THE CONSTRUCTION NETWORK RECONFIGURATION HYPOTHESIS

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Abstract:
In this paper I develop the Construction Network Reconfiguration Hypothesis, according to which construction networks may have their inheritance links changed over time due to the emergence of new constructions via grammaticalization. In order to demonstrate such hypothesis, I investigate, under a diachronic approach, the configuration, in Brazilian Portuguese (BP), of a radial network of 11 constructions, which all share the *para infinitive* syntactic schema as well as some variation of the semantic frame of Purpose. I present a corpus-based analysis of the inheritance links found among the constructions; moreover, I investigate the history of each construction, from Medieval Portuguese to BP. This analysis supports the claim that, throughout time and due to grammaticalization processes, new *para infinitive* constructions have been incorporated to an original network composed of four constructions. The emergence of such new constructions promoted the reconfiguration of the networks for each century.

Keywords: Construction Grammar; Grammaticalization; Inheritance; Change; Para Infinitive Constructions.

Introduction[1]

Cognitive Construction Grammar (CCxG) (GOLDBERG, 2006), as well as other cognitive approaches to language (LAKOFF, 1987; SALOMÃO, 1990; 2007; to name a few), center their analyses on the inheritance relations established among constructions, which, by their turn, are organized by the speaker, throughout language acquisition, in motivated networks. On the other hand, studies on language change, amongst which those on Grammaticalization (HOPPER & TRAUGOTT, 2003 [1993]; HEINE, 2003; LEHMANN; 2002 and many others), aim at analyzing how constructions develop historically, and tend to argue that they do it following unidirectional linear chains (or clines).

However, if, in some sense, these two approaches are apart in which concerns their orientations (either synchronic or diachronic, radial or linear, acquisition-centered or concerned with the historical emergence of grammar); it is also possible to state they are related to the extent that Cognitive Linguistics rely on the emergence of grammatical patterns as an alternative to the generative approach to language (see TOMASELLO, 2003), and that language change studies use the notions of "construction" and "cognitive processes" – such as metaphor and metonym – in their explanations. Hence, some common ground is needed so as to bring together the achievements of both sides in which regards the task of adequately accounting for both constructional inheritance and change.

Considering such need, I propose in this paper the Construction Network Reconfiguration Hypothesis, according to which construction networks may have their inheritance links changed over time due to the emergence of new constructions via grammaticalization. In order to demonstrate such hypothesis, I investigate, under a diachronic approach, the configuration, in Brazilian Portuguese (BP), of a radial network (see LAKOFF, 1987) of 11 constructions, which all share the *para infinitive* syntactic schema as well as some variation of the semantic frame of Purpose (see FILLMORE, 1977; 1982). I present a corpus-based analysis of the inheritance links found among the constructions studied; moreover, I investigate the history of each construction, from Medieval Portuguese to BP.

This analysis supports the claim that, throughout time and due also to grammaticalization processes, new *para infinitive* constructions have been incorporated to an original network composed of four constructions. The emergence of such new constructions promoted the reconfiguration of the networks for each century.

Corpora and Methods

In order to carry out the analyses to be presented in the next section, extensive data collection was performed. For the definition of the properties and usage patterns of each construction in current BP, speech corpora[2] from the 20th / 21st century with c. 185,000 words was scanned for the *para infinitive* syntactic schema. Through the analysis of the results of this survey, 11 constructions were identified and described (see section 2).

Based on such survey, a construction network is proposed in a radial fashion. Both the emergence of the network and the links between its members are described from the point of view of Cognitive Construction Grammar (GOLDBERG, 1995; 2006) and Frame Semantics (FILLMORE, 1977; 1982).

Finally, in order to verify whether this synchronic analysis holds diachronically, occurrences of the constructions analyzed were surveyed in written-text corpora from both Peninsular Portuguese[3] – ranging from the 13th to the 17th centuries –, and Brazilian Portuguese[4] – 18th and 19th centuries. For each century, a multiple-genre corpus of c. 150,000 words was used. Since this analysis also raised some questions on the origins of the four more ancient patterns in the original network, depending on the case, one last survey may have been made in order to track the origins in Latin for some of these patterns.

Data Analyses

The analyses carried out in this work are usage-based (cf. BARLOW & KEMMER, 2000), in the sense that they are corpus-based, diachronically oriented, and construed in an attempt to account for (i) the formal and functional properties of the constructions in the network as they are used in real interactive situations; (ii) the internal consistency of the inheritance links in the network; and (iii) the development of the constructions via grammaticalization and the reconfiguration of such network alongside the history of Portuguese.

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2   Corpora used in the synchronic analysis comprise the data from three different projects: (i) O Português Falado na Região de Juiz de Fora e Arredores, organized by Dias; (ii) PROCON – Juiz de Fora, organized by Bittencourt and Gago; and (iii) Conceição de Ibitipoca, by Resende. More information concerning this and the other corpora used can be found in Torrent (2009b).

3   I used Davies' and Ferreira's Corpus do Português, available at http://www.corpusdoportugues.org.]

4   Two other corpora, besides Corpus do Português, were used: the one from Museu da Língua Portuguesa (http://www.estacaodaluz.org) and that of the Para Uma História do Português do Brasil from Rio de Janeiro (http://www.letras.ufrj.br/phpb-rj).

