimed that these languages do not have other means of lexicalizing motion events. The constructions cited here are meant to illustrate a strategy found in these languages, but other constructions might be available.

CONSTRUCTION	LOC. COMP.	name	can be found in
MOVE EXIT$_V$- RUN$_V$-		Zero-conflation	Jaminjung
MOVE-UP	Ø (IN)	Zero-conflation compounded	English
GO$_v$+ EXIT$_V$- RUN$_V$-	Ø (IN) / FROM	Generic V-framed (unipolar)	Jaminjung
EXIT	FROM	V-framed polar / congruent	?
EXIT	FROM… TO…	V-framed multipolar	French
EXIT	Ø (IN)	Radically V-framed	Swahili
B-Infl	(TO)…	Radically V-framed inflectional	Tagalog
EXIT$_{appl}$	Ø (IN)	V-framed augmented	Tswana
RUN$_v$- EXIT$_v$+	Ø (IN) / FROM	V-framed serial (rad. / unipolar…)	Japanese
Ø	HOME	Radically S-framed	Russian
MUST	FROM… / TO…	S-framed coerced	German
RUN	TO	S-framed unipolar	?
RUN	FROM… TO…	S-framed multipolar	English
RUN$_{appl}$	Ø (IN) / TO	S-framed augmented	Zulu, Tswana
RUN$_v$+ EXIT$_v$-	Ø (IN) / FROM	S-framed serial (rad. / unipolar…)	Fon
RUN$_v$+ EXIT$_v$+		Equipollently-framed	Chinese, Klamath
THROUGH-RUN $_v$+	Ø (IN) / THROUGH	S-framed compounded (unipolar)	German (a)
OUT-RUN $_v$+	Ø (IN) / FROM… TO…	S-framed compounded (multipolar)	Polish (b)
RUN $_v$+	……IN	S-framed constructional	Dutch
$_{DIRT}$MOVE$_v$+-ALIQUID		S-framed multistem	Atsugewi (?)

(a) For ex.
Auf der Suche nach diesem Laden haben wir die ganze Stadt <u>durchlaufen</u>.
(lit.) 'In search of that shop, we have through-run the whole town.'

Cf. also Russian *pereijti / perekhodit' ulitsu / tcherez ulitsu* 'across-walk the street / over the street'.

(b) Polish (Kopecka, p. c.):

chłopiec	<u>*wy*</u>*-biegł*	<u>*z*</u>	*morza*	*na*	*plażę.*
boy.NOM	out-run	from	sea.GEN	on	beach.ACC

(lit.) 'The boy ran out of the sea onto the beach.'

III.4.4. TOWARD A TYPOLOGY OF LANGUAGES

To summarize, it is proposed that languages fall into the following types of lexicalization patterns:

LANGUAGE TYPES	EXAMPLES
V-framed system	Tswana, Swahili
S-framed system	Russian, Fon
Split system	Romance, Mandarin
Equipollent system	Klamath
Parallel system	Greek, Shona
Generic Framing system	Jaminjung

For some languages (such as English), "pure" types (V- and S-framed) represent dominant tendencies.