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Dossier

Brazilian academic english and distribution of binomial possessives: A diasytematic analysis

Inglês acadêmico de estudantes brasileiros e a distribuição das possessivas binominais: uma análise diassistêmica

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ABSTRACT

How is contact-based linguistic representation cognitively organized? Diasystematic Construction Grammar (DCxG) predicts that, in an integrative network, we may (over)generalize commonalities between systems in contact while also efficiently mapping linguistic units onto their more adequate context of use. We zoom in this broad issue considering one linguistic phenomenon: the distribution of the possessive binominal constructions, or more specifically, [NP*possessed*] of [N*possessor*]}and {[NP*possessor*] `s [N*possessed*]}. In English as a first Language (EL1), the alternation between these two constructions is regulated by three generals criteria: *animacity*, *size* and *givenness*. In the interface between Brazilian Portuguese as a Native Language (Br-Pt/L1) and English as an additional language (EAL), would EAL speakers behave alike EL1 speakers, once Br-Pt/L1 has only one possessive binomial construction -{[NP*possessed*] de [N*possessor*]}? Hypothesizing there would be a mismatch between EAL and EL1 speakers' distributions due to Pt-Br/L1 interference, we

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carried out a study comparing the EAL and the native speakers` behavior, aiming to assess the contextual appropriateness of EAL generalizations. Initially, we compiled a database of the academic production by UFRJ`s English-major and statistically assessed its (non)convergence with native speakers` behavior. We annotated all instantiations of the possessive constructions in our dataset according to the three criteria presented herein. We, then, conducted a distributional analysis, based on the relation between expected and observed frequencies (EF e OF) and conducted a probabilistic analysis, namely a binomial logistic regression, to measure the statistical probability of these criteria as actual regulators of the alternation in EAL. We found that EAL distributional behavior is empirically convergent with native speakers' tendencies, in different degrees, for all criteria. However, these convergent tendencies are statistically relevant just regarding *size*.

Keywords

Diasystematic Construction Grammar, binomial possessives constructions, linguistic contact.

RESUMO:

Como a representação oriunda de línguas em contato é cognitivamente organizada? A Gramática de Construções Diassistêmica (DCxG) prevê que, em uma rede integrativa, podemos (super)generalizar as semelhanças entre sistemas em contato, mapeando ao mesmo tempo os contextos de uso mais adequado das unidades linguísticas. O presente trabalho se ocupa da distribuição das construções binominais possessivas [NPpossuído] de [Npossuidor] e [NPpossuidor] `s [Npossuído]. No Inglês como Língua Materna (EL1), a alternância entre essas duas construções é regulada por três critérios gerais: *animacidade*, *tamanho* e *status informacional*. Na interface entre o Português Brasileiro como Língua Nativa (Br-Pt/L1) e o Inglês como língua adicional (ELA), os falantes de ELA se comportam como os falantes de EL1, dado que o Br-Pt/L1 possui apenas uma construção binominal possessiva - [NPpossuído] de [Npossuidor]? Hipotetizando que haveria uma divergência entre a distribuição destes dois grupos de falantes devido à interferência do Pt-Br/L1, analisamos o comportamento distribucional dos falantes de ELA, avaliando o seu grau de convergência com o da comunidade nativa. Inicialmente, reunimos a produção acadêmica de alunos de inglês da UFRJ e avaliamos estatisticamente sua (não)convergência com o comportamento dos falantes nativos. Anotamos todas as ocorrências das construções possessivas de acordo com os três critérios apresentados aqui. Em seguida, realizamos uma análise distribucional, com base na relação entre frequências esperadas e observadas (EF e OF), seguida por uma análise probabilística, uma regressão logística binomial, para medir a probabilidade estatística de esses critérios também serem

reguladores reais da alternância em ELA. O estudo mostrou que o comportamento distribucional do EAL é empiricamente convergente com as tendências dos falantes nativos, em diferentes graus, para todos os critérios. No entanto, essas convergências são estatisticamente relevantes apenas para o critério *tamanho*.

Palavras-chave

Gramática Construcional Diassistêmica, construções possessivas binominais, contato linguístico.

Introduction

Usage-based Construction Grammar has Diasystematic Construction Grammar (DCxG) as one of its affiliated models. Captained by Stephen Höder (2012; 2014), the model provides us with theoretical-analytical tools specifically applicable to linguistic contact. DCxG advocates for an encompassing multilingual *constructicon* to account for the speakers` whole linguistic experiences and postulates same-cognitive-nature symbolic units: idioconstructions (which are language-specific) and diaconstructions, which are language-shared. Aligned with this theoretical model, the present study analyzes the competition between English binomial possessive constructions (namely {[NP possessor] `s [N possessed]} and {[NP possessed] of [N possessor]}) in the following interface: English as an Additional language, spoken by speakers of Brazilian Portuguese as a Native Language (Br-Pt/L1). In English as a native language (EL1) setting, Stefanowitsch (2020) claims that this competition is ruled by three guiding criteria applied on the possessor elements: ANIMACY, GIVENNESS and SIZE. According to the author, animate, short and given referents favor the use of {[NP possessor] `s [N possessed]}, while the alternating scenario prefers the postnominal construction. Having in mind the fact Br-Pt/L1 has only one possessive binomial construction, we ask how these English constructions in competition are distributed in the aforementioned EAL x Br-Pt/L1 scenario. Likewise, we aim to understand to which extent this distribution translates probabilistic relationships between guiding criteria and constructional choices.

To reach our goals, we have compiled a specialized *corpus* of academic EAL English (with texts from Br-Pt/L1 speakers) (cf. Reppen, 2010). Once our *corpus* was compiled, we conducted a distributional analysis in terms of raw frequencies and observed/expected frequencies relations to visualize the distributional tendencies in our *corpus*. Yet, in order to measure probabilistic relations underlying our distributional outcome, we carried out a binomial logistic regression. We hypothesized EAL speakers' linguistic production would, in distributional terms, match the EL1

overall tendencies for SIZE and ANIMACY. However, they would diverge in terms 'of GIVENNESS. What we actually found is that, to different degrees of statistical relevance, all distributional patterns converge to EL1 tendencies and this state of facts is in agreement with the results of our probabilistic analysis.

Theoretical framework

Construction Grammar is a family of taxonomically arranged models which seek for enhancing accountability in terms of grammar representation (cf. Pinheiro, 2016). This family of models branches out towards Usage-based Construction Grammar, which stands for those constructionist proposals aligned to the background assumption of situated use as constitutive of linguistic knowledge representation (cf. Barlow; Kemmer, 2000; Boyland, 2009; Bybee, 2010; Diessel, 2019; Tomasello, 2005). In that regard, Ibbotson (2013, p. 1) synthesizes the integrating bedrock on which all Usage-based models stand: "knowledge of a language is based on knowledge of actual usage and generalizations made over usage events".

