Events of Motion and Talmyan Typology: Verb-framed and Satellite-framed Patterns in Portuguese

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Abstract

This paper discusses the classical Talmyan proposal (Talmy 1985, 2000) on events of motion and lexicalization patterns, which classifies languages as verb-framed and satellite-framed. The research is based on corpus data of European Portuguese (EP) and Brazilian Portuguese (BP), and focuses on costa-motion events, which imply movement along/ towards an area of land bordering on a water basin. It is shown that these motion patterns may be encoded by: a) denominal lexicalized verbs such as (a)beirar, margear, acostar, and b) satellite-framed patterns of the type [V + preposition + COSTA Noun], in which the noun may be instantiated by costa ‘coast’, margem ‘margin’ or beira ‘edge’. Our analysis challenges the assumption that Portuguese is a(n) (exclusively) verb-framed language by showing that while the verb-framed pattern is stronger in BP, EP seems to be moving toward satellite-framing. These results indicate different typological tendencies in the development of Portuguese as a pluricentric language.

Keywords

1 Introduction

Cognitive Linguistics holds that human cognition is not only rooted in the human body but also inherently viewpointed, as defended by Talmy (2000: 68, 216) and recently discussed largely in Dancygier and Sweetser (eds.) (2012). There are different methodologies for studying cognitive and linguistic perspective-ivation but one of the most active research areas on this topic is linguistic typology. In line with this theoretical perspective, the present research is rooted in Talmy’s classical typology of motion events (Talmy 1985, 2000), and focuses on the encoding of motion events in Portuguese. Following our previous studies (Batoréo 2000, 2006, 2008, 2009, 2014 (a and b); Ferrari 2012; Ferrari and Sweetser 2012; and Batoréo and Ferrari 2014) we aim at comparing motion events and perspectivization phenomena in two national varieties of the language: European Portuguese (EP) and Brazilian Portuguese (BP). Our present study focuses on a small sub-class of motion events referred to here as costa-motion events, the term being coined from the word costa (‘coast’), in Portuguese, in the sense of a seashore, shore, water border line, water bank, water edge, etc., i.e., any part of land bordering on a water basin such as, for example, ocean, sea, river or lake. In Portuguese, these motion patterns may be encoded either by a sub-class of denominal lexicalized verbs such as (a)beirar, margear, acostar (which can be rendered roughly in English by ‘to be at the edge/ verge of’, ‘to margin’, ‘to coast/ border’) or by corresponding constructions of the type [V + prep. + COSTA noun], such as chegar à beira (‘to reach the edge’), caminhar pela margem (‘to walk along the margin’), seguir pela costa (‘to follow the coast’), etc. The two types of COSTA-motion patterns—the lexicalized and the non-lexicalized one—were researched in the Linguateca corpus (www.Linguateca.pt). The corpus was consulted for European Portuguese (CETEM Público – with 191 million of words) and for Brazilian Portuguese (NILC/ São Carlos – with 32 million of words).

The present paper is organized into six sections. Following the introductory Section 1, in Section 2, the classical Talmyan proposal on events of motion, lexicalization patterns and language typology is discussed in the light of further research developed more recently in the events of motion area. Section 3 presents some observations on general usage data in two national varieties of Portuguese. In Section 4, we explicate our research aims and hypotheses. Section 5 is the main part of the research and it focuses on similarities and differences in the encoding of COSTA-motion events based on corpus data of both European Portuguese and Brazilian Portuguese: in Part 5.1., we discuss lexicalization patterns; in 5.2., we make language-in-use observations on EP and BP in the light of Talmyan typology; in 5.3., we analyze and discuss the data from the Linguateca corpus, and in 5.4., we present the results of our research. Section 6 aims at showing conclusions and further research possibilities.
Theoretical Background: Talmyan Typology and Beyond

Talmy’s seminal work (1985, 2000) on the lexicalization of motion events plays a decisive role and occupies a very special place in typological research. Talmy (2000) identified six elements of complex motion, with basic motion formed by only the first four of them. These elements are: a) **figure** (the moving object), b) **ground** (the reference object), c) the **motion** itself, which refers to the presence *per se* of motion or locatedness in the event, d) **path** (the trajectory followed or site occupied by the figure with respect to the ground), e) **manner** (the way in which the Figure moves), and f) **cause**. These elements can be linguistically encoded in a variety of combinations, and languages will demonstrate characteristic lexicalization patterns—**verb-framed** or **satellite-framed** patterns—which are the source of typological variation. In fact, the linguistic diversity observed in the expression of motion has revived questions about *whether* and *how* language may affect our construal of motion events and provide a window onto the cognitive processes that may underlie conceptualization.