The *Para Infinitive* Network in Current Brazilian Portuguese

The constructions[5] (Cx.) studied in this paper either share the *[NP V NP para (NP) V$_{INF}$]*[6] syntactic schema or are related to it by inheritance links. All of them inherit properties from the Purpose Adjunctive Cx., whose formal pattern is *[para (NP) V$_{INF}$]* and whose semantic counterpart codes the frame of purpose, i.e. this construction can point to the metaphorical desired destination of a movement, be it physical or intentional. In this space, the entity coded by the NP is the Agent in an event which is the intended resultant of the previous event. Examples[7] (1) – (11) illustrate the different usage patterns of the *Para Infinitive* family of constructions.

(1) **Podia deixar a chave pra mim pegá a conta de tel.**
Could-2$_{SG}$ leave-INF DET key for 1$_{SG}$-DAT pick-INF DET phone bill.
You could leave the key for me to pick up the phone bill. (PFJF – JFA)

(2) **Pedi uma colega minha lá pra ela** í
Asked-1$_{SG}$ DET friend 1$_{SG}$-POSS there for 3$_{SG}$-NOM go-INF
I asked a friend of mine to go [and represent me]. (IBITI – AUR)

(3) **Eu tenho otras coisa pra resolvê**.
1$_{SG}$-NOM have-1$_{SG}$ other thing for solve-INF
[I have to go,] I have other things I need to get done. (PFJF – PON1)

(4) **Eu vou pedir pr-o senhor contar**
outro caso aqui.
1$_{SG}$-NOM go-1$_{SG}$ ask-INF for-DET sir tell-INF other story
here
I'll ask you to tell another story now. (IBITI – WAL)

(5) Num **tem nada pra fazê**...
NEG have-3$_{SG}$ nothing for do-INF
[Then, I don't go out...] there's nothing to do... (PFJF – TOC)

(6) **Aquele quarto ali deve ser mais fácil pra você limpá**.
3$_{SG}$-DEM room there must-3$_{SG}$ be-INF more easy for 2$_{SG}$-NOM clean-
-INF
That room over there must be easier for you to clean it. (PFJF – JFA)

(7) **Eles tão doido pra saber** quem é o dono d-o carro.
3$_{PL}$-NOM are-3$_{PL}$ crazy for know-INF who is-3$_{SG}$ DET owner of-DET car
They are eager to know who is the owner of the car. (PFJF – TOC)

(8) **Dá pa dormi** n-a viage?
Give-3$_{SG}$ for sleep-INF in-DET trip
Is it possible to sleep during the trip? (IBITI – APA)

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[5] This paper adopts the Cognitive Construction Grammar definition of construction: "Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency." (GOLDBERG, 2006, p.5)

[6] The third (NP) is notated in brackets because it can be either overt or not. There is always a subject for the VINF, which can be either explicit or inferable.

[7] Contextual information needed for the interpretation of the examples is given inside brackets.

(9) **Eu já era pra ter vendido** esse imóvel.
1$_{SG}$-NOM already was-3$_{SG}$ for have-INF sell-PART 2$_{SG}$-DEM realty
I should have sold this realty already. (PROCON – JF)

(10) **Tava pa ganhá** esse minino.
was-1$_{SG}$ for get-INF 2$_{SG}$-DEM boy
[By that time,] I was about to give birth to this boy. (IBITI – APA)

(11) Agora **o meu disquete deu pra dá** problema.
Now DET 1$_{SG}$-POSS floppy disk gave-3$_{SG}$ for give-INF problem
Now my floppy disk started presenting bugs repeatedly. (PFJF – TOC)

The sentence in (1) exemplifies the Dative with Infinitive Cx. (TORRENT, 2007; 2008; 2009a; 2009b). My analysis of this Cx. follows the one Salomão (1990; 2007) proposes for a very similar pattern[8], the Enablement Cx. with *Dar.* According to her analysis,

> The Enablement Construction inherits structure from the Transfer of Ownership Construction via a Metaphorical Link (Goldberg 1995). It also combines with the Purpose Construction to motivate its whole frame. As it has been pointed out before (Goldberg 2006), Constructions are motivated via Inheritance and/or by syntagmatic combination. The Enablement dar Construction inherits frame-structure from Transfer of Possession and combines with the Purpose Construction to constitute its own complex syntactic/semantic pairing. Combined with Purpose, the Construction allows the following inferences: (i) THE TRANSFERRED RESOURCE ENABLES THE RECIPIENT TO MOVE TO THE INTENDED DESTINATION; (ii) THE ENABLED RECIPIENT IS AN EMPOWERED AGONIST; (iii) THE SHIFT IN THE FORCE--DYNAMICS PATTERN UNBLOCKS THE PATH OF THE AGONIST. (SALOMÃO, 2007, p.7)

In other words, in this construction, the *para infinitive* schema fills the slot of the oblique argument of a Transference Construction. Such syntactic configuration allows the Dative with Infinitive, in its semantic counterpart, to compress, in the dative NP – i.e. the one subcategorized by *para* – both the roles of Benefactive of the transference and Agent of the infinitival verb. In example (1), the speaker is, at the same time, the Benefactive of the transference of the key – currently under possession of the hearer – and the person who will take an action towards the desired goal of picking up the bill to pay it.