Höder`s Diasystematic Construction Grammar (DCxG) (Höder, 2012; 2014) is an example of a Usage-based Construction Grammar specific proposal. According to the model`s nurturing assumptions, constructions may be defined as conventional bidimensional units, form-meaning pairings which encompass the speaker´s cognitive perception of experientially-grounded linguistic units, in an ongoing updating fashion (Croft, 2001; Goldberg, 2003, Langacker, 2008). Such constructional units coexist with other representations and are cognitively arranged as nodes of a network (Diesel, 2019) in our hyperdimensional conceptual space (Goldberg, 2019). The network, conventionally referred to as *constructicon*, encompasses all the speakers' knowledge of the language(s) they have been experiencing throughout life (Goldberg, 2003; Hilpert, 2014).

These symbolic units also vary in degrees of schematicity, compositionality and productivity (see Traugott and Trousdale, 2013), which could each be defined as gradual properties instead of clear-cut categories (Furtado da Cunha, Silva and Bispo, 2016). We would like to briefly highlight the notion of schematicity, which will be referred to in our analysis. The concept of schematicity is directly proportional to the level of generalization complexity. The higher the constructional node is in the network, the more generalizations were made over more specified constructions at a lower level. Thus, schematicity is a gradation ranging from fully specified constructions to fully schematic ones (cf. Traugott; Trousdale, 2013; Furtado da Cunha; Silva; Bispo, 2016). However, one might ask: How does cognition organize (linguistic) experience when the speaker is immersed in a language-contact situation? According to Höder (2012), we have language-specific constructions (idioconstructions) as well as language-shared constructions (diaconstructions). Here, a bit of caution is needed:

the distinction signaled herein is not about the cognitive nature of constructions. Both types emerge from the same cognitive processes initially applied for L1. As previously anticipated, these constructional units coexist in a multilingual and multidirectionally-organized construction, that is: diaconstructions tend to figure at more abstract levels of the taxonomy whereas idioconstructions are, in general, placed below (which signals a greater level of form-meaning linguistic specificity) (cf. Höder, 2012; 2014; Hilpert, 2019; Höder; Prentice; Tingsell, 2020).

Up to this point, having laid out the epistemological tenets of DCxG as a model for grammatical description, we turn our attention to our possessive binomial constructions, namely: {[NPpossessor] `s [N possessed] and {[NPpossessed] of [N possessor]} as in, respectively, "*the city`s museum*" and "*the museum of the city*" (Stefanowitsch, 2020, p. 142 - emphasis added). These possessive constructions can materialize, in semantic terms, multiple possessive relations (Langacker, 2009) but how are these multiple meanings linked to the same linguistic units? In this regard, Stefanowitsch (1998) summarizes the discussion by presenting the most widespread proposals regarding this semantic-constructional productivity. Two of them are particularly relevant to our research context: (i) The existence of a general meaning "which covers all the relations" associated with each of the constructions in question. To this end, this meaning must be "highly abstract" (p.2); and (ii) "A basic meaning is postulated, from which all other meanings can be derived in some way" (p. 2). For this proposal, we are dealing with a semantic multiplicity made possible by polysemy.

In line with proposal (i), possession is aligned with the cognitive skill of reference point (cf. Langacker, 2009). Langacker (1995) claims that the multiplicity of possession relations can be traced back to an abstract meaning, derived from an integrating cognitive reality that gives them cohesion: the *point of reference ability*, seen by the author as an integrative aspect of our mind`s *modus operandi*. It is a cognitive maneuver through which an entity is evoked to facilitate access to another that is in its conceptual domain. Yet, for the polysemic approach sketched above, possession is a prototypical relation of meaning in relation to which other meanings emerge and are evoked by the same linguistic resource. This prototypical relationship carries a basic meaning, through which other meanings are constituted by means of (i) metaphorical links, that is,referents associated with one domain are interpreted by means of another (Nikiforidou, 1991) or by (ii) similarity (Taylor, 1989). In dialogue with Taylor`s ideas, Heine (1997, p. 34) postulates a set of seven notions of possession arranged on a scale of prototypicality. For the sake of space, we will briefly state these notions were important to help us discern over the inclusion of some occurrences in our *corpus* (see more on Heine, 1997, p. 34).

It is important to know that such constructions are in competition, fighting for prominence in somehow alike communicative contexts (cf. Goldberg, 2019). Thus, provided there is not any extra competition-hindering factor, native speakers of English choose between them in terms of linguistic tendencies rather than mutually excluding alternatives. Additionally, Lisboa Jr (2019) sets out to analyze the semantic structure of the Portuguese binomial possessive. The researcher points to a systemic difference between English and Portuguese: while the former adopts a strategy of "heterosemy", with two "linguistic resources" to encode the relations of possession (alienable and inalienable) (Lisboa Jr., 2019, p. 179), the latter already uses, in an economical way, a single morpho-morphemic structure to express the same relations.

For the sake of illustration, speakers of English prefer {[NPpossessor] `s [N possessed] when the possessor entity (*Mr. Booby*, in the subsequent example) is animate (cf. Stephanowitsch, 2020). Examples in our database capture such preference, as in "*In this scene, which takes place after Joseph's accident after heading to* ***Mrs. Booby's home parish****, the narrator shows what he considers relevant in the story and what not"* (5A.5.Lit). On the flip side, inanimate possessors (*Verona,* in our following example) signal greater choice probability towards {[NP possessed] of [N possessor]}, as in *The plot in the play "Romeo and Juliet" portrays that, in the sense that both families – the Montagues and the Capulets – fight day after day just to ensure their power in* ***the streets of Verona***. Yet, Brazilian Portuguese instantiates both in/animate referents via the same possessive construction {[NP possessed] de [N possessor]}, as in Lisboa Jr`s example of an inanimate possessor "*os armários da* ***cozinha***" (the cupboards of the kitchen - kitchen being the possessor) and in his animate example "*o filho de Trump" (The son of* ***Trump****)* – see Lisboa Jr. (2019, p. 191 and 195 for, respectively, each example retrieval). As the languages at issue deploy these two different strategies, how do Brazilian EAL speakers` manage the binomial possessive competition in English? Do they deviate from the native-speaker community? If so, could it be attributed to their "one-and-only" binomial possessive construction?

Methodological procedures

In this study, focusing on the competition between English binomial possessives in the Br-Pt/L1 - EAL contact setting, we aim at understanding whether, in the case of EAL, the distribution of the alternating possessive binomial constructions is in accordance with the tendencies already documented for English as a Native Language (EL1). Stefanowitsch (2020) summarizes what seems to be a consensus regarding the factors that influence this alternation. He provides us with three guiding factors: *animacy*, *informational status* and *size*, all referring to the possessor element and operating not in categorical terms but as signaling mapping-tendencies between

constructional options and contextual scenarios. Thus, we have (i) ANIMACY (animate, inanimate), (ii) GIVENNESS (given, new) and iii) SIZE (short, long). In each of the pairs above, the elements to the left favor the choice of {[NP possessor] `s [N possessed]}. On the other hand, the values to the right create a context of preference for {[NP possessed] of [N possessor]}.