In order to show that linguistic systems encode spatial information in different ways using different lexicalization patterns, Talmy (2000) classified languages into two groups, depending on whether they are **verb-framed** (e.g. Romance languages like Spanish, and also Hebrew or Turkish) or **satellite-framed** (e.g. Slavic, like Russian, and Germanic, like English). Verb-framed (or low-manner languages) conflate motion and path in the verb, using a **verb-framed lexicalization pattern**, whereas manner is eventually expressed by a satellite. On the other hand, satellite-framed (or high-manner languages) encode motion and manner in the verb, with path as a satellite, using a **satellite-framed lexicalization pattern**. For example, since English is satellite-framed, the sentence *Pedro drove across the bridge* has the verb conflating motion and manner (‘to drive’), whereas path is encoded by a satellite (‘across the bridge’) in a satellite-framed pattern. Given that Portuguese is verb-framed, the corresponding Portuguese sentence *Pedro atravessou a ponte de carro* has motion and path conflated in the verb: *atravessar* (*move + across*) and manner as a satellite (‘by car’): (ep/bp) *de carro* or (bp/*ep) *dirigindo*, being the pattern of lexicalization of a verb-framed type.

If we compare these two different lexicalization patterns in two typologically different languages—such as, for instance, a satellite-framed English and a verb-framed Portuguese—we can observe that rendering some of the famous (English) Cognitive Linguistics scholars’ phrases such as ‘The rustlers lassoed the steers’ (Leonard Talmy) or ‘She sneezed the foam off the cappuccino’ (Adele Goldberg) constitute a tremendous challenge for a speaker of Portuguese. Even if in BP (but hardly in EP) we might accept *laçaram o novilho*...
as the first equivalent, the second (possible) proposal of translation *soprou a espuma do cappuccino* (‘she blew the foam from the cappuccino’) leaves the ‘sneezing’ causation and the ‘off’ direction aside, because, in Portuguese, unlike in English, the linguistic expression of MANNER or CAUSE in the respective pattern is peripheral. The English MANNER verbs ‘to lasso’ (= to catch by lasso) or ‘to sneeze off’ (= to cause that something disappears as an effect of strong sneezing) are expected to be rendered in a verb-framed-language as periphrastic construction rather than as a singular verb, where the MANNER information becomes periphereal or even gets completely lost in translation.

As has been noted in recent research in the area (Hickmann et al. 2010: 4), the classical Talmyan typology is anchored in various earlier proposals which made similar observations on the mechanisms of conceptualization of motion events, mostly contrasting Germanic and Romance languages; however, it is beyond doubt that Talmy (1985, 2000, 2009) has provided the most complete account of motion phenomena on the basis of a wide number of languages across the world, suggesting that constructions that describe motion may lexicalize PATH in verbs or in satellites, defining the latter as the grammatical category that is in a sister relation to the verb root (but is not a noun-phrase or prepositional phrase complement), including different grammatical items, such as verb particles, verb prefixes, verb complements, incorporated nouns or affixes.

Despite Talmy’s huge classical contribution, crosslinguistic research developed in the last decades shows that, in practice, the classical typology of motion events is not as clear-cut as was initially proposed. Further research following Talmy’s typology postulated that some languages seem harder to fit into these two categories. Zlatev & Yanklang (2004) pointed out that languages may differ along multiple parameters: (a) the core schema of the “objective” aspects of motion, (b) the presence or absence of co-event adverbials, (c) boundary-crossing constraints, (d) the number of PATH segments per clause, (e) the relative diversity and frequency of MANNER verbs, (f) GROUND specification, (g) event granularity across clauses, and (h) the expression of scene setting. Based on this multidimensional set of factors, further research proposed revisions to Talmy’s typology in order to take into account differential patterns concerning the above parameters.

On the other hand, crosslinguistic research developed in last decades mostly according to Dan Slobin’s line in the States (e.g. Slobin 2004, 2005, 2006) and Maya Hickmann’s line in Europe (e.g. Hickmann et al. 2010) postulates that languages should be placed on a cline that goes from verb-framed to satellite-framed languages, rejecting Talmy’s dual distinction and proposing a third class of equipollently-framed languages that include languages with serial verb constructions (e.g. Thai, Mandarin Chinese), languages with bipartite verb constructions (e.g. Algonquian and Hokan), and languages with Manner preverb + Path preverb + verb (e.g. Jaminjungan languages).
More recent studies developed in the field, as well as some larger linguistic
discussion anchored in Talmy’s proposals (Feist 2010, 2013; Feist and Cifuentes
2013; as well as Matellán and Mateu 2008; Lindsey 2008) suggest that the initial
typology be rather treated as a starting point for discussion and/or as a theo-
retical typological prototype than as a strict (and/or absolute) theory of lin-
guistic typology. Feist and Cifuentes (2013) also claim that many of the problems
reside in the focus on a single class of lexical items—in this case, the verb—
rather than on the motion description as a whole (2013: 396). They propose an
alternate way to address this question by focusing their research on cross-
linguistic differences in the expression and codifying of one single dimension,
e.g. manner, rather than on cross-linguistic differences for encoding the
motion information only in the main verb. As Feist (2010) puts it:

Because lexical choices are intimately tied to constructional ones, the cross-
linguistic asymmetry between path and manner that holds in the motion
verb lexicons may not hold in motion event descriptions. Thus reducing
language effects to those resulting from the lexicon alone will result in an
incomplete picture of the resources that a language provides its speakers.
The current evidence suggests that speakers are sensitive to this distribu-
tion of information, combining it with their knowledge of typical patterns
in their language as they shape their understanding of motion events.