Such complex frame will be partially or entirely present in each construction of the network, depending on the inheritance links which connect each of the constructions. This network is conceived, based on the work by Lakoff (1987) on radial categories and prototype effects, as having a central prototy-

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[8] The main difference between my analysis and that by Salomão is related to the fact that whilst she analyzes a family of construction centered in the verb *dar* ('give'); my analysis focuses a formal pattern *[para V$_{INF}$]*. Consequently, her analysis of the Enablement Cx. does not take into consideration that verbs other than *dar* can occur in the finite verb slot of the pattern.

pic construction to which the other ones can be linked in a radial fashion. Treating family of constructions as radial networks is not new in CCxG approaches (see LAKOFF, 1987; GOLDBERG, 1995; 2006; among others) and has proven to be a robust way of analyzing inheritance and combinatory relations among form and function pairings.

For the sake of economy, I will present the analysis of the form/meaning pairings for the other constructions in a graphic representation (Figure 1) of the network. In the representation, each construction will be shown in a box in which it will be possible to find the name of the construction, its syntactic schema, its functional aspects and its frequency – numeric and percentual – in the data surveyed in the *corpora* of the 20th / 21st century. Links between constructions (GOLDBERG, 1995) are represented by arrows indexed according to the type(s) of link(s) found.
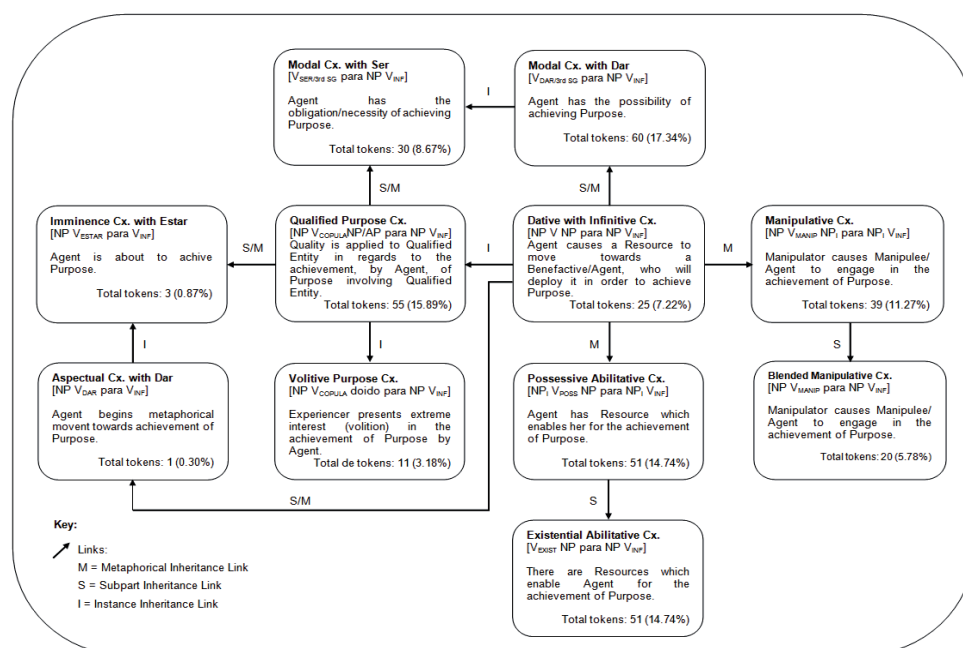

Figure 1: The *Para Infinitive* Construction Network in 21st Century BP.

The center of the network is occupied by the Dative with Infinitive Cx., which, by its turn, inherits via blending from the Transference Cx. and the Purpose Adjunctive Cx. (see TORRENT, 2008; 2009b). Such construction is the prototype from which the rest of the network is motivated. Its prototypical status can be ascribed based on the following characteristics:

(i) The Dative with Infinitive Cx. encodes the ENABLEMENT transference scene, which is cognitively more basic than the scenes encoded by the other constructions.

(ii) Such construction presents the basic formal schema, *[NP V NP para (NP) V_{INF}]*, from which the other are derived. Also, it has more open slots than those which inherit from it, i.e., in a previous work (TORRENT, 2008), utte-

rances of this construction were attested with a great variety of verb types, besides prototypical transference verbs. In such construction the finite V position can also be filled by verbs indicating placement (*botar* and *colocar* – *'place'*), arrangement (*arranjar* and *conseguir* – 'get/arrange/obtain'), and purchase (*comprar* – *'buy'*). Those verbs add some perspective to the transference of the resources towards the Benefactive/Agent.

(ii) The Dative with Infinitive Cx. complies with the prototypical argument structure of Brazilian Portuguese in both the finite and infinitive clauses. Also, the finite verb clause has agentive verb, which makes its subject a prototypical agent.

The Manipulative Cx. inherits via Metaphorical link from the Dative with Infinitive Cx. In which concerns the form, they are almost exactly the same – exception made for the fact that the finite V slot must be filled by a verb of manipulation (*pedir, mandar* – *'ask, tell, mandate'*), however, the functional mapping is quite different. The metaphor underlying the relation between those two constructions is the Conduit Metaphor (see REDDY, 2000 [1979]). Following this branch of the network, the Blended Manipulative Cx. inherits via Subpart link from the Manipulative Cx., since the manipulee of the finite verb and the agent of the infinitive are blended in the NP introduced by *para*.

The Possessive Abilitative Cx. also inherits from the prototype metaphorically. In such case, following Salomão's (1990) analysis on the Enablement Construction, the metaphors involved are RESOURCES ARE POSSESSIONS and POSSESSION OF RESOURCES IS ENABLEMENT. Another Subpart link connects the Existential Abilitative Cx. to the Possessive Abilitative Cx. In this case, due to the usage of verbs *ter* and *haver* (*'have'*) as subjectless existence verbs, the first NP of the schema is erased from the construction.

