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Verbs of inherently directed motion in two different modality languages, European Portuguese and LGP: some typological reflections

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Abstract

In the chapter we analyse two verbs of inherently directed motion such as *ir* 'go' and *vir* 'come' in two different modality languages – EP (European Portuguese) and LGP (Portuguese Sign Language), in order to discuss their main properties. We show that Romance languages, and Portuguese in particular, are not only verb-framed in the way they express motion and manner of motion and we show the importance of Prepositional Phrases in the construction of argument structure of verbs. As for Sign languages, and specifically LGP, we show, starting from a brief corpus, that this language, being closer to an "equipollently-framed language", has some properties that indicate that verbs are not the only way to express movement. We conclude that more important than a typological classification it is crucial to analyse morphological, lexical and syntactic resources that languages have in order to express manner and path of motion.

Keywords

Verb-framed languages, satellite-framed languages, equipollently-framed languages, European Portuguese, Sign languages, LGP

1 - Introduction

In natural languages, not only Oral but also Sign languages, many spatial relations are expressed by motion verbs, such as *ir* 'go', *chegar* 'arrive', *sair* 'go out', *correr* 'run', *dançar* 'dance' and *saltar* 'jump'. The first three verbs express a path and are typically called direction motion verbs; the last three describe a way of movement and are typically called manner motion verbs (Levin 1993). As for the first ones, Demonte (2002), developing Levin & Rappaport-Hovav (1995), distinguishes two types: verbs of inherent direction (*ir* 'go' and *chegar* 'arrive') and verbs of inherent direction and localization (*sair* 'go out' and *entrar* 'enter').

Motion verbs have interested linguists for a long time, in different theoretical frameworks, and the bibliography is impressive. One of the most important contributions was the one by Talmy (1985, 2000) for different reasons. Beyond thematic roles Source and Goal, proposed by Fillmore (1968), Talmy shows that for the understanding of motion events, it is crucial to also use other notions such as Figure, Motion, Path, Ground, Manner and Cause. Another idea is that languages vary typologically according to the way languages express path and manner motion. Some languages are "satellite-framed" and some languages are "verb-framed". Germanic languages, but also Russian, would be "satellite-framed", because manner motion is characteristically given by the main verb, while path is given by the satellites; see (1):

(1)   *John limped into the house*

(Talmy 1985, *apud* Beavers, Levin & Tham 2009: 3)

Also, in (2) we present some examples in which the idea of leaving is given with the contribution of the satellite particles *(out* in English, *hinaus* in German, *uit* in Dutch, *ut* in Swedish):

(2)   *to go out* (English), *hinausgehen* (German), *uitgann* (Dutch), *gå ut* (Swedish)

Differently, in Romance languages (French, Spanish), but also in Turkish, Japanese, Hebrew, the path is given by the verb and the manner by an adjunct or a subordinate clause, as in (3), and therefore these languages are considered "verb-framed":

(3) *Je   suis   entré   dans   la   maison   (en boitant)*
                                    (Talmy 1985, *apud* Beavers, Levin & Tham 2009: 14)
     I   was   entered   in   the.FEM.SG   house   (in limping)
     'I limped into the house'

In (4) the different Spanish paths are given by the verb, nothing more:

(4) *entrar* 'to enter', *salir* 'to get out', *subir* 'to move up', *bajar* 'to down'

In these same languages, the idea of manner of movement is given by other means, as in (5):

(5) *Entró*   *corriendo / volando / nadando a la   cueva.*
     entered.3SG.PAST   running/flying/swimming   to the   cave
     'S/he entered running / flying / swimming to the cave.'
                                                    (Spanish, Talmy 1985: 111)

However, in Italian there are some verbs, normally called *verbi sintagmatici* ('phrasal verbs'), in which verbs and particles/adverbs express motion, but also path and localization. The Italian examples are from Iacobini & Masini (2007) and are also given by Mateu & Rigau (2010: 242):

(6) *buttare giù* 'throw down', *uscire fuori* 'exit out', *correre via* 'run away', *tirare su* 'bring up', *lavare via* 'wash away'

These data justify the claim by Iacobini & Masini (2007:163) according to which "it is evident that Italian does not conform to Talmy's generalization, since it behaves more like English than Spanish".