Based on the trends presented above, we turn to the context of alternation between binomial possessives in EAL with the following general questions: i) *in a contact situation (specifically in the case of EAL speakers who are native speakers of Br-Pt/L1), does constructional-choice behavior empirically converge with native speakers` behavior*? Also, *is this convergence random or motivated by each criteria*? In case of the second scenario, *to which extent can we relate constructional alternation to the guiding criteria presented herein*? Before presenting the general hypothesis of this study, it is important to anticipate the theoretical reasoning behind it:

Given the associative nature of our memory, the approximation between exemplars of {[NP possessed] of [N possessor]} and {[N possessed] de [NP possessor]} in the same exemplar clustering finds theoretical support due to the following crucial factors: the formal and semantic similarity between the two constructions and, equally, the speaker`s cognitive ability of establishing analogy links via interlingual association (cf. Hilpert, 2019). Likewise, (ii) overall contextual features shape the situational environment in which (linguistic) symbolization takes place. In the case of late-learning contact (Freitas Jr *et al*, 2021) and in Brazilian educational environments, the context of animate referents is explicitly associated with {[NP *possessor*] `s [N possessed]}. Furthermore, (iii) English presents a general tendency to place heavier pieces of information to the end of sentences (Yule, 1998).

In view of the above, we have formulated our general hypothesis: *in our specific Br-Pt/L1 and EAL contact interface, Br-Pt/L1 representations will, via analogy, play a role in guiding constructional choice towards {[NP possessed] of [N possessor]} when it comes to both internal values of GIVENNESS. However, when it comes to SIZE and ANIMACY, the distributional outcome will be native-convergent. Additionally, we believe these distributional outcomes are not random but rather reflect the probabilistic relations at play, which regulate the mapping between constructions and their preferable contexts*.

Moreover, the general objectives of this study are (i) to quantitatively measure the behavior of EAL, native speakers of Br-Pt/L1 in relation to each guiding criterion of the competition between the English binomial possessives, and (ii) assessing how relevant, probabilistically speaking, these criteria are in terms of constructional choice outcome. In order to achieve the proposed objectives, we conducted a specialized *corpus* analysis in the following phases, outlined in chronological order: in phase I, we compiled academic texts in EAL, written by English/Portuguese undergraduates at the Federal University of Rio de Janeiro. In phase II, we gathered all the occurrences

of binomial possessives from these texts and designed our specialized *corpus* (BiPoEAL - Binomial Possessives of English as an Additional Language)**1**. The study culminates in a statistical analysis (phase III) of both EAL choices in a scenario that licenses constructional alternation and the probabilistic dynamics underlying such choices. Finally, it is worth mentioning that the distributional (non)randomness of the constructions in relation to the criteria will be measured by contrasting the observed and expected frequencies of occurrence of the two constructions and the relevance of such criteria will be measured in probabilistic terms. The following sections deal with the details of the phases mentioned above. Let us start with the compilation of academic texts (phase I).

Compiling the bank of academic texts (phase I)

The students who agreed to take part in the research, after signing a consent form, sent their texts to the researcher' s institutional email address. The texts received were screened according to a set of criteria, numbered as follows: first, (i) Texts must be individually authored. Also, (ii) Speakers should only know the languages involved in the contact situation (EAL and Br-Pt/L1); (iii) The texts must be related to the students' academic production for specific subjects; (iv) The textual productions must come from a genuine context of interlocution: they must have been submitted to the assessment of the teacher responsible for the subject in question, with the communicative aim of attesting to technical knowledge in a given subject (cf. Silva, 2017). We also decided (v) the work must have been evaluated with a satisfactory grade for approval; (vi) Up to 4 (four) texts per participant. The texts must total a maximum of 16 pages (counted from the beginning of the running text, disregarding the pre- and post-textual portions). The total flow of texts received amounted to 98 (ninety-eight) academic assignments. Out of this total, 43 texts are part of our online text database and 45 were excluded due to non-compliance with one (or more) of the above criteria. Once the database was organized, the second stage of the study followed: the compilation of a specialized *corpu*s with only constructs of the competing binomial possessives.

Compiling and annotating the specific *corpus* (phase II)

In phase II of our study, each of the texts included in our database was read carefully, at least twice, and the occurrences of both binomial possessives in them were gathered into a *corpus,* the *BiPoEAL (Binomial Possessives in English as Additional Language)*. Considering that the presence of the morphemes -`s and -of cannot stand as a single criterion for identifying a binomial possessive construction, their presence must be combined with a set of criteria which ensure that we are dealing with the

[1] Corpus available at https://docs.google.com/spreadsheets/d/11shscRnCYVq2bdvJxKE7KrPpmK7d-ZSZ/edit?usp=sharing&ouid=115122435687527121619&rtpof=true&sd=true

constructional templates we are interested in and whose possibility of alternation is guaranteed (cf. Stefanowitsch, 1998). Thus, the reliability of our results depends on the coherent identification of our constructions. Consequently, we have developed some criteria for constructional mapping, guided by the concept of construction as a pairing of form and meaning. The context in which our possessive occurrences were found must allow the alternative use of the correspondent construction. So, we excluded those cases in which the competition between the binomial possessives is restrained by intervening factors that do not interest us for the purposes of this research.

Below is a summary of these mapping criteria and, whenever possible, we illustrate each of them with binomial examples from the excluded texts from phase I. When we deem it necessary and if no satisfactory example has been identified, we come up with an example for illustration purposes (marked in brackets). Finally, the criteria below are a combination of Biber (1999) and insights from our analysis, emerging as answers we found to problems posed by more challenging data to discern. Let us start with the first one: (i) Binomial occurrences could not be examples of attributive constructions such as in "*She also shows how Clarice's legacy is marked in a material way, through statues in her honor or through the* ***children's version*** *of her books, for example*" (occurrence excluded). In this type of construction, the modifier is conceptualized not in its individuality/integrity but in terms of one of its specific properties or characteristics. This emphasized property is used to categorize entities (Biber *et al.*, 1999).