Modal Cx. with *Dar* which is connected do the Dative with Infinitive Cx. via both a Metaphorical and a Subpart inheritance link. As the Subpart link erases the first and the second NPs, i.e. the agent of the transference and the resource transferred, the Metaphorical Extension link allows, via Force Dynamics Metaphors (TALMY, 1981; 1988; SWEETSER, 1988; 1990), the epistemic modality interpretation.

The Modal Cx. with *Ser* can be recognized as an Instance of the Modal Cx. with *Dar*, since they share the *[V para NP V$_{INF}$]* syntactic schema, being the only difference between them (i) the obligation of filling the V slot with the verb *ser* (*'be'*), and (ii) the consequent deontic modality meaning of this construction[9].

The Qualified Purpose Cx. is also directly linked to the prototype, however, by an Instance link. This link is posited because this Cx. presents two constraints: one which concerns the filling of the V slot with a copula; and the fact

9 It would also be possible to state that the Modal Cx. with *Dar* is an instance of the Modal Cx. with *Ser* or even that both of them are instances of a more abstract schema [V para NP VINF]. However, I chose to analyze these constructions the way presented in Figure 1 in order both to respect Goldberg's proposal to inheritance links and also to reinforce the fact that the Dative with Infinitive Cx. radiates some of its properties all over the network.

that the second NP must be filled by a noun or adjective – therefore the AP – which qualifies the first NP in regards to the achievement of purpose. The Volitive Purpose Cx., by its turn, inherits from the Qualified Purpose Cx. also through an Instance link, i.e. it is a specialized instance of the mother construction which presents a somehow different meaning, which is, in this case, the sense of extreme volition.

Two more constructions inherit from the Qualified Purpose Cx.: the Modal Cx. with *Ser* and the Imminence Cx. with *Estar*. The first one inherits via Subpart link from the Qualified Purpose Cx. – there is a suppression of the subject argument of the mother construction. As for the Imminence Cx. with *Estar*, it inherits via Subpart link, due to the suppression of the NP encoding the qualification of the subject, and also via a Metaphorical link sustained by the STATES ARE POINTS IN A PATH metaphor.

Finally, the Aspectual Cx. with *Dar* inherits from the Dative with Infinitive Cx., via a Subpart link (suppression of the second NP) and a Metaphorical link. It also motivates the Imminence Cx. with *Estar* in a way which is analogous to the relation between the two modal constructions discussed above (see footnote 9).

It is also important to make clear that all of the constructions in the network are in some way motivated by the Purpose Adjunctive Cx., since all of them share the notion of ACHIEVEMENT OF A PURPOSE.

The Construction Network Reconfiguration Hypothesis

The construction network outlined in section 2.1 is intended to represent the synchronic motivational relations among the *Para Infinitive* constructions. Nevertheless, one could assume that the proposition of the inheritance links between constructions might shed some light on the processes of grammatical change which led to its development in the language.

In order to verify how these constructions emerged in Brazilian Portuguese, I analyzed written data from *corpora* of the Portuguese language ranging from the 13th to the 19th centuries. When possible, I also tried to map the history of the construction back into Latin, a procedure which proved to be very effective in solving apparently unsolvable problems which appear during the analysis.

Among the 11 constructions studied at first, only three appear in the earliest data of Peninsular Portuguese (see Table 1). One instance of the Qualified Purpose Cx. in which the AP is filled by *prestes,* an adjective meaning *'ready'*, also appears[10]. As the centuries pass by, some other constructions emerge, some of the existing ones become more frequent, and one of them disappears.

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[10]   This construction was not found in the data surveyed for the XXI century. However, it is possible to attest some uses of this construction in a Google search. Nowadays, this construction is more common with the preposition *a* in Brazilian Portuguese.

XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX / XXI	◄ CENTURIES CONSTRUCTIONS▼
							25 7.2%	Dative with Infinitive Cx.
				1* 0.0%	1 1.3%	5 7.3%	39 11.2%	Manipulative Cx.
						1 1.4%	20 5.78%	Blended Manipulative Cx.
5 41.6%	4 33.3%	52 82.5%	11 37.9%	21 61.7%	45 61.6%	29 42.6%	55 5,8%	Qualified Purpose Cx.
1* 0.0%	1 8.3%	†	†	†	†	†	†	Imminent Purpose Cx.
							11 1.2%	Volitive Purpose Cx.
5 41.6%	1 8.3%	2 3.1%	2 6.9%	1 2.9%	13 17.8%	18 26.4%	51 14.7%	Possessive Abilitative Cx.
		1 1.5%	3 10.3%	5 14.7%	4 5.4%	5 7.3%	51 14.7%	Existential Abilitative Cx.
						1 1.4%	60 17.3%	Modal Cx. with Dar
2 16.6%	3 25.0%	7 11.1%	10 34.4%	4 11.7%	5 6.8%	7 10.2%	30 8.6%	Modal Cx. with Ser
	3 25.0%	1 1.6%	3 10.3%	3 8.8%	4 5.4%	1 1.4%	3 0.8%	Imminence Cx. with Estar
							1 0.3%	Aspectual Cx. with Dar
12 100%	12 100%	63 100%	29 100%	34 100%	73 100%	68 100%	346 100%	TOTAL

Table 1: Diachronic distribution of type and token frequency for the *Para Infinitive* Constructions

Table 1 presents the timeline for the *Para Infinitive* constructions. For each century, the number of tokens found for each construction is presented. An * following the number 1 indicates that the construction was not found in the *corpora* originally chosen for that century, but could be found in other texts of the same time period. A † indicates a dead construction.