Talmy's typology was augmented by Slobin (2004) and Zlatev & Yangklang (2004) with a third class of languages, the "equipollently-framed languages", because they exhibit serial verb constructions in which one verb may encode manner and one or more verbs may encode path. This would be the case of Thai, studied by Zlatev & Yangklang (2004: 165), ex. (7a), and of Emai, a Nigeria language of Edo group, studied by Schaefer (1986: 181), ex. (7b), (all examples taken from Beavers, Levin & Tham 2009: 22):[1]

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[1] Talmy analyses Mandarin Chinese as a satellite-framed language, but Slobin (1996, 2004) argues that Chinese is an equipollent-framed language (E-framed language), due to the existence of serial verb construction (SVC).

(7)   a. chán   dəən   (paj)
      I   walk   go
      'I am walking (away, towards something).'

   b. ọli   ọmọhe   la   o   vbi   oa
      the   man   run   enter at   house
      'The man ran into the house.'

Returning to Romance languages, Mateu & Rigau (2010) show that Italian is not so different from other Romance languages like Spanish, Catalan, French, at least in old phases; in fact, they present combinations that show the crucial role of prepositions and particles in the expression of motion and manner. All the examples in (8), (9) and (10) are from Mateu & Rigau (2010):

(8)   Old Spanish:
      a. *echar fuera* 'throw out'
      b. *echar arriba* 'throw up'
      c. *echar delante* 'throw forward'
      d. *venir delante* 'come forward'
      e. *volver atrás* 'turn back'
      f. *subir arriba* 'rise/raise up'

(9)   Old Catalan:
      a. *anar defora* 'go out'
      b. *gitar fora* 'throw out'
      c. *metre sus* 'put up'
      d. *pujar sus* 'rise up'
      e. *tirar defora* 'throw out'
      f. *tornar amunt* 'turn up'
      g. *treure sus* 'draw up'
      h. *venir dessus* 'come over'

(10) Old French:
      a. *aller ariere* 'to go back'
      b. *aller avant* 'to go forward'
      c. *courir su* 'to pursue, to attack'
      d. *mettre sus* 'to put on'
      e. *issir fors* 'to go out'

The authors conclude, therefore, that "verb-particle constructions are not a quirk of Italian but a Pan-Romance phenomenon." (Mateu & Rigau 2010: 245)

All these phenomena show that the typological classification of Talmy (1985) must be reconsidered, as well as his notion of satellite.

In fact, his notion of satellite is too broad, as the following paragraph shows:

"satellites are certain immediate constituents of a verb root other than inflections, auxiliaries, or nominal arguments. They relate to the verb root as periphery (or modifiers) to a head. A verb root together with its satellites forms a constituent in its own right, the 'verb complex'. In some cases, elements that are encountered acting as satellites to a verb root otherwise belong to particular recognizable grammatical categories; therefore, it seems better to consider the satellite role not as a grammatical category in its own right but as a new kind of grammatical relation." (Talmy 1985: 102)

It is this definition that allows Talmy to consider as satellites English particles, German and Russian prefixes, Chinese co-verbs, among other elements. And to exclude prepositions. Therefore, in an English example such as (11), analysed by Beavers, Levin & Tham (2009: 7),

(11)   *I ran out of the house.*

(Talmy 1985: 103)

out would be a satellite and *of* a preposition, suggesting that satellites are sister constituents of the verbs. But it seems obvious that *out of the house* is, as a whole, a constituent selected by the verb (*run* or *go*), as the cleft tests allow showing; see (12) and (13):

(12)   a. ? *It was out of the house that I ran, not into the house.*
        b. * *It was out that I ran of the house, not in.*
(13)   a. *It was out of the house that I went, not into the house.*
        b. * *It was out that I went, not in.*

(cf. Beaver, Levin & Tham 2009: 8)

Also Fábregas (2007) claimed that particles are nothing more than intransitive prepositions.[2]

All these proposals and the data already presented show that a language may show verb-framed and satellite-framed behaviors and that Talmy's notion of satellite is under discussion; it is why Beaver, Levin & Tham (2009) prefer to use the term 'satellite' in a broad sense in order to classify any constituent that is a sister or an adjunct to the verb root, including PPs. And they claim that the different options presented by languages depend not on a rigid typology but on: (i) morphological, lexical and syntactic resources that these languages have in order to express manner and path of motion; (ii) the role of the verb, which may express manner or path of motion; (iii) eventually, extra-grammatical factors.