In a similar fashion, (ii) occurrences with *-of* cannot appear in a partitive structure and (iii) - *of* cannot be part of a chunk with a cohesive-textual function: *however, the technical procedures of them gave us some trouble not only* ***because of*** *the online platform to which we were not accustomed, but also due to the tools involved in the edition of the archives* (occurrence excluded). Likewise, (iv) the morpheme in question cannot appear in any chunk arrangement: *Partoor points out the ambiguity of the situations that the QAnon supporters claim to be undeniable proof of Trump's link to their cause, markedly,* ***the lack of*** *direct endorsement of their presence on his rallies* (occurrence excluded). Yet, (v) even when possessive, the construction cannot present two coordinated possessor names (this coordination would cast doubt on which name was more salient for the constructional choice): *While Pamela is a story that focuses more on t****he development of characters and their characteristics****, Joseph Andrews focuses on the development of the story* (occurrence excluded)). What is more, (vi) When the same possessor name has already appeared in the context of the same binomial possessive and within the same text, this occurrence could not be computed (this helps to mitigate any priming effects that may act within constructional competition beyond our three guiding *criteria*); and (vii) When alluding to a categorization, the occurrence was excluded: *In this essay, it will be argued that Joseph Andrews by Henry Fielding is* ***an example of***

an anti-realistic novel*, justifying this argument by comparing its narrating strategy to the one presented in Pamela or Virtue Rewarded by Samuel Richardson* (occurrence excluded).

Additionally, occurrences, even when *de facto* possessive, have been excluded when the use of the alternating binomial construction is ungrammatical: a friend of mine x mine`s friend (illustrative example created); (ix) When the constructional alternation results in a substantial change of meaning and semantic parity cannot be ensured, we exclude the occurrences. Likewise, (x) uses of conventionalized constructs were excluded: *The first two images are of the same character role (the princess) in two different games of* ***the Prince of Persia*** *series, one of 1989 and the other from 2008* (occurrence excluded) (*criterion* in line with Rothlisberger and Schneider, 2013).

We also ruled out (xi) Cases in which both the possessor and the possessed refer to abstract entities (cf. Heine, 1997): the possessor needs to be a concrete element. *Firstly, the Anglo-Saxon brought to Britain the runic alphabet which was designed for* ***Germanic languages' phonology*** (occurrence excluded). Furthermore, we excluded cases where there is a mismatch between the semantics of the instantiated name and the semantics of the constructional slot within the possessive relation: *Do learners should sound like native speakers? Are native speakers* ***the real owners of English****?* (occurrence excluded). In the example presented here, the nominal slot to the left suggests a relational role of possessed. However, on a lexical level, the term recruited carries with it the semantics of possessor. We also decided to excluded (xiii) Possessive constructions that occur in the context of citation/academic referencing. Similarly, in line with Rothlisberger and Schneider (2013), (xiv) elliptical or pronominal occurrences of the constructions were discarded and (xv) collective possessors have been ruled out. This is because of the possibility of conceptualizing the possessor as a unitary reference or as a group of individuals cohesively referenced by a single term (cf. Celcie-Murcia; Larsen-Freeman, 1999): *Moreover, the naturalization of* ***elite's power*** *over poor people (...)* (occurrence excluded);

Finally, we disregard (xvi) possessive cases in which competition between constructions is hindered by some intervening syntactic factor. In these cases, alternation would cause semantic-syntactic ambiguity: *The novel comes to an end, but* ***Karim's quest for identity*** *does not because it will never be over* (occurrence excluded). Alternating the construction in question would result in the formation *the quest for identity of karen* and the syntactic scope of *of karen* can be related to either quest or identity. Moreover, (xvii) regarding the semantics of the binomials spotted in phase 1, they would only be considered possessive if they instantiated any of the seven notions of possession systematized in Heine (1997) (see chapter 2). Next, the *corpus* was annotated for the guiding criteria of behavior present in Stefanowitsch (2020), as set out in the section below.

Corpus annotation criteria

From now on, we present our operationalized definition for each of the guiding criteria. This operationalization was necessary to ensure the uniformity of the data, since the multifaceted nature of use imposes severe restrictions on any generalist and watertight classification.

Animacy

In interaction with the traits we identified in the data and the contribution of Stefanowitsch (2019, p. 98-99), we established a set of characteristics that animate possessors must present: (i) be conceptualized as human (with characteristics of human cognition), (ii) be identified with its own reference, without the need of leaning on some other entity for referential purposes (iii) present volition, (iv) be alive. All these traits must be identified via the context of use and the more [+] traits a referent has, the more prototypically animate it is. Trait (iv) is imperative and the assessment of all the criteria is subject to the pressures of the context presented. To illustrate the importance we have given to context, let us look at the following data (reference in brackets): *"That is, how factual and palpable the text is for those who are reading it. As writing* ***Pamela's foreword****, Richardson states" (...)* (5A.1.Lit)

In the example above, the possessor (Pamela) would prototypically be identified as **animate**. The linguistic context, however, suggests that we are talking about the preface of a book (which is not endowed with volition, does not have human cognition and is not endowed with life either). Therefore, the referent was classified as inanimate, due to the primacy we give to the context of use. Now, we present our definition for GIVENNESS.

Givenness

To identify the informational status of the possessors, we used the classification explained in Furtado da Cunha (2008). From this perspective, referents can be classified - in terms of their informativeness - as "given, new, available and inferable" (Furtado da Cunha, 2008, p. 166 - emphasis in original). We paraphrase the author's definitions for each of these classifications: the possessor is **given** when its reference has already been evoked previously in textual structure. The given classification can also have "situationally given" referents (Furtado da Cunha, 2008, p. 166). In turn, when the referenced entity appears in the discursive-communicative situation for the first time, it is considered **new**. A referent is considered **available** when it is, as a rule, "a unique referent (in a given context)" (Furtado da Cunha, 2008, p. 166): *These factors end up favoring* ***Jane Austen****'s idealism in maintaining her work in the traditional view of her society*. (12C.3.Lit). When inferable, the referent is not explicitly materialized in the text but can be identified "through a process of inference" and

this occurs "from other given information" (Furtado da Cunha, 2008 p. 166). In line with the author, we have given priority to clues from the materiality of the imminent context, since the writer's prediction about shared knowledge with the interlocutor in the actual production context cannot be accessed precisely. Likewise, as we did in the case of the animacy scale, we reduced this classification to a binary reality for the convenience of our analysis.

Size

The possessor elements were also classified, in terms of **short** and **long**, according to its SIZE. The operationalization of these values was designed according to the prototypical properties of these elements in the syntactic condition of modifiers and measured by word length (grammatical and lexical) (cf. Diessel, 2019). Inspired by the formal descriptions provided by Quirk *et al* (1985), we considered the following two-word structures as the basic morphosyntactic structure of the modifier/possessor: [(DET) + N] and [NAME + SURNAME] and they apply respectively to {[NP possessor] `s [N possessed]} and {[NP possessed] of [N possessor]}. We thus have the following distinction: **short** - with up to two words; whereas **long** has more than two words. The occurrences were finally annotated for the three criteria presented above in a Google worksheet, so that statistical procedures could be coherently applied.