From Table 1 it is possible to notice that the *Para Infinitive* Cx. have undergone an outstanding process of increase in type frequency. The four constructional patterns found in the 13th century turn into five in the 14th; six in the 17th; seven in the 19th; finally reaching the 11 current patterns in the 21st century.
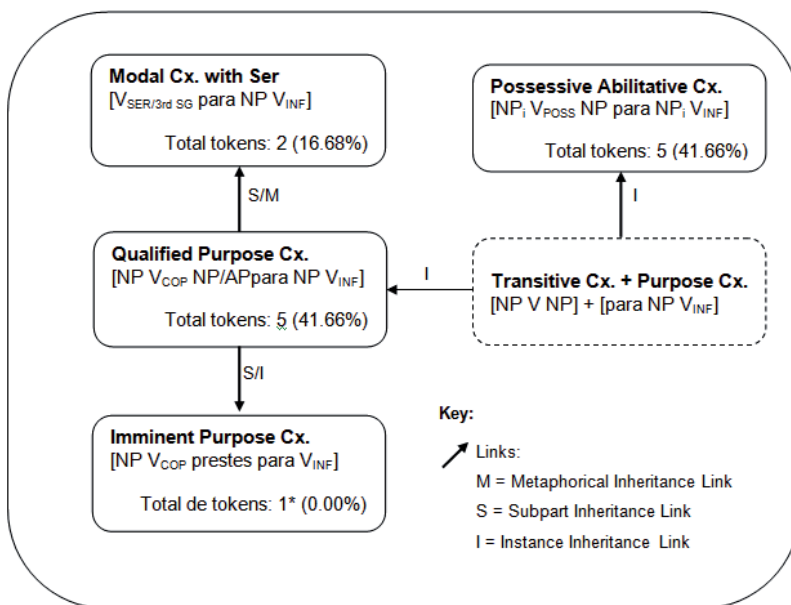
Figure 2: The network in the 13th century.

I have already claimed elsewhere (TORRENT, 2007; 2009b) that the emergence of the *Para Infinitive* constructions is related to the fixation of some syntagmatic association patterns between the Transitive Cx. *[NP V NP]* (or the Transference Cx.) and the Purpose Cx. *[para NP V_{INF}]*. This last Cx. was very frequent in Portuguese since the 13th century and was very commonly associated to the Transitive Cx., which is an extremely open argument structure Cx., allowing almost any verb to fill the V slot. The syntagmatic association between these two patterns may have motivated some specialized uses (or instances) of the *[NP V NP] + [para NP V_{INF}]* combination. Such specialized combinations developed also specialized meanings, becoming the Qualified Purpose Cx. and the Possessive Abilitative Cx.

Thus, since the Qualified Purpose Cx. and the Possessive Abilitative Cx. profile some very specific verb types for the V slot and also have a very specific semantic counterpart, and since the role of the Purpose Cx. in motivating the *Para Infinitive* network is still very prominent, I argue that the syntagmatic association between the Transitive Cx. and the Purpose Cx. (represented inside dashed lines) functions as a sort of prototype from which the 13th century network is structured (see Figure 2).

It is very important to state that the inheritance links posed for the network in Figure 2 – as well as those which will be posed in the following ne-

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11   *In previous works (TORRENT, 2009b) I developed the Constructional Convergence Hypothesis, according to which "historically unrelated constructions can take part in a both formally and functionally motivated network via the overgeneralization of a surface form and its corresponding semantic structure to other constructional domains."*

tworks – may not parallel the language change processes which gave rise to the constructions in the network. As shown in previous works (TORRENT, 2008; 2009b), if one analyzes the history of, for example, the Modal Cx. with *Ser* and the Possessive Abilitative Cx. before the 13th century, one will find these constructions to be already constituted since Latin. Moreover, the fact that they are a part of the *Para Infinitive* family of constructions is due to a series of grammatical changes which caused two different constructions from Latin to converge into this family. [11]

The Modal Cx. with *Ser* has its origins in the Dactiuus Auctoris Cx., which, according to Ernout and Thomas (1953, p.74), is a "dative which complements the verbal adjective in –ndus: it is a dative of interest indicating the person to whom a certain obligation is directed". They also point out that, in this construction, the dative element is, at the same time, the recipient and the agent. Such characterization fits the semantic properties of the Modal Cx. with *Ser*, since the NP introduced by *para* encodes the person to whom the obligation is bound and also the one supposed to perform an action which is able to satisfy it.

If one considers the grammatical changes in the Latin verbal system in its evolution into Portuguese, the formal similarities between the two constructions emerge lively. The Dactiuus Auctoris Cx. was filled by a gerundive. This nominal form, according to Faria (1958, p.458), was used for the infinitive (or gerund) when the verb was linked to a dative form, since the infinitive was used with the nominative case. As the Portuguese verbal system substitutes the gerundive by the infinitive, and marks the dative case with *para*, it is possible to claim that the contemporary Modal Cx. with *Ser* is nothing but the Dactiuus Auctoris Cx. after the series of grammatical reorganization processes which changed Latin into Portuguese.