It is in this perspective that we are going to analyse in the next section some examples of European Portuguese in which the relation between the V and the PPs is central and in which these ones constitute internal arguments of the verbs.

2 - The verb *ir* 'go' in European Portuguese

As we have said before, in this chapter we will focus our attention in inherent direction verbs such as *ir* 'go' and *vir* 'come', with subjects with the feature human, leaving behind many motion verbs, in particular those which mean manner of motion. The main goal will be to discuss argument structure and the structure of the VP whose head is *ir* 'go' or *vir* 'come'.

As the sentences in (14) to (16) will show, the verb *ir* 'go' may encode different parts of the motion event related to the different prepositions that may be selected: in (14) and (15) the sentence focalizes the Goal to which the Figures move; in (16) the sentence describes the Path that the Figure reaches from the Source to the Goal.

(14) *A   menina   vai   a   casa   da   avó.*
     the   girl   goes   to   house   of.the   grandmother
     'The girl goes to her grandmother's house'

(15) *No   fim   das   aulas,   vou   para casa.*
     at.the end   of.the   classes,   go   to   home
     'After classes I will go home'

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[2] Some authors claim that, as in Vs with particles and adverbs, prepositions incorporate into Vs (for this perspective, see Mateu & Rigau 2010).

(16) *O   meu   pai   vai   do   Porto   para Lisboa.*
      the   my   father goes from.the Porto   to   Lisbon
      'my father goes from Porto to Lisbon'

     It was noticed by Cuartero Otal (2006) for Spanish that the verb *ir* 'go' may combine with Goal or may combine with Path, but cannot combine with Source alone, as in (17a and b):

(17) a. * *Caminamos   del   Pueblo*

                                           (Cuartero Otal 2006: 21)

        walked1stPL   from.the Pueblo
        'We walked from el Pueblo'
    b. * *Fuimos   de   Roma*

                                           (Cuartero Otal 2006: 21)

        went1stPL   from Rome
        'We went from Rome'
    c. * *O   meu   pai   vai   do   Porto.*
        the   my   father goes from.the Porto
        'My father goes from Porto'

     However, in Portuguese, (17c) is acceptable in a contrastive context in which we compare different places with the role of Source, with a deleted Goal:

(18) A – *De onde vai a tua família para o almoço de Natal?*
     'From where will your family go to Christmas lunch?'
     B- *O meu pai vai do Porto, mas a minha tia vai de Trás-os-Montes.*
     'My father goes from Porto, but may aunt goes from Trás-os-Montes'

     As it was noticed by Pontes (1992: 24), for Portuguese, *"a* indicates the direction towards a place [the Goal] and implies that the subject arrives to his destination, but this is not his permanent or regular place; differently, *para* indicates the approach to the final Goal, the Destination." (Pontes 1992, p. 24) (our translation). [3]
     From this short presentation we can understand the importance of PPs and their relation to motion verbs. There have been many formal treatments of the

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[3] The verbs of direction are not equivalent from the aspectual point of view: for instance, *ir* 'to go' is atelic and *chegar* 'to arrive' is telic. For a semantic approach of movement verbs, see Oliveira & Leal (2015).

VP structure. Since Larson (1988), it is claimed that the verbal syntax obeys to decomposition and hierarchy, in order to describe the argument structure and the event structure of each verb.

In many analyses of motion verbs, the lower category is a PP.[4] Referring to displacement (DVs) and motion verbs, Bosque (2015: 77) claims that:

"displacement verbs (DVs) include a preposition as the backbone of their lexical structure. The grammatical representation of these verbs contains a number of syntactic layers above and below this preposition, which may lack phonological features in certain circumstances. The lexical properties of this preposition, its internal argument, and the conflation processes in which it participates determine the lexical structure of the DV, as well as its overt syntax to a large extent."