FEIST, 2010: 195–196

Moreover, according to Hickmann et al. (2010: 7), there are two different ways
to approach Talmy’s classical typology: either it is about the locus of path
information (in the verb or in satellites) or it is about what is or is not charac-
teristically encoded in descriptions of motion events (e.g. manner).

Taking into consideration the revision of the literature presented above, in
the next section we will focus on Portuguese costa-motion events, both in
verb-framed and corresponding non-verb-framed constructions. This analysis
follows the first research approach mentioned by Hickmann et al. (2010) and
referred to above, aiming at identifying the path information in the verb and/
or in satellites, and it also reflects on the initial classical typological proposal
without restricting it just to one lexical verb class alone but taking into consid-
eration the respective corresponding constructions.

3 Observation on Portuguese Usage Data: EP and BP

The growth of Construction Grammar within the field of Cognitive Linguistics
in recent years has shifted the focus of Cognitive Linguistic research from units
of analysis (such as verbs) to whole constructions in which these words may (or may not) take part.

As far as motion events are concerned, the first Portuguese usage data observation is that the use of a verb that conflates motion with path and the corresponding (periphrastic) construction can co-exist, showing different levels of acceptance and different levels of contextual interchangeability. As discussed in the earlier studies on acqua-motion verbs and/or perspectivization phenomena in Portuguese (Batoréo 2006, 2008, 2009; Batoréo 2014 a and b; Batoréo and Ferrari 2014), in both national varieties of the language (EP and BP), we can use either surfar (to surf) or fazer surf (to do surf) or with small contextual restrictions either afundar(-se) (to sink, to drown) or ir até ao fundo (to get to the bottom). These examples show that in Portuguese either path (in afundar(-se)) or manner (in surfar) can be conflated with motion in a verb, or these verbs can be as common in use as the parallel periphrastic constructions (fazer surf or ir até ao fundo), assumptions that challenge partially the Talmyan theory of Romance languages as verb-framed systems.

The second observation is that the co-existence of denominal verbs and periphrastic constructions not only shows different degrees of acceptability in each variety, but is also present in events that do not involve motion. It is common to notice that BP speakers use denominal lexicalized verbs that EP native speakers do not accept. For example, in order to congratulate somebody on a special occasion (e.g. his/her birthday), BP speakers use a denominal verb, parabenizar (from Portuguese: parabéns – ‘congratulations’), as well as a periphrastic expression dar os parabéns (‘to give congratulations’). EP speakers, on the other hand, do not use the denominal verb at all, but only the periphrasis. Due to this restriction, the passivized more emotional BP expression sinto-me parabenizada (in the sense of: I feel congratulated on something) does not occur in EP. The EP equivalent construction: deram-me/ recebi os parabens (‘I was given congratulations’) is totally impersonal and devoid of the emotion manifested in BP, which illustrates how rendering one variety into the other can result in poor contextual interchangeability between the two varieties.

Another case of the same phenomenon as the one discussed above referring to events that do not involve motion is the case of meteorological verbs, like rain, snow, to be windy, etc. When it is cold we say in both varieties faz frio (literally: ‘(it) makes cold’), using a periphrastic construction and not a single verb, but when it rains or snows we say chove/ neva (‘(it) rains/ (it) snows’), using a denominal verb (from chuva (‘rain’) and neve (‘snow’)). Nevertheless, when it is windy, only BP (but not EP!) allows the verb ventar (‘to wind/ to be windy’); in EP it is only possible to use the construction faz vento (literally: ‘(it) makes wind’), with the Brazilian verb mostly unknown to EP speakers.
The third observation is related to the second one but is restricted to fictive motion verbs. For example, the sentence ‘the costal road follows the beach’ would correspond to constructions with denominal lexicalized verbs that conflate motion with path in Brazilian Portuguese. So, whereas BP speakers use verbs such as margear (‘to margin’), costear (‘to coast’), beirar (‘to edge’), as in: a estrada margeia/ costeia/ beira a praia (‘the road margins/ coasts/ edges the beach’) — formed on the basis of nouns margem (‘margin’), costa (‘coast’), beira (‘edge’), to express fictive motion — EP speakers prefer the respective periphrastic constructions: e. g. A estrada acompanha/ vai junto/ vai pela beira da praia. (‘the road accompanies/ goes close to/ edges the beach’).

4 Research Aims and Hypotheses

In the present study we will depart from the first observation presented in the previous section, narrowing our focus of investigation to motion events along (or towards) borderline regions such as ‘margin’ (margem), ‘edge’ (beira/ borda) and ‘coast’ (costa), i. e. COSTA-motion events. We will discuss evidence for the following generalizations:

(I.a) in both Portuguese national varieties (BP and EP) we can observe two types of nearly parallel patterns: (a) denominal lexicalized verbs and (b) (periphrastic) constructions of the type [Verb + prep. + COSTA noun] with the respective noun being the origin of the denominal COSTA verb;

(I.b) some differences and restrictions can be observed in the type of pattern accepted and/or preferred in one of the varieties with respect to the other.