The scenario is quite similar for the Possessive Abilitative Cx., which can be found in Latin dictionaries under the entry *hăbĕo* (*'have'*):

> **hăbĕo** , ŭi, ĭtum, 2 (archaic I. perf. subj. habessit, Cic. Leg. 2, 8, 19; inf. haberier, Plaut. Mil. 2, 6, 111), v. a. and n. etym. dub.; cf. Gr. κώπη, handle; Lat. capio; Germ. haben, Haft; Engl. have, to have, in the widest sense of the word, to hold, keep, possess, cherish, entertain, occupy, enclose, contain (cf.: teneo, possideo, etc.). (…)
> **(b). With inf. (analog. To the Gr. ἔχω), to have something to do, be able to do something: "habeo etiam dicere quem contra morem majorum dejecerit, etc.," Cic. Rosc. Am. 35, 100: "de re publica nihil habeo ad te scribere," id. Att. 2, 22, 6.** (LEWIS & SHORT, 1879)

Note that the authors already present a syntagmatic combination (construction) involving *hăbĕo* and an infinitival clause (*de re publica nihil habeo ad te scribere* – *'I have nothing to write you about the public matters'*). Also, the fact that an infinitival clause profiled by a Possessive Cx. was, in Latin, a way of indicating the ability to perform an action constitutes enough evidence to pro-

pose that the contemporary Possessive Abilitative Cxs. in Brazilian Portuguese is historically related to it.

The fact that all of these constructions with completely different origins can figure in a same family (or network) is possible because, unlike linguists, speakers do not know the history behind constructions. All they can access is the formal and functional properties of each construction, and, from those properties, the motivation relations between constructions.
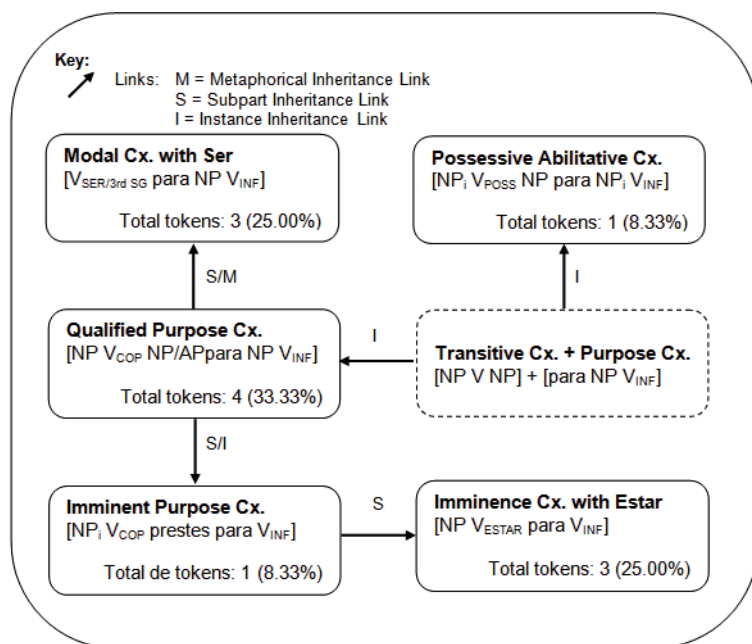

Figure 3: The network in the 14th century.

However, there are some cases in which language change, specifically, grammaticalization processes can add constructions to a network in a way that the inheritance links in it parallel the historical trajectory of the construction. This is the case of the emergence of the Imminence Cx. with *Estar* in the 14th century (see Figure 3).

The Subpart link connecting the Imminent Purpose Cx. to the Imminence Cx. with *Estar*, as well as the Subpart and Instance links connecting the first to the Qualified Purpose Cx. are synchronic effects of a diachronic grammaticalization process whose source is the Qualified Purpose Cx.

In such process, the Qualified Purpose Cx. filled by *prestes* in the AP slot, seen in (12), develops its own semantic counterpart, giving rise to a new pattern, the Imminent Purpose Cx., seen in (13).

(12) [O dito Matrtin queixada protestou dizẽdo perdãte mỹ dito Tabelyõ que]
[The man known as Martin queixada protested saying to me, the notary, that]
el   prestes   staua pera filhar o testemũyho
P3-NOM ready be-P3/PAST for take-INF DET testimony

he was ready to testify
[polas ditas donas asi como era cõteudo eessa carta del Rey que o dito Martim queixada mostraua. E o Alcayde da Azãbuia nẽ seus enqueredores nẽ seu escriuã nẽ outrẽ por el nõ ueerõ nẽ pareçerõ perdãte mj̃.]
[in behalf of the ladies as it was stated by a letter written by the King, which Martim queixada was showing. And neither the judge of Azambuja nor his inquirers, notaries, or anyone else came to my presence.]
(CP-13th)

(13) [E envyou dizer dõ Johã Afonso a el rey per Ruy Dias Cabeça de Vaca, seu mordomo moor, que el se tornara cõ seu reçeo, por que lhe disserom que algûus seus privados ho avyã mal ẽformado dele, pero que, se algûus dissessem que ele avya errado contra el rey, que]
[And Dom João Afonso made Ruy Dias Cabeça de Vaca, his major butler, tell the king that he was worried again, for people told him that he was misinformed by some of his men. However, if someone say that he had come against the king, that]
dõ Johã Afonso estava prestes pera se salvar
Dom João Afonso was-3rdsg ready for 3rd-self save-INF
Dom João Afonso was ready to be saved
[na maneira que el rey mãdasse, ca ele sabya bẽ ca desde sua moçydade ho tiinha bẽ servydo]
[in the way that the king ordered, because the king knew well that, since he was young, Dom João had been serving him kindly] (CP – 13th)

Note that, in (12), the adjective can be in fact interpreted according to its lexical meaning. Martin is representing some ladies in court and protests because neither the judge, nor anyone who could represent him, was present so as to take the testimony he was ready to give. The interpretation of imminent aspect is quite unlikely in this context, since Martin cannot testify without the presence of the judge.