Statistical procedures (phase III)

The first step in choosing the analytical method was to understand the nature of our data. Stefanowitsch (2019) presents three types of data: nominal, cardinal and ordinal. For lack of space, we will limit ourselves to saying that all variables can be treated as nominal if we ignore, for theoretical-methodological reasons, some of their inherent properties. As an example of this group, the author points to the variable CONSTRUCTIONAL CHOICE. They are nominal because we cannot organize a hierarchical relationship between {[NP possessor] `s [N possessed]} and {[NP possessed] of [N possessor]} based on any inner property. Similarly, given their non-numerical nature, it is not possible to directly calculate mean values. We believe it is necessary to justify the choice of treating all the data as nominal: we are interested in the frequencies of occurrence and their distribution arising from the competition scenario in a contact situation. Also, at this point, we are not looking at the detailed properties of each internal value and their possible effects on competition. Therefore, it is desirable to seek maximum methodological simplicity, as long as the strategy answers the research question outlined.

The appropriate statistical treatment for nominal data envolves the preparation of contingency tables, i.e. tables which intersect the occurrences of a guiding criterion (in isolation) to the occurrences of both possessive constructions There are three contingency tables. They illustrate the following relationships respectively:

ANIMACY x CONSTRUCTIONAL CHOICE, INFORMATIONAL STATUS x CONSTRUCTIONAL CHOICE and POSSESSOR SIZE x CONSTRUCTIONAL CHOICE. As all the variables involved in the study are operationalized in binary form, each table has four intersections between its rows and columns, for example, for the ANIMACY X CONSTRUCTIONAL CHOICE table, we have: [animate] x {[NP possessor] `s [N possessed]}, [animate] x {[NP possessed] of [N possessor]}, [inanimate] x{[NP possessor] `s [N possessed]} and [inanimate] x {[NP possessed] of [N possessor]}. As for all calculations, we used the statistical tool *Jamovi*. The subsequent step in the statistical procedures was to check the expected frequency of each intersection in each table and compare them to the frequency actually observed in the data. The expected frequency values are calculated for each intersection of each contingency table (raw frequency) and aim to capture the expected frequency at all the table intersections if the relationship between the variables at stake were random. This calculation is done as follows: we multiply the marginal frequency of each column with the marginal frequency of each row, which are relevant to a given intersection and divide each of these multiplications by the total of the contingency table. These calculation procedures for each intersection are summarized below, according to the Figure 1 presented in Stefanowitsch (2020, p. 156):

Above are the calculation formulas for each intersection in the table. To paraphrase Stefanowitsch (2020) and according to what is statistically conventionalized, we

		Dependent Variable		
		value 1	value 2	Total
Independent Variable	value 1	$E_{11} = \frac{O_{T1} \times O_{1T}}{O_{TT}}$	$E_{12} = \frac{O_{T2} \times O_{1T}}{O_{TT}}$	O_{1T}
	value 2	$E_{21} = \frac{O_{T1} \times O_{2T}}{O_{TT}}$	$E_{22} = \frac{O_{T2} \times O_{2T}}{O_{TT}}$	O_{2T}
	Total	O_{T1}	O_{T2}	O_{TT}

Figure 1. statistical procedures (calculation of expected frequency at intersections) (Stefanowitsch, 2020, p. 156).

have i) E for the expected frequency, ii) O for the observed frequency and iii) the subscripts. These subscripts include the numbers 1 and 2, which refer to the first or second row or column of the table, and the letter T, which refers to the total of the column or row indicated. As a rule, the number referring to the row is shown before the number referring to the column. The author illustrates this logic with example *E21*: E refers to the expected frequency, while 2 refers to the second row and 1 to the

first column. Roughly speaking, the expected frequency of the intersection signaled above is calculated by multiplying the observed total of the first column (OT1) and the observed total of the second row (O2T) divided by the total occurrence of the table (OTT). Once the expected frequencies had been obtained, we used them as a parameter for comparison with the observed frequencies. The method described above is a *distributional analysis* and, as such, it tells us about the empirical distribution of data in our given context. After the distributional analysis, we also carried out a *probabilistic analysis*, providing our analysis with further methodological security by means of a binomial logistic regression. We aim to better understand the influence of each variable (or predictor), in probabilistic statistical terms, on the constructional choice outcome of our *corpus*. This analysis was run on R software, version 4.3.2.

Results

Distributional analysis: animacy

In this subsection, we analyze the correlation between the variables ANIMACY and POSSESSIVE CONSTRUCTION. When it comes to raw frequency, each column gives distributional information regarding the internal values of ANIMACITY for each construction. In turn, the horizontal *axis* (rows) shows the number of times (in) animate referents are recruited by each construction. In the scope of this paper, the rows of each contingency table are the focus of our attention, since they illustrate the competition between the two English binomial possessives.

Raw frequency

In this subsection, we present the raw frequency results of the correlation between ANIMACY and POSSESSIVE CONSTRUCTION, as the contingency Figure 2 below shows:

The table shows that, in terms of general constructional frequency, we have a predominance of {[NP possessor] `s [N possessed]} over {[NP possessed] of [N

ANIMACITY	POSSESSIVE CONSTRUCTIONS		
	{[NP] `s [N]}	{[NP] of [N]}	**Total**
Animate	83	42	125
Inanimate	4	5	9
Total	87	47	134

Figure 2. Constructional raw frequencies in correlation with animacity (adapted from Stefanowitsch, 2020).

possessor]} which, respectively, sum up 87 and 47 cases. Similarly, the table columns show a substantially greater use of animate referents in relation to inanimate referents: respectively, there are 125 cases against just 9 cases. Interpreting the distributions of each of the four intersections in the table, we conclude that, apparently, there is a more intimate association between animate referents and the choice of {[NP possessor] `s [N possessed]} (83 cases) in contrast to {[NP possessed] of [N possessor]} (42 cases). Similarly, there is only a slight advantage of {[NP possessed] of [N possessor]} (5 cases) over the competing genitive construction when it comes to the status of inanimate referents (4 cases). We attribute this small advantage to the scarcity of inanimate referents which is, in turn, motivated by the predominance of literary novels in our *corpus* and their communicative objective, which triggers more animate human linguistic references. This is so because we are describing the character`s imminent reality and the inanimate referents are there circumventing the characters as elements of their imminent reality. So, it is conjectured that the predominance of animate referents is motivated by a communicative demand (yet, some strong argument for understanding that the conclusions of this study are restricted to the textual-discursive scope of our database)

Additionally, we must interpret this raw distribution cautiously. That is so, because there are, in general, more cases of {[NP possessor] `s [N possessed]} compared to cases of {[NP possessed] of [N possessor]}. There are also many more occurrences of animate possessors than inanimate ones. These differences in marginal frequency do not allow us to clearly observe the (non-)random relationship between the two variables at play, since, given the non-balancing of these marginal frequencies, it is not possible to state categorically that the above preferences refer to the action of the ANIMACY variable, and not simply to the greater presence of animate possessors and also of the construction {[NP possessor] `s [N possessed]}. As far as our distributional prediction is concerned, it is apparently confirmed by raw constructional distribution in both rows. However, to ensure a more accurate interpretation of the correlation we are trying to ascertain, we looked at the relation between expected and observed frequencies. The interpretation of this frequency dimension is presented below.