Given these general observations, we assume Portuguese cannot be classified as a verb-framed language in the classic absolute sense of Talmyn typology (1985, 2000), but only in terms of prototypical typological categorization. Thus, the hypotheses entertained in the present study on COSTA-motion events are the following:

(II.a) Both national varieties (BP and EP) present the two types of parallel patterns of COSTA-motion;

(II.b) The verb-framed pattern is stronger in BP than in EP, whereas the satellite-framed pattern is stronger in EP than in BP.

In the next section, we will discuss data that support these hypotheses.
5 COSTA-motion Events in Portuguese

5.1 Portuguese as a Verb-framed Language and the Lexicalization Pattern of the costa Verbs

In the present paper our research is focused on COSTA-motion events, and can be illustrated in Portuguese by examples (1) to (6) below,\(^1\) referring either to motion along the coast (see (2), (3), (5) and (6)) or to motion towards the coast of a water basin (see (1) and (4)). In the latter case, the movement can be either landward-oriented (with the movement starting in the water, as in (1)) or waterward-oriented (with the movement starting on the land), (as in (4)):

(1) acostar\(^2\)  
   a. O navio esteve há dias acostado em Lisboa.  
      ‘some days ago the ship was docked in Lisbon’

(2) costear  
   a. O navio costeou uma das ilhas de Cabo Verde.  
      ‘the ship coasted to/around one of the islands of Cape Verde’

(3) margear/ marginar  
   a. As casas que margearam o rio foram inundadas.  
      ‘the houses that lined the river were flooded’  
   b. As casas marginaram o rio até à foz.  
      ‘the houses bordered the river to its mouth’

(4) beirar/ abeirar  
   a. Abeirou o cavalo da água para que pudesse refrescar-se.  
      ‘he rode the horse to the water so he could cool off’

(5) bordar\(^3\)  
   a. As árvores bordavam os canais.  
      ‘trees bordered channels’

(6) orlar\(^4\)  
   a. As dunas enormes que orlavam os quilómetros do areal.  
      ‘the huge dunes that border kilometers of beaches’

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1 In this section, we focus only on examples of physical motion conceptualized in relation to a water border, avoiding reference either to fictive motion or metaphorical extensions of physical movement or even to other types of barriers (as land borders, for example). The area is very complex, where a lot of research has to be done, due to numerous restrictions these uses follow in different varieties of Portuguese. The subject is to be developed in a follow-up study of the present research (cf. the last section).

2 In Portuguese, there is also a verb acostar 2 (= encostar), meaning to lean.

3 In Portuguese, there is also a verb bordar 2, meaning to embroider.

4 In Portuguese, there is also a verb orlar, meaning to hem.
The examples (1) to (6) presented above show the verb-framed pattern expected for Romance languages, according to Talmy’s theory (1985, 2000): motion and path are conflated in the verb, conveying the meaning of to move to/towards/along the water/land border. In fact, as presented above, there is a series of denominal verbs formed according to this lexicalization pattern in Portuguese, as illustrated in previous examples and schematized in Table 1 below:

As previously stated (see footnote 1, above), in the present section we decided to restrict our examples preferably to physical motion only and to the movement conceptualized in relation to a water border, although many of the verbs presented in Table 1 can also be used in relation to land borders as well. This choice is not always an easy task, as can be illustrated, for instance, by the analysis of the verb *beirar*, as a representative of costa-motion event, in examples (7), (8), and (9), below. In this case, we show a semantic extension of physical motion in relation to a non-water border (see (7)), a metaphorical extension (see (8)) and a specific case of fictive motion (see (9)).

<table>
<thead>
<tr>
<th>Portuguese costa (Coast)</th>
<th>English rough correspondence: shore, seashore, costline, border, bank, etc.</th>
<th>→ denominal verb</th>
<th>Verb-framed lexicalization: [motion + path]</th>
<th>English rough correspondence: to shore, to edge, to dock, to moor, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>· margem</td>
<td>‘borderside’ ‘bank’, ‘edge’,</td>
<td>→ margear, marginar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· beira</td>
<td>‘border’ ‘vergebank’, ‘edge’,</td>
<td>→ beirar, abeirar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· orla</td>
<td>‘shore’ ‘coastline’,</td>
<td>→ orlar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· litoral</td>
<td>‘seashore’</td>
<td>→ litoralizar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· marginal</td>
<td>‘coast (road)’</td>
<td>→ marginalizar</td>
<td></td>
<td></td>
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<tr>
<td>(= estrada marginal)</td>
<td></td>
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</table>

TABLE 1  Lexicalization patterns in V-framed [motion + path] COSTA motion verbs in Portuguese
This phenomenon of forming a new verb with an a-prefix is a very common and old phenomenon in popular Portuguese (defended to be earlier than the 16th century) and is known as a "morfema protético" (prothetic morpheme). A pair of verbs is formed in this way, in which the first is unmarked in form and usage, and the prefixed verb is marked as a popular form, which can be observed in the case of the following Portuguese verbs: baixar/abaixar ('to bend down'), sentar/assentar ('to sit'), levantar/alevantar ('to raise'), mandar/amandar ('to throw'), etc. In some cases, the prefixed verb looses its popular markedness with time, as is the case of ruinar/arruinar ('to ruin').