In (13) it is already possible to infer some sense of imminence, since as soon as João Afonso receives orders from the king, he will fulfill them in order to be forgiven. The notion of imminence seems to be extended from the meaning of *prestes* combined with the notion of purpose coded by the *para infinitive* schema.

Example (14) shows the already changed pattern. The adjective is no longer present and the notion of being ready no longer available. On the other hand, the aspectual meaning of imminence is now clear. Data from the 14th and from the following centuries confirm the fixation of the Imminence Cx. with *Estar* in this current form.

(14) [E aconteceo que se feriron ambos e foy dom Nuno ferido no rostro e]
[And it happened that they both got injured and Dom Nuno was injured in the face and]
esteve pera se vencer,

was-3[rd]sg for 3rd-self win-INF
was about to be defeated,
[por que dom Henrrique e os seus pelejavõ muy fortemente.]
[because Dom Henrique and his companions fought very bravely.]

The process just described is a classical instance of grammaticalization. A more lexical pattern changes into a more grammatical construction. The copula changes into an auxiliary and become deeply entrenched with the infinitive in one single clause. The five Principles proposed by Hopper (1991) for the grammaticalization process hold for this case. Firstly, the Stratification Principle applies whilst the new emergent aspectual marker also becomes a member of the category of the previous aspectual markers of Portuguese. It interacts with those constructions and establishes with them another network. As for the Divergence Principle, it is maintained by the fact that the Qualified Purpose Cx. can still be used with the adjective *prestes*, as it has been since the 13th century. Specialization is observed for the complement of *prestes* could either be introduced by *para* or *a.* However, only the construction with *para* undergoes grammaticalization, probably due to the semantic properties of the *para infinitive* schema. As for the principles of Persistence and Decategorization, they are also easily noticeable, as long as the notion of ACHIEVEMENT OF A PURPOSE is maintained and the copula is changed into an auxiliary.

Such grammaticalization process reorganizes the network in the 14th century, supporting the hypothesis developed in this paper. Similar reorganizations take place in the 15th century (Figure 4), 17th century (Figure 5) and in the 19th (see Figure 6). All of them can also be related to some grammaticalization process, however, such processes are less advanced than the one just described.
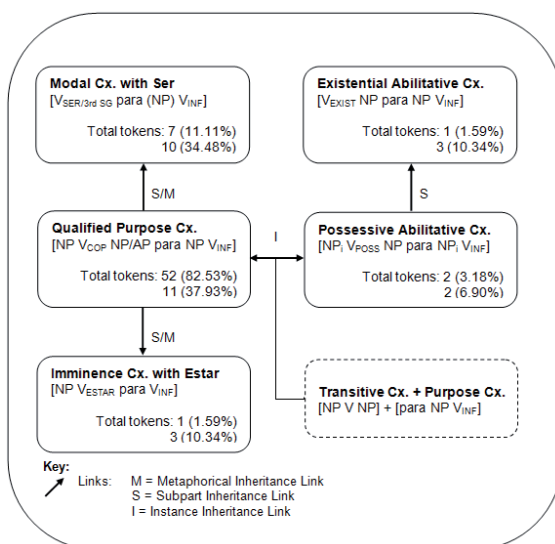

Figure 4: The network in the 15th and 16th century. Token frequency is presented for each century, respectively.

In the 15th century the Imminent Purpose Cx. has already disappeared and a new pattern emerges. Due to the change of verbs of possession into subjectless verbs of existence in Portuguese, the Existential Abilitative Cx. rises from the Possessive Abilitative Cx. The Subpart link connecting them can also be seen as a byproduct of grammatical change: since the Possessive Cx. changes into a subjectless Existential Cx., the subject NP is erased.

The changes observed form the 17th to the 19th century seem to involve the cline of clause-combining constructions: PARATAXIS > HYPOTAXIS > SUBORDINATION (HOPPER & TRAUGOTT, 2003 [1993]). In the 17th century, the Manipulative Cx., which takes the *para NP infinitive* as a complement, emerges due to the fixation of a syntagmatic combination between the Transitive Cx. – filled in V by a verb of manipulation – and the Purpose Cx., an adverbial clause, hence, from the point of view of the grammaticalization of clauses, the pattern moves from hypotaxis to subordination.
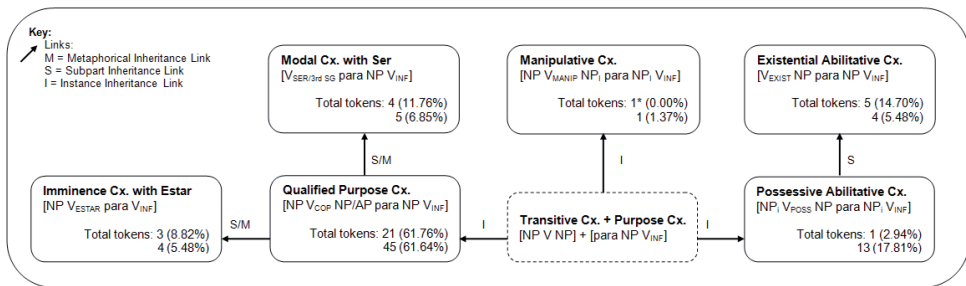

Figure 5: The network in the 17th and 18th century. Token frequency is presented for each century, respectively.