In these circumstances, some differences between Spanish and English would not result from a typological difference, but from the null or explicit nature of the preposition, mainly those which are associated to Goal, Direction and Path.
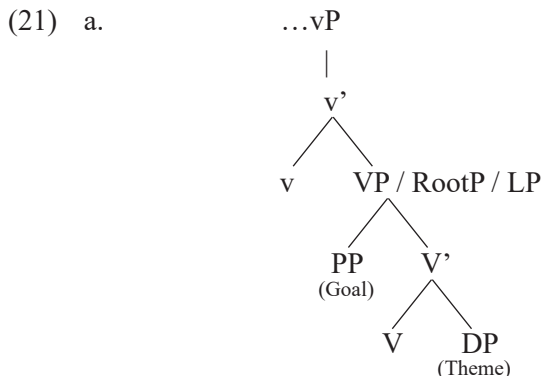
Bosque also notes that the redundancy, sometimes expressed in the V and in the Preposition, as in *subir arriba*, litt. 'to climb up' is largely variable from language to language and it is an important grammatical property.

We must note, however, that many motion verbs, in particular those of inherent direction like *ir* 'go' and *vir* 'come', are unaccusative, and therefore the "undergoer" is an internal argument, the most embedded argument.

Therefore, we will adopt the structure (21) as the basic structure of the VP with *ir* 'go' as its head; of course, DP movement and V movement to T apply, projecting the right word order, as in (14), here renumbered as (19), and (20):

(19) *A   menina   vai   a   casa   da   avó.*
     the   girl   goes   to   house   of.the   grandmother
     'The girl goes to her grandmother's house'

(20) *No   fim   das   aulas,   vou   para   casa.*
     at.the   end   of   classes,   go   to   home
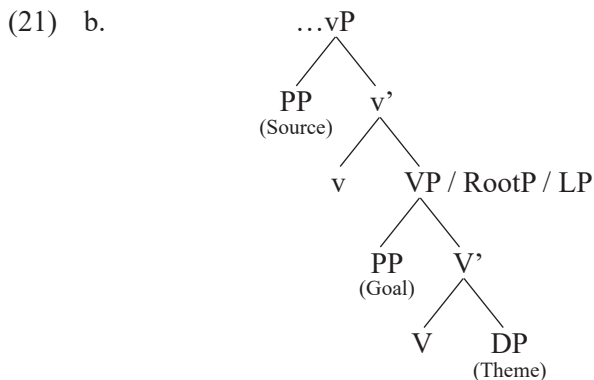   'After classes I will go home'

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[4] We will not analyse here the internal structure of PPs.

(21)   a.   ...vP
                          |
                          v'
                         / \
                        v   VP / RootP / LP
                            / \
                          PP   V'
                        (Goal) / \
                              V   DP
                                (Theme)

In (16), here renumbered as (22), the V *ir* 'go' has three, not two arguments:

(22)   *O meu pai vai do Porto para Lisboa.*

One hypothesis is to adopt again a "VP shell" (Larson 1988):

(21)   b.   ...vP
                         / \
                        PP   v'
                     (Source) / \
                             v   VP / RootP / LP
                                 / \
                               PP   V'
                             (Goal) / \
                                   V   DP
                                     (Theme)

Summarizing: *ir* 'to go' and *vir* 'to come' are two of the most important inherent direction verbs; in Romance languages and in European Portuguese, in particular, PPs are crucial for the expression of Source and Goal of movement and syntactically this is expressed by a highly hierarchically structured VP, in which PPs may occupy specifier positions of verbal projections.

3 - Motion verbs in Sign languages and in LGP

Sign languages and LGP, Portuguese Sign language, in particular, do not express prepositions and therefore, according to Talmy's typology, they are normally considered "verb-framed languages". In order to understand how these languages organize the sentences with motion verbs without prepositions, we will first present verbs' classification (3.1), we will discuss how motion verbs are generally studied in Sign languages (3.2) and then we analyse a brief corpus containing IR 'to go' and VIR 'to come' (3.3).[5]

3.1 - Verb classes in Sign languages

Padden (1988) and Padden (1990), for the American Sign Language (ASL), claim that verbs belong to three different classes:

i) *plain verbs*, without agreement marks, without locative affixes and without person or number inflexion (it is the case of verbs like DREAM, THINK, LOVE and FORGET);

ii) *agreement verbs* or *inflecting verbs*, with person, number and aspect marks, but without locative affixes (it is the case of GIVE, SAY, OFFER);

iii) *spatial verbs*, a class of verbs without person, number or aspect inflexion, but that accept locative affixes, that represent a spatial *Locus* in the syntactic space (it is the case of PUT, GO, COME) (Padden 1990: 119).