Nevertheless, in the case of the Almodovar's famous film, surprisingly both in EP and in BP the "construction" solution was used in the title: Mulheres à beira de um ataque de nervos ('Women on the verge of a nervous breakdown').

The examples (7) and (8) show, first, that beirar is used either as physical motion (here, referring to a land border) only in BP (but not in EP!), as in dançar até beirar o chão ('dance bordering the ground'), (see (7a)), or in metaphorical extensions beirar um ataque de nervos ('to verge on a nervous breakdown'), (see (8a)). Second, in EP, physical motion prefers the parallel form abeirar (see (4) above) or a periphrastic construction instead, as in dançar até chegar ao chão ('dance till coming to the ground') (see (7b)). It is interesting to observe, though, that the BP and EP choices above in (7a) and (7b) are not exactly equivalent, as in BP (see (7a)) you do not touch the ground dancing, whereas in EP (see (7b)) you may do so. If you want to be more explicit in EP and say dançar até chegar à beira do chão ('dance till coming to the edge of the ground'), (see (7c)), the utterance will be marked dialectally, as the noun beira is preferred in northern dialects of Portugal but hardly used in this meaning either in the south or in standard EP. Third, in the EP metaphorical extension, (see (8b)), a periphrastic construction is used: estar à beira de um ataque de nervos ('to be on the verge of a nervous breakdown'),

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5 This phenomenon of forming a new verb with an a-prefix is a very common and old phenomenon in popular Portuguese (defended to be earlier than the 16th century) and is known as a "morfema protético" (prothetic morpheme). A pair of verbs is formed in this way, in which the first is unmarked in form and usage, and the prefixed verb is marked as a popular form, which can be observed in the case of the following Portuguese verbs: baixar/abaixar (to bend down), sentar/assentar (‘to sit’), levantar/alevantar (‘to raise’), mandar/amandar (‘to throw’), etc. In some cases, the prefixed verb looses its popular markedness with time, as is the case of ruinar/arruinar (‘to ruin’).

6 Nevertheless, in the case of the Almodovar's famous film, surprisingly both in EP and in BP the "construction" solution was used in the title: Mulheres à beira de um ataque de nervos ('Women on the verge of a nervous breakdown').
and the verb *beirar* generally rejected by the native speakers of Portuguese, (see (8a)). Forth, in the case of fictive motion (see (9)), BP uses the verb *beirar* (see (9a)), which is totally rejected by native speakers of EP, (see (9b)), who use different equivalent periphrastic constructions instead.

The complexity of costa-motion events in Portuguese, as highlighted above in the analysis of just one event, in examples (7) to (9), show that in this sort of analysis many different variables have to be taken into consideration in order to cover different sort of physical, fictive and metaphorical conceptualizations. These variables are different in character: cognitive, linguistic, psycholinguistic, and different levels of sociolinguistic character (national varieties, registers, local dialects, local uses, etc.). This shows that a lot of research has to be done in follow-up studies in the area, as stated in the last section.

5.2 *COSTA* Motion in Portuguese Language-in-use

In general terms, there are some observations to be made regarding the use of what was schematically proposed in Table 1 for the systemic level of lexicalization patterns in Portuguese.

First, in Table 1, some of the denominal morphologically well-formed verbs may not be dictionarized, as is the case of *litoralizar* (‘move towards/ along the seashore’) or *marginalizar* (in the meaning of ‘moving along the coast road’), which means that their usage is not generally accepted, as also confirmed by native speakers, even if they occur in real data, as, for example, *litoralizar* does in EP. Second, some of these physical motion costa verbs are considered old-fashioned by native speakers and/or confined to written language more than to every-day speech, as is the case of *costear* or *bordar*. Third, some verb forms seem to have parallel uses such as *margear*/*margar*, lexicalized from *margem* (margin) or *beirar*/*abeirar*, lexicalized from *beira* (‘edge’, ‘border’), as discussed above. In these cases, the choice of each parallel form seems to be dependent on the variety used, as EP, for instance, seems to privilege *abeirar* instead of *beirar* and *marginar* instead of *margear*. Fourth, some of the nouns that originate the corresponding lexicalized verbs are more common in EP, as seems to be the case of *litoral*, or in BP, as is the case of *orla*, indicating that there may be variety differences to be observed when comparing EP and BP.