Expected and observed frequencies

As mentioned, unbalanced raw frequency results lack a conclusion-drawing reliable scenario. It is methodologically safer looking at EF/OF relation having the following question - paraphrased from Stefanowitsch (2020, p. 155) – in mind: since i) the constructions {[NP possessor] `s [N possessed]} and {[NP possessed] of [N possessor]} occur, respectively, 87 and 47 times in our *corpus* and ii) there are 125 animate and 9 inanimate referents, how frequent must each of the intersections between these values be for a random relationship between the variables? As an answer

to this question, we arrived at the expected frequencies in the Figure 3 below. The table also shows the observed frequencies (which were retrieved from contingency Figure 2). The expected frequencies were obtained according to the calculation explained in the methodology:

ANIMACITY		POSSESSIVE CONSTRUCTIONS FREQUENCIES		
		{[NP possessor]`s [Npossessed]	{[NP possessed of N possessor]}	Total
animate	Obs.	83	42	125
	Exp.	81,16	43,84	
inanimate	Obs.	4	5	9
	Exp.	5.84	3,16	
Total	Obs.	87	47	134

Figure 3. Expected/observed frequencies for animacity – adapted from Stefanowitsch (2020, p. 157).

Again, the information in the table above allows us to measure the distance between the empirical reality of occurrences and the theoretical value which ensures a random distributional relation between the two variables involved in the Figure (see section 3.3). Figure 3 shows the following results for the row of animate referents: for {[NP possessor] `s [N possessed]}, the observed frequency (OF) is slightly higher than the randomness parameter provided by the expected frequency (EF), that is, 83 cases occurred when the FE is 81.16. The distance margin between them is numerically quite tight, though. The overall conclusion is that there is a slight distributional tendency pointing towards native speakers' behavior (as our hypothesis anticipated).

Comparatively, regarding {[NP possessed] of [N possessor]}, the number of factual occurrences is 42 cases (OF), against the EF expectation of 43.84. Please, notice that this lower-than-expected OF also points to a constructional distribution which converges with native speaker`s distributional preferences but in an inversely proportional way when compared to the prenominal construction above. All in all, the EF/OF correlation provides additional evidence towards what was predicted by our distributional hypothesis. Similarly, for the inanimate-referent row, the OF for {[NP possessor] `s [N possessed]} is 4 against an EF of 5.84. On the other hand, regarding {[NP possessed] of [N possessor]}, we have an expectation of 3.16 cases (EF) against 5 empirical occurrences (OF). In summary, the OF of the four intersections

in the table above, contrasted with their respective EF, corroborates our hypothesis of a constructional choice behavior by EAL speakers that, in our *corpus*, tends to converge with the tendencies of EL1 speakers.

Distributional analysis: Givenness

Raw frequence

The Figure 4 below correlates the variables GIVENNESS and CONSTRUCTIONAL CHOICE in terms of raw frequency:

GIVENNESS	POSSESSIVE CONSTRUCTIONS		
	{[NP possessor] `s [N possessed]}	{[NP possessed] of [Npossessor]}	Total
New	12	10	22
Given	75	37	112
Total	87	47	134

Figure 4. Constructional raw frequencies in correlation with Givenness (adapted from Stefanowitsch, 2020).

The reading of the rows in the table (the focal point of our analysis) reveals the following state of facts: in the row of new referents, the preferred construction is {[NP possessor] `s [N possessed]} with 12 occurrences, compared to 10 for {[NP possessed] of [N possessor]}. Similarly, in the row for given possessors, the preferred construction is also {[NP possessor] `s [N possessed]}, which appears 75 times against 37 occurrences of the competing construction. In addition, the discrepancy between the values in columns 1 and 2 (which deal with the recruitment of new or given referents within the same construction) calls for caution: the two constructions are more instantiated with given referents. Looking at the context of use, we believe this distribution comes from a communicative demand towards the instantiation of given referents. We assume that the literary nature of the texts in our *corpus* favors the use of given referents: the number of fictional characters in the literary works analyzed is limited, while the referents attached to them can vary in quantity depending on how the narrative unfolds. By understanding this communicative motivation, we believe that the discrepancies in our *corpus* may highlight the communicative demands of the texts that make it up. In other words, the discrepancy between the marginal frequencies seems to be discursively motivated.

Observed and expected frequencies

In order to find our comparative parameter (EF), we again used Stefanowitsch's paraphrase (2020, p. 155): since i) the constructions {[NP possessor] `s [N possessed]} and {[NP possessed] of [N possessor]} occur, respectively, 87 and 47 times in our *corpus* and ii) there are 22 new referents and 112 given, how frequent must each of the intersections between these values be in order for there to be a random distributional relationship between the variables? The answer to this question is shown in the contingency Figure 5 below, along with the actual number of occurrences observed in our *corpus* (OF).

GIVENNESS		POSSESSIVE CONSTRUCTIONS FREQUENCIES		
		{[NP possessor]`s [Npossessed]	{[NP possessed of N possessor]}	Total
new	Obs.	12	10	22
	Exp.	14,28	7,72	
given	Obs.	75	37	112
	Exp.	72,72	39,28	
Total	Obs.	87	47	134

Figure 5. Expected/observed constructional frequencies for Givenness (adapted from Stefanowitsch (2020, p. 157).

For new referents, the Figure above shows the following relationships: for {[NP possessor] `s [N possessed]}, we have an OF of 12, which is lower than the expectation of 14.28 (EF). However, such distance is really short and we find in the low frequency of new referents a coherent explanation for it. In turn, for {[NP possessed] of [N possessor]} we have an OF of 10, which is also higher than the EF of 7.72. In other words, both constructions seem to behave distributionally in a native-convergent fashion regarding new as an internal value of GIVENNESS. Yet, in the case of given referents, the construction {[NP possessor] `s [N possessed]} has an OF of 75 occurrences, higher than the EF of 72, 72. Yet, in the case of {[NP possessed] of [N possessor]}, the EF and OF values are 39.28 and 37 respectively. Also, the distance between EF and OF here is also 2.28 for both constructions. This whole scenario suggests that the speakers in our *corpus* also prefer to instantiate given referents in the construction {[NP possessor] `s [N possessed]}, to the disadvantage of {[NP possessed] of [N possessor]} and this distributional tendency is native convergent. This conclusion does not seem to corroborate our distributional hypothesis,

Finally, the EAL choice behavior does show a distributional convergence with the pragmatic information represented in EL1 constructions: Quirk *et al* (1985) state that the possessor NP in {[NP possessor] `s [N possessed]} has the function of discursively situating a superordinate possessed entity which operates functionally as the phrasal syntactic Head. This is only possible because of the possessor's status as a given referent. Therefore, there is a pragmatic compatibility between the constructional slot of the determiner/possessor and the informativity of the NP that instantiates it as a shared reference. Likewise, the distributional behavior of EAL speakers shows convergence with the status of specifier that the possessor assumes in the construction {[NP possessed] of [N possessor]}, according to the author. As for this post-nominal construction, the possessor does not assume a pragmatic status of determiner (see section 2.2). In light of all the analysis provided herein, we venture to say that EAL speakers might symbolize pragmatic information in the possessor slot, in both constructions, in a way that converges with the representation of EL1 speakers.