Let us see, in the next section, how spatial verbs are generally considered according to the classical typologies of motion verbs.

3.2 - Inherent directional verbs in Sign languages and in LGP

According to Talmy's typology, Sign languages are generally considered "verb-framed" (cf. Slobin & Hoiting 1994), because they have no prepositions or particles and therefore it is important to analyse how these manual-motor and visual-

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[5] From now on, the words in LGP will be capitalized, as is customary in transcription of sign languages. Capital letters mark gloss in European Portuguese of LGP gestures.

-spatial languages express movement, in particular how they express the notion of inherent direction movement and the displacement of a Figure in a Path with the so-called spatial verbs.

In a Sign language, a verb of inherent direction is executed with a tridimensional movement of the dominant Hand and of the arm in the syntactic space, according to certain rules of use of space of each language. While Oral language like Portuguese and other Romance languages use prepositions as heads of PPs that are Oblique complements of verbs in order to describe the initial (Source) and final (Goal) places from where the Figure moves or is dislocated, Sign languages use other resources, in particular the Path, as it is the case of MOVE$^{L1→L2}$ in ASL, in which the Figure moves in a continuous Path from *Locus* 1 (L1) to *Locus* 2 (L2) (cf. Liddell 2003).

Therefore, if someone wants to describe the movement of an human Figure, the Hand(s) get(s) a particular form and move(s) in the syntactic space from an initial point (Source) to another point (Goal), previously determined in space or conventionalized (for instance, the signer's body, the non-dominant hand, the place of YOU or of HE).

Supalla (1990) distinguishes manner movement verbs (*andar* 'to walk', *correr* 'to run', *saltar* 'to jump') from direction movement verbs (*ir* 'to go', *vir* 'to come'); in ASL he only considers the latter as "verb-framed", because the former use the body in a complex way. In fact, the latter merge movement and Path and this is why Supalla calls them "one-handed verbs", distinguishing them from "full-body verbs". Supalla (1990) admits, therefore, that the use of classifiers by hand configurations (in an iconic relation with the Figure or the manner of dislocation) or body movements may be considered satellite resources, identical to those used by "satellite-framed" Oral Languages. With a verb like "run", ASL uses not the two fingers as in "walk" but two closed hands, which make circular movements of the arms, in parallel to the slight movement of the upper part of the body.

Developing the proposal for ASL by Supalla (1990), Slobin & Hoiting (1994) analyse direction movement verbs and manner movement verbs in SLN, the Sign Language of the Netherlands, and notice that this language has *serial verb constructions* in order to transmit the manner of movement. So, in a sentence like (23) in SLN, there is a sequence of three verbs which transmit not only the manner of movement but also the direction of Path.

(23)　MAN HOUSE RUN APPROACH ENTER

(Slobin & Hoiting 1994: 492)

Differently from Supalla (1990), the authors consider that this type of construction may be analysed as an illustration of "verb-framed" languages, because it is in the scope of verbs that the manner of movement and the Path are expressed, under strong syntactic constraints: in particular, the manner verb precedes the inherent direction verb (Slobin & Hoiting 1994: 490). However, it is important to note the proposal by Slobin (2004) and Zlatev & Yangklang (2004), who claim that there is a third class of languages, the "equipollently-framed languages", which would be an adequate classification for SLN.

3.3 - IR 'to go' and VIR 'to come' in LGP

Let us see now what happens in LGP. The different semantic values expressed by prepositions in Oral Languages, as we have seen in the previous section for Portuguese, are transmitted by the direction of Path, that is to say, by the direction of the real movement executed in the syntactic space and by the final and initial points of this Path.