The most important fact to be observed, though, is that Portuguese language-in-use shows clearly that COSTA-motion can be expressed not only by synthetic

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7 In the meaning of *border* 1 (see note 3, above).
forms of lexicalized verbs,\(^8\) as expected in a verb-framed type of language, (see (1) to (6)) but also, by the satellite-framed type:

\[
[\text{Verb} + \text{preposition} + \text{costa noun}].
\]

In this type of periphrastic construction the \textit{Verb} is prototypically – either an auxiliary: \textit{ser} or \textit{estar} (‘to be’) or a semi-auxiliary: \textit{ficar} (‘to stay’); it can also be a light/ support (i.e., not semantically full) verb: \textit{dar} (‘to give’), \textit{fazer} (‘to do’, ‘to make’), \textit{andar} (‘to go’), \textit{seguir} (‘to follow’), etc. – or a deictic motion verb: \textit{ir} (‘to go’) or \textit{vir}, \textit{chegar} (‘to come’). The periphrastic constructions of the satellite-framed type are illustrated in the following examples (10) to (15):

\begin{enumerate}
\item[(10)] \textit{O barco aproximou-se da costa}.
\textit{the boat approached the coast’}
\item[(11)] \textit{A maré está quase a dar à costa em Gaia}.
\textit{the tide is about to come up the coast at Gaia’}
\item[(12)] \textit{O barco seguiu/ veio pela margem sul}.
\textit{‘the boat followed/ came along the south bank’}
\item[(13)] \textit{O carro foi/ seguiu pela marginal no sentido de Cascais}.
\textit{‘the car followed by the coast road towards Cascais’}
\item[(14)] \textit{Os turistas seguiram o caminho à beira-mar/ foram pelo caminho da beira-mar}.
\textit{‘tourists followed a path along the seaside’}
\item[(15)] \textit{De repente, chegaram à beira de uma lagoa}.
\textit{‘suddenly, they reached the edge of a lagoon’}
\end{enumerate}

If we compare two groups of examples previously discussed here (the examples (1) to (6), on one hand, and the examples (10) to (15), on the other) we observe some parallelism between the verb-framed patterns, in the first group, and the satellite-framed patterns, in the second. Despite their apparent similarity, pragmatic and contextual differences may be at issue within each pair. For instance, the example \textit{o navio costeia a ilha} (‘the ship coasts to/ around the island’) can be extensionally very close to the construction \textit{o navio segue pela costa da ilha} (‘the ship follows along the coast of the island’). However, it is not safe to conclude that these constructions are interchangeable: they seem to differ with respect to what Talmy (2000: 90) has called \textit{perspective mode}, the development of the perspective point the conceptualizer adopts to regard the

\(^8\) As already highlighted in the case of the verb ‘beirar’ above in examples (7) to (9).
event and the distribution of attention over the event. Thus, it may well be the
case that the denominal verb construction assumes a steady-state long-range
perspective point with global scope of attention, whereas the periphrastic con-
struction adopts a moving close-up perspective point with local scope of atten-
tion. The investigation of this hypothesis however, lies beyond the scope of the
present paper, and will be developed in our future research in the area.

Summarizing what was defended above, we claim that, in Portuguese, COSTA-
motion events can be expressed linguistically by two typologically different pat-
terns (and not just one, as traditionally posited for Romance languages):

(i) by a verb-framed lexicalization pattern, as proposed originally by Talmy, or
(ii) by a satellite-framed pattern, contrary to Talmy’s classical proposal for
Romance languages.

Given the simultaneous acceptance of these parallel patterns in Portuguese, we
can argue that one of these groups can be considered more typical of a given
language variety than the other. This proposal is schematized in Table 2, below.

<table>
<thead>
<tr>
<th>costa Noun</th>
<th>costa denominal Verb</th>
<th>Periphrastic construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. coast, shore, bank, edge, ...</td>
<td>e.g. to shore, to edge, to bank, to border, ...</td>
<td>e.g. to be at/on the edge; to draw close to the coast; to walk/follow along the costal road; to follow the bank/shore...</td>
</tr>
<tr>
<td>· costa</td>
<td>→ acostar, costear</td>
<td>aproximarse da costa, ...</td>
</tr>
<tr>
<td>· margem</td>
<td>→ margear, marginar</td>
<td>estar à margem/ir/seguir pela margem, ...</td>
</tr>
<tr>
<td>· beira</td>
<td>→ beirar, abeirar</td>
<td>estar à beira/ir pela beira, ...</td>
</tr>
<tr>
<td>· borda</td>
<td>→ bordar</td>
<td>ir pela borda/acompanhar a borda, ...</td>
</tr>
<tr>
<td>· orla</td>
<td>→ orlar</td>
<td>ir pela orla, ...</td>
</tr>
<tr>
<td>· litoral</td>
<td>→ litoralizar</td>
<td>estar/ficar no litoral, ...</td>
</tr>
<tr>
<td>· (estrada) marginal</td>
<td>→ marginalizar</td>
<td>ir/seguir pela marginal, ...</td>
</tr>
<tr>
<td>(etc.)</td>
<td>(etc.)</td>
<td>(etc.)</td>
</tr>
</tbody>
</table>
The examples (1) to (15) and the schematization in Table 2 above show that, in Portuguese, it is possible to express COSTA motion events creating two types of patterns, and not only one as predicted by Talmy’s typology:

(a) patterns that conflate MOTION + PATH, as expected in a V-framed language, forming a lexicalized denominal verb-framed utterance; and

(b) patterns that do not conflate MOTION + PATH, but frame the PATH as a satellite in a construction pattern of the type: [Verb + prep. + COSTA noun], typologically non-prototypical in V-framed languages.

In the next subsection we shall verify if these two patterns are common and attested both in EP and BP language-in-use corpus, and if both of the patterns are equally used in each variety or if there is a variety preference for one of them.