Distributional analysis: Size

Raw frequency

The contingency figure (Figure 6) presented presents the raw distributional frequencies on the SIZE and CONSTRUCTIONAL CHOICE intersection:

SIZE	POSSESSIVE CONSTRUCTIONS		
	{[NP possessor] `s [N possessed]}	{[NP possessed] of [N possessor]}	**Total**
Short	83	34	117
Long	4	13	17
Total	87	47	134

Figure 6. Constructional raw frequencies in correlation with size (adapted from Stefanowitsch, 2020).

Here, again, we have the same predominance of {[NP possessor] `s [N possessed]} compared to {[NP possessed] of [N possessor]}: 87 cases and 47, respectively. What changes is the distribution of these values according to the guiding *criterion* adopted. Looking at row 1 of the table (short referents), we have the suggestion that {[NP possessor] `s [N possessed]} is the preferred construction in this context (83 cases) compared to {[NP possessed] of [N possessor]} (34 cases). In row 2 (long referents),

we have a higher frequency of {[NP possessed] of [N possessor]} (13 cases) than {[NP possessor] `s [N possessed]} (4 cases). For the moment, the raw frequency suggests a convergence with our distributional hypothesis: provisionally, the speakers present a choice behavior that converges with the tendencies presented by native speakers. However, with regard to the short/long *status* of the referents, the internal distribution of each construction (columns 1 and 2) indicates the following state of facts: the marginal frequencies of each row show a massive frequency of short referents (117 occurrences) in relation to long referents (17 cases), which may statistically bias our interpretation of the table, given the greater occurrence of short referents in the internal distribution of both constructions.

Expected and observed frequencies

Here, we use the same strategy of paraphrasing Stefanowitsch's question (2020, p. 155): since i) the constructions {[NP possessor] `s [N possessed]} and {[NP possessed] of [N possessor]} occur, respectively, 87 and 47 times in our *corpus* and ii) there are 117 short referents and 17 long referents, how frequent must each of the intersections between these values be for a random relationship between the variables?

SIZE		POSSESSIVE CONSTRUCTIONS FREQUENCIES		
		{[NP possessor]`s [Npossessed]	{[NP possessed of N possessor]}	Total
short	Obs.	83	34	117
	Exp.	75,96	41,04	
long	Obs.	4	13	17
	Exp.	11,04	5,96	
Total	Obs.	87	47	134

Figure 7. Expected/observed constructional frequencies for size (adapted from Stefanowitsch, 2020, p. 157).

In the Figure 7 above, for the case of short referents (row 1), the construction {[NP possessor] `s [N possessed]} OF is 83 (above the EF of 75.96) for the short / possessive-prenominal intersection. Likewise, {[NP possessed] of [N possessor]} has an OF of 34, which is lower than the EF of 41.04 for the short / possessive post-nominal intersection. In sum, short referents seem to favor the use of {[NP possessor] `s [N possessed]} in our *corpus*. Also, looking at row 2 (long referents), we have these frequencies for both constructions: EF of 11.04 and OF of 4 for {[NP possessor] `s [N possessed]} and the EF of 5.96 against the OF of 13 for {[NP possessed] of [N possessor]}. For long referents, therefore, we have a preference for {[NP possessed]

of [N possessor]} over the competing binomial possessive. In summary, the values presented herein suggest that i) there is a distributional sensitivity to the guiding *criterion* at stake here and that ii) this sensitivity is EL1 convergent. Note also that the distance between the EFs and OFs for this *criterion* is the highest of all. Taking this distance as evidence towards the higher probabilistic influence for the *criterion* in question, we believe that this criterion is the most influential for constructional choice in the context of our *corpus*.

The distributional preference for {[NP possessed] of [N possessor]} in longer possessor contexts suggests that EAL speakers may be sensitive to a specific tendency of English language. This is so because English "English has a general tendency to move longer or heavier chunks of information to the end of sentence known as end-eight" (Yule, 1998, p. 137). It is possible to conjecture, having in mind the analysis presented here, that EAL speakers process portions of information in this additional language in a similar way as EL1 speakers, at least in terms of the weight (linguistic complexity) of the information recruited. In other words, it seems to be part of FILA's implicit knowledge that the two possessive constructions in question wrap up information differently regarding informational weight. It is worth adding that the state of facts reported here corroborates the argumentative suggestions made in our relative frequency preliminary analysis. We now turn to our probabilistic analysis to see how the empirical distribution of our criteria relates to their probabilistic influence on linguistic choice outcome.

Probabilistic analysis: binomial logistic regression

Regarding our corpus distributional behavior, we see it as the result of an interplay among different factors which probabilistically impact the context-situated constructional choice we empirically have access to. To grasp these probabilistic relations underneath textual materiality, we run a binomial logistic regression (a statistical method which allows us to unveil the relationship between distributional behavior and its regulating factors). We used the R software, version 4.3.2. The analysis was run on the interface *Rstudio.*

	Dependent variable		
Predictors	*Odds Ratios*	*CI*	*p*
(Intercept)	0.70	0.15 – 3.13	0.628
inanim [sim]	0.56	0.12 – 2.64	0.453
new [sim]	1.08	0.36 – 3.03	0.880
long [sim]	7.33	2.30 – 28.59	**0.002**

Figure 8. Binomial logistic regression results.

Figure 8 must be read regarding the possibility of {[NP possessed] of [N possessor]} being the probabilistically favored outcome from constructional competition, given the guiding *criteria* presented herein. On the left end of the table, we have the internal values of each one of these criteria which, according to Stefanowitsch (2020), would favor the choice of {[NP possessed] of [N possessor]} in its native-competence preferable context. The table, then, has three rows which condense the results of each variable at a time. In other words, the statistical information in the table regards the probability of {[NP possessor] of [N possessed] occurrence, in relation to{[NP possessor] `s [N possessed]. Furthermore, the organization of our table towards {[NP possessor] of [N possessed] was motivated by its diasystematic-associative potential with {[N possessed] de [NP possessed]}.