We present from (24) to (26) some sentences in LGP:

(24) MENINA FEMININO_AVÔ DELA CASA IR $^{L1(signer's\ space)\rightarrow L2(neutral\ space\ in\ front\ of\ the\ signer)}$
girl   grandmother her house go
'The girl goes to her grandmother's house'

       __ls
(25) AULA   FIM EU CASA IR $^{L1(touch\ in\ body)\rightarrow L2\ (neutral\ space\ in\ front\ of\ the\ signer)}$
class   end i house go
'At the end of classes I will go home'

       ___lp
(26) PAI   MEU CARRO PORTO $_{(signer's\ space)\ (L1)}$ IR$^{L1\rightarrow L2}$ LISBOA $_{(near\ the\ addressee\ (L2))}$
father my   car   Porto   go   Lisbon
'My father goes from Porto to Lisbon'

In all sentences the Path starts from an initial point (L1) and ends in a final point (L2), independently of the fact that focus is in the Goal (cf. 24 and 25) or in the Source and in the Goal (26), due to the spatial nature of these languages.

In this sense, LGP verbs, although expressing a crucial part of the information

about their event and argument structures, are supported by the real path motion and by the use of final and initial points, which is equivalent to the information values of prepositions *de* 'from', *para* and *a* 'to'.

As for the way this language expresses manner of movement, as in *limp into x*, LGP presents, like SLN, serial constructions, as in (27) and (28).

(27) J-O-Ã-O CASA ANDAR.A.COXEAR$_{CL: two legs limping}$ ENTRAR
John   house walk   limp (two legs limping) enter
'John limped into the house'

(28) HOMEM CASA CORRER$_{CL: handshapes in 'G', circle movement and slight movement of body}$ ENTRAR
man   house run   enter
'The man entered in the house running'

Other examples confirm this strategy, although with some word order variation that we are not analysing here:

(29) a. HOMEM CASA CORRER
man   house run

b. HOMEM CORRER CASA   IR
man   run   house go

c. HOMEM CASA CORRER IR
man   house run   go
'the man ran to the house (entered into the house running)'

(30) a. MÃE CASA ANDAR.LENTO$_{CL: slow and large movement}$
mother house   walk   slowly (slow and large movement)

b. MÃE   CASA   ANDAR.LENTO$_{CL: slow and large movement}$ IR
mother house   walk   slowly (slow and large movement) go

c. MÃE ANDAR. LENTO$_{CL: slow and large movement}$ CASA   IR
mother go   slowly (slow and large movement) house go
'Mother entered slowly home'

(31) a. MENINO ESCOLA ANDAR.SALTOS$_{CL: repetitive angle movement; CNM}$
child   school walk   jumps (repetitive angle movement)

b. MENINO ESCOLA ANDAR.SALTOS$_{CL: repetitive angle movement; CNM}$ IR
child   school walk   jumps (repetitive angle movement)   go

c. MENINO ANDAR.SALTOS$_{CL: repetitive angle movement; CNM}$ ESCOLA IR
child   walk   jumps (repetitive angle movement)   school go
'The child went jumping to the school'

Bearing in mind what we said, we think that Talmy typology applied to Sign languages must be reviewed because it is insufficient to explain LGP. In fact, LGP is not just a verb-framed language and is closer to an "equipollently-framed language" (cf. Slobin 2004 and Zlatev & Yangklang 2004), in which manner and path are given by distinct verbs.

4 - Some conclusions

One of the most important contributions for the understanding of linguistic expression of space and motion verbs was Talmy's (1985, 2000), because he showed the importance of notions like Figure, Motion, Path, Ground, Manner, and Cause. Another contribution was his typology of languages; some languages seem "satellite-framed", other languages seem "verb-framed". However, this classification has problems, especially due to Talmy's definition of satellite; Romance languages, that in some aspects seem verb-framed, in other aspects seem satellite-framed, with a crucial importance of prepositions.

Sign languages, which have no prepositions, have been considered "verb framed". However, a more detailed analysis of a brief corpus of LGP shows that, while it is true that this sign language is not a satellite-framed language, it has properties that show that verbs are not the only way to express movement. Also, in order express path and manner of motion, LGP is close to the third type proposed by Slobin (2004) and Zlatev & Yangklang (2004) – the "equipollently-framed languages" – because it exhibits serial constructions, in which manner and path of movement are given by distinct verbs.

The general conclusion from the research of Oral languages and Sign languages is, therefore, that, more than a typological classification, we must understand morphological, lexical and syntactic resources that languages use in order to codify path and manner movement and the role of the verb in the expression of these notions, in line with Beavers, Levin & Tham (2009).