5.3 The Linguat eca Corpus Data of COSTA-motion Patterns in EP and BP

The two types of COSTA-motion patterns as discussed in Section 5.2. were researched in Linguat eca (cf. Section 1). The Corpus was consulted for European and Brazilian Portuguese for all the patterns discussed in previous subsections (cf. Tables 1 and 2).

The research shows that COSTA-motion events use both lexicalized and non-lexicalized patterns, either in EP or in BP, which can be illustrated in (groups of) examples (16) to (18) bellow. These examples illustrate the three most common COSTA-motion events (cf. results bellow) and refer to expressions rooted in three COSTA nouns:

(a) \textit{costa} \rightarrow \textit{verb costear}, and a respective periphrastical construction;

(b) \textit{beira} \rightarrow \textit{verbs beirar/ abeirar}, and a respective periphrastical construction;

(c) \textit{margem} \rightarrow \textit{verbs margear/ marginar}, and a respective periphrastical construction.

In what follows, each of these groups will be exemplified. Examples (a) and (b) illustrate lexicalized denominal verbs in EP and BP respectively, whereas examples (c) and (d) illustrate satellite-framed perifrastical constructions in each variety:

(16) \textit{costa} \rightarrow \textit{verb costear} + construction [Verb + prep. + \textit{costa}]

a. (EP) \textit{par=ext56n7-nd-91b-2}: Quando me preparava para entrar, o porto fechou devido ao nevoeiro, mas conseguimos \textit{costear} sem dificuldade a praia... e entrar no porto.
'when I was about to get in, the harbor got closed due to the fog, but we managed to follow along the beach and get into the harbor'

b. (BP) ar=Dinheiro--94b-1: (…) os navios costeavam a ilha, batiam nos recifes submersos da beira-mar e naufragavam.
‘(…) the ships followed the coast of the island, hit the seaside submerged reefs and sank’

c. (EP) par=ext1067827-clt-96a-1: (…) os atuns passavam pela costa do Algarve às centenas, na sua migração anual entre o Atlântico e o Mediterrâneo.
‘(…) hundreds of tunas followed the Algarve coast, in their annual migration between the Atlantic and the Mediterranean’

d. (BP) par=Cotidiano--94a-2: O roteiro começa em Salvador e passa pela costa da ilha de Itaparica (…).
‘the route starts in Salvador and passes the coast of Itaparica island (…)’

(17) beira → verb beirar/ abeirar + construction [Verb + prep. + beira]

a. (EP) par=ext94582-soc-95a-1: Maria de Lurdes não tem medo da poluição e nem a descarga de produtos químicos que matou algumas centenas de peixes no rio Ferreira, (…) a demoveu de (…) se abeirar do ribeiro e ali lavar a roupa lá de casa.
‘Maria de Lurdes is not afraid of pollution and not even the discharge of chemicals which killed hundreds of fish in the River Ferreira dissuaded her from coming close to the river and washing there her family clothes’

b. (BP) par=Turismo--94a-2: Beirando a praia, e olhando-se de perto os cactos e as pedras, Aruba vai ficando simpática.
‘if you walk along the shore, and look closely at cacti and stones, you’ll get to like Aruba’

‘the operator walked along the edge of the road’

d. (BP) par=Cotidiano--94b-2: Ando todos os dias dez quilômetros pela beira da água e não vi nem uma (...) água-viva.
‘everyday I walk ten kilometers by the seashore, and I haven’t seen any jellyfish’
margem → verbs margear/ marginar + construction [Verb + prep. + margem]

(a) (EP) par=ext433115-soc-95a-2: (...) Admite a valorização dos terrenos que ficaram a marginar as águas da albufeira (...).
‘he admits that the land at the shore of albufeira had its value increased (...)

(b) (BP) par=Cotidiano--94a-2: A caminhada continua sempre margeando o rio Itapanhau.
‘the walking continues alongside the river Itapanhau’

(c) (EP) par=ext154145-soc-97b-3: Quem vá pela margem direita do rio Tâmega (...), nunca chegará lá.
‘if you go along the right margin of the river Tâmega, you’ll never get there’

(d) (BP) par=118396: Seguindo pela margem do rio, o cristão escolheu o lugar para levantar a cabana.
‘walking by the river, the Christian chose a place to build a hut’

5.4 Results of the Research of COSTA-motion Patterns Attested in Linguateca Corpus

As regards costa-motion patterns attested in Linguateca, strong usage restrictions were found for types of verbs and constructions presented initially in Tables 1 and 2, showing that patterns created from orla, litoral, borda or (estrada) marginal are only peripheric in language-in-use. For example, in EP, the verb orlar was found only once in the whole corpus, while litoralizar was only found in restricted formal contexts when coasted population is referred to or where the respective deverbal noun litoralização (coasting phenomenon) is mentioned, showing strong context-type restrictions.