New reorganization of the network happens in the 19th century, due to the evolution of the grammaticalization process which gave rise to the Manipulative Cx. Since the second and the third NPs of the Manipulative Cx. tend to be coreferent, the process advances towards blending those two NPs in only one, which takes the roles of both Manipulee and Agent.[12]

Other reorganizations take place in the *Para Infinitive* construction network. Some of them are due to constructional convergence, such as the emergence of the Modal Cx. with *Dar* (see TORRENT, 2007; 2009b); some are due to the opportunistic blending (see FAUCONNIER & TURNER, 2002) of the Purpose Cx. with the Transference Cx., such as the Dative with Infinitive Cx. (see TORRENT, 2008; 2009b); and some may indicate the beginning of new grammaticalization processes, such as the Aspectual Cx. with *Dar* and the Volitive Purpose Cx. In spite of the motivation which leads to the reorganization, it is important to notice that:

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[12]   For a more complete and exemple-based analysis of such process, refer to previous works, such as: Torrent, 2009b.

(i) construction radial networks change over time, being reorganized every time a new pattern emerges;

(ii) such reorganizations do not follow linear unidirectional clines which account for all of the constructions in the network;

(iii) grammaticalization processes may give rise to new constructions which may establish inheritance relations with the source constructions they are historically related to, however, it is impossible to state that every inheritance link parallels a language change process.
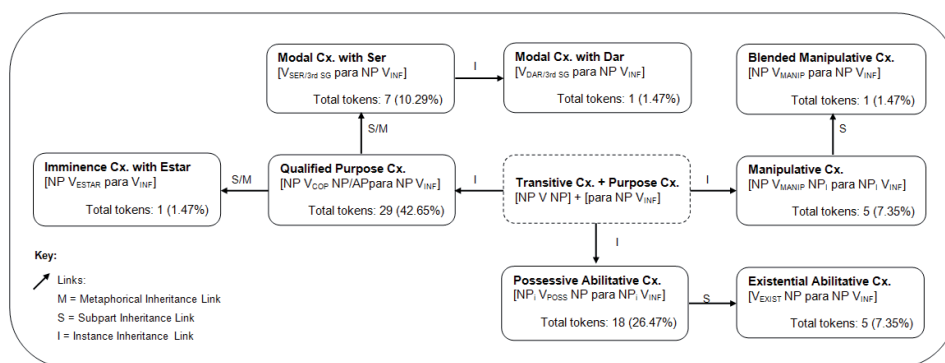

Figure 6: The network in the 19th century.

Conclusions

In this paper I argued in favor of the Construction Network Reconfiguration Hypothesis, which states that construction networks may have their inheritance links changed over time due to the emergence of new constructions via grammaticalization. In order to support this hypothesis, I analyzed the history of the *Para Infinitive* family of constructions. I showed that, from a network of four constructions in the 13th century, such family expanded into a set of 11 inheritance-related constructions.

This expansion is due both to the emergence of new constructions via grammaticalization and to the convergence of historically unrelated form and function pairings into the network, according to the Constructional Convergence Hypothesis already developed elsewhere (TORRENT, 2009b).

I also stated that, although some inheritance links parallel grammatical change processes – e.g. the Subpart links which parallel the change of the Possessive Cx. into the Existential Cx. – it is not productive to try to account for every inheritance link in a network as a byproduct of a unidirectional linear cline. Since the speaker is not aware of the history of each construction she uses, it is very unlikely that the generalizations observed by her in language use will reproduce the paths of language chance.

Finally, this paper contributes to the fields of Grammaticalization and Construction Grammar, since it presents one hypothesis which can deal with both the synchronic inheritance links between constructions in a radial ne-

twork and the diachronic language change processes, which tend to be conceived as unidirectional linear clines. ⊠

TORRENT, T. T. A HIPÓTESE DA RECONFIGURAÇÃO DAS REDES CONSTRUCIONAIS

Resumo
Neste trabalho, desenvolve-se a Hipótese da Reconfiguração das Redes Construcionais, segundo a qual as redes construcionais podem ter suas relações de herança alteradas ao longo do tempo devido à emergência de novas construções por via de gramaticalização. Para demonstrar tal hipótese, investiga-se, em uma abordagem diacrônica, a configuração, no Português do Brasil, de uma família de 11 construções, as quais compartilham o esquema sintático para infinitivo e algum aspecto do frame de finalidade. Apresenta-se uma análise baseada em corpus das relações de herança encontradas entre as construções no PB atual, as quais são responsáveis pela configuração de uma rede radial. Ainda, investiga-se a história de cada uma das construções, desde o Português Medieval até o PB. Essa análise sustenta a ideia de que, ao longo do tempo e devido a processos de gramaticalização, novas construções em para infintivo vem sendo incorporadas a uma rede original de quatro construções. A emergência desses novos padrões promove a reconfiguração das redes em cada século, sendo capaz de mudar mesmo o protótipo a partir do qual a rede radial se organiza.
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Palavras-chave
Gramática das Construções; Gramaticalização; Herança; Mudança; Construções Para Infinitivo

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