As already exemplified in the previous sub-section, only the first three types of costa-motion events referred to on the systemic level in Tables 1 and 2 and consulted in the Linguateca corpus were well represented in language-in-use (cf. examples (16) to (18), above, and in Figures 1 and 2, bellow). We refer here to the costa case in (16), the margem case in (17), and the beira case in (18), and all of them can be considered as significantly frequent.9 In BP, data analysis showed a preference for denominal verbs over periphrastic constructions: 53% for costear, 58% for margear, and 59% for beirar. In EP, on the other hand, the choice of denominal verbs is dispreferred (respectively, 38%, 42% and 6%), as shown in Figure 1:

9 With the exception of the beira case in EP.
The use of periphrastic constructions with *costa*, *margem*, and *beira* over denominal verbs is preferred in EP; the former corresponds to 66%, 58%, and 94% of the occurrences (cf. Figure 2, below).

The results of the analysis of costa-motion patterns in *Linguateca* presented here show that:

(a) the three most common verb-framed costa-motion instantiations are used both in EP and BP language-in-use in comparable patterns;

(b) the verb-framed pattern is clearly privileged by BP in all the cases studied, given that the percentage is not only relatively higher than in EP but also always higher than 50 per cent of all uses;

(c) the strategy of satellite-framed pattern is frequent both in EP and BP in all cases studied, always with more than forty percent of occurrences in each variety, which shows its representativity in both varieties;

(d) the satellite-framed strategy is by far more productive in EP than in BP in all three cases studied, with around fifty percent (or above) of all uses.
The two figures (Fig. 1 and Fig. 2) seem to be mirror-reflected: they illustrate that, in language-in-use of costa-motion events, BP clearly privileges verb-framed patterns, whereas EP clearly privileges satellite-framed patterns.

6 Conclusions and Further Research

The evidence presented in our study\(^{10}\) of costa-motion patterns in Portuguese lead us to the following conclusions, confirming our initial hypotheses:

1) in both Portuguese national varieties, we observe two frequent types of nearly parallel patterns in most common costa events: (a) a *verb-framed pattern*, centered on a denominal lexicalized verb, which confirms the classical typological prediction for Romance languages in Talmy’s typology, and (b) a *satellite-framed* pattern in a (periphrastic) construction of the type [Verb + prep. + COSTA Noun] with the respective noun being the origin of the denominal COSTA verb; this pattern violates the classical typological prediction for Romance languages;

2) we observe also some differences and restrictions in the type of pattern accepted and/or preferred by one of the varieties with respect to the other: in language-in-use of costa-motion events, BP privileges verb-framed patterns, whereas EP prefers satellite-framed patterns.

The material presented here not only confirms the hypotheses initially presented in this study but also support our proposal of typological reformulation of Portuguese as a verb-framed language in the absolute sense (according to Talmyan typology 1985, 2000). Given the parallelism of verb-framed and satellite-framed patterns in both varieties under study, it is our understanding that the typological categorization of motion events in the Talmyan proposal should be reformulated from absolute terms to prototypical terms only. In this sense, we understand that, in Portuguese, verb-framed and satellite-framed patterns, both frequent in language-in-use, can be preferred and/or privileged by one language variety but not the other.

Although Talmy’s typological work on the expression of motion has been recognized world-wide as an extremely productive starting point for a thorough typology of languages in the world, detailed analyses of some languages and multiple aspects of conceptualization of motion events observed cross-linguistically and cross-culturally are necessary to pursue new lines of research

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\(^{10}\) We would like to acknowledge our colleague, Prof. Jeffrey Childs, for discussing with us some English aspects of the final version of this text.
and to go beyond the initial proposals. Following Slobin’s and Hickmann’s research of motion events developed in the last twenty years, we believe that the diversity with which languages of the world represent motion events is perhaps best interpreted in terms of a cline, taking into consideration which motion patterns are more or less prototypical in a given language variety.

If the tendency observed in the present research of BP preferring verb-framed patterns and EP privileging satellite-framed patterns can be generalized for other language-in-use comparative studies of EP and BP, it seems that it could be interpreted as a signal of an on-going typological change of lexicalization patterns within Portuguese. This typological change can be postulated to go in the direction of (a) BP showing a tendency to be verb-framed (with PATH conflated in the verb), and therefore more morphologically-oriented from the linguistic point of view, and (b) of EP showing tendency to be satellite-framed (with PATH in the satellite), and therefore more syntactically-oriented from the linguistic point of view. From our perspective, this line of research seems to be the most fascinating and challenging to be followed in the linguistic research of Portuguese in the future.

As a final remark, and taking into account the development of the COSTA-motion research started in the present study but practically restricted here only to physical motion, we understand that there are some important research lines still to be developed in the area, such as fictive COSTA-motion, and metaphorical extensions of COSTA-motion patterns, in order to create a more thorough vision of the global COSTA-motion research.

It will also be important to develop perspective and attention implications of different typological patterns used in EP and BP, in order to study (degrees of) possible interchangability of different typological patterns in the two national varieties of Portuguese. As postulated in our analysis, it may well be the case that the denominal verb construction assumes a steady-state long-range perspective point with global scope of attention, whereas the periphrastic construction adopts a moving close-up perspective point with local scope of attention, an assumption that needs further development. This type of research will contribute to a better understanding of the relevance of language typology for the study of conceptualization.

References