We would like to highlight the fact that these results are not detached from our corpus context and must, therefore, be interpreted in lieu of our empirical frequencies. The first value we look at is the Odds *ratio.* In terms of our table, all rows suggest a positive tendency towards {[NP possessed] of [N possessor]} as the preferable construction (given our criteria internal values, explicitly signaled in the table). The other additional measure we must look at is the *p*-value, which measures the statistical relevance of the identified distributional tendencies. As it can be seen (and it was empirically suggested by our EF/OF relations) EAL speakers seem to follow a slight EL1-convergent tendency for two of our criteria, in our *corpus*-based context (namely, ANIMACY and GIVENNESS). However, we must not lose track of an important fact: as raw frequencies demonstrated, the overall distribution of constructions is unbalanced (as well as are the internal values of each independent variable). These two criteria point to an EL1 convergent direction but they do not show statistical relevance (their p-value is >0,05).

Regarding these criteria statistical non-relevance, unbalanced frequency may dim criteria influence. However, despite its biased effect, we cannot ignore frequency as a paramount aspect of usage-based linguistic analysis (cf. Boyland, 2009). The most reasonable conclusion is: where we do have statistically non-relevant tendencies, they are still tendencies and we need more data to draw more robust conclusions. For example, our ANIMACY data speaks more of animate referents than inanimate ones (see table 4.1). For now, it suffices to say that both ANIMACY and GIVENNESS are distributionally convergent at a **slight** margin and this is in alignment with the non-statistically relevant tendency present in our binomial logistic regression. We attribute these results to marginal frequency discrepancies and, based on that, we point out the need for data expansion to see how this slight tendency actually unfolds (again, we acknowledge such slight tendencies as noteworthy, though). The same reasoning above applies to the case of given/new referents: our data basically tell us about Given referents (see table 4.4). Finally, the slight probabilistic tendencies reported herein for ANIMACY and GIVENNESS converge with the tight EF/OF

margin for both criteria. Thus, we have a slight distributional tendency which is translated, probabilistically, in an existing but non-relevant statistical appeal.

Now, when it comes to SIZE, its p-value is <0.05 and it favors {[NP possessed] of [N possessor]} regarding our long referents scenario and it corroborates our initial hypothesis of EL1-convergence. This statistical relevance relates to the empirical *corpus* distribution: the EF/OF is the highest of all cases for long referents (see table 4.9). This larger EF/OF margin signals a more substantial EL1-convergent tendency and this higher distributional convergence is confirmed in probabilistic terms due to SIZE statistical significance. All in all, the table shows all predictors favor the choice of [NP possessed] of [N possessor]} as the probabilistic outcome in the following scenario: *inanimate*, *new* and *long* referents (with this SIZE internal value presenting significant statistical relevance).

Discussion of results

Based on our findings, we present in Figure 9 our EAL multilingual constructional network arrangement, followed by our remarks:

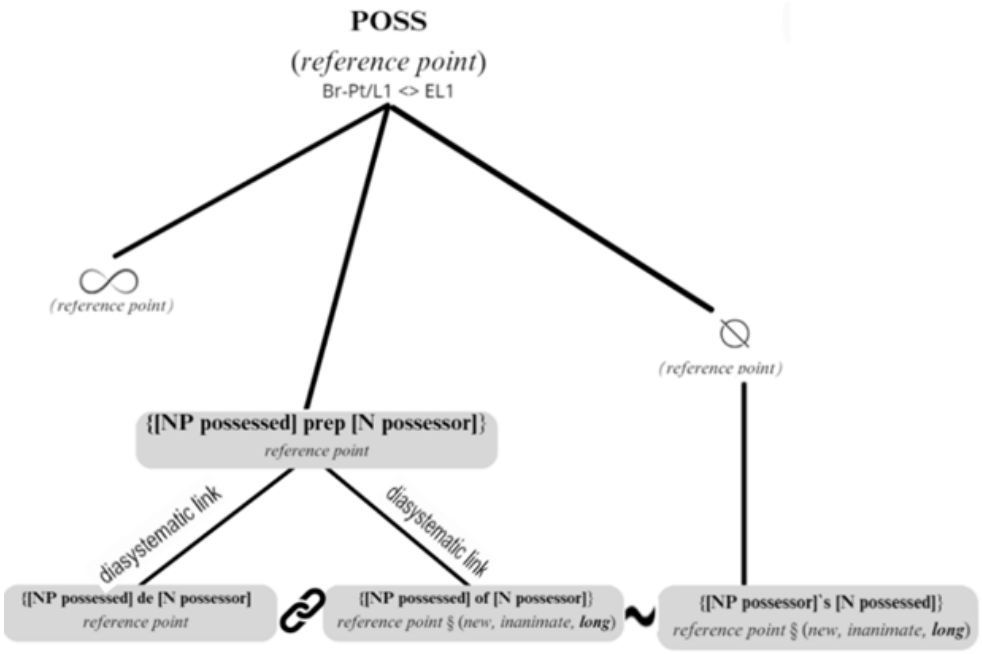

Figure 9. Possessive binomial constructions –diasystematic network (own elaboration).

From top to bottom on the picture above, we make reference to possession (POSS) as an integrating notion, encompassing different symbolic units which are all candidates to its instantiation (cf. Stefanowitsch, 1998; Langacker, 2009). We also refer to the contact context in which our network emerges (Br-Pt/L1 <> EL1). Additionally, the network branches out in (at least) three directions: on the left extreme, we chose the symbol to visually acknowledge there are other possessive

constructional nodes which constitute the network itself (although they are not in our research scope). The ramification in the middle illustrates our immediate diasystematic constructional network: our memory associative generalizations (cf. Goldberg, 2019) are sorted out in a taxonomic arrangement, with a diaconstruction, at a highly-complex representational layer, and the idioconstructions right below, storing the contextual specificities in terms of *criterion* tendencies. The internal values of our guiding criteria which are preferably associated with one of the EAL idioconstructions are in parentheses and italicized. The values for size, which are statistically relevant, were also marked bold. Likewise, we have a link symbol between EAL and Br-Pt/L1 postnominals. This symbol () signals the interlingual association speakers establish between these two constructions (cf. Hilpert, 2019). The prenominal possessive, on the other hand, is interpreted as an idioconstruction with no association to a diasystematic generalization, since there is no direct formal equivalent for it in Br-Pt/L1. This non-equivalence at a diaconstructional level is illustrated by . Additionally, expresses the competition between EAL postnominal and pre-nominal constructions at this lower idioconstructional level.

All in all, this competition between [NP possessor] `s [N possessed]} and {[NP possessed] of [N possessor]} remains preserved in terms of its general tendencies. Additionally, in the same figure, we represent {[N possessor] de [NP possessed]}in an adjacent position. The possible reconfiguration of the category {[N possessed] de [NP possessor]} by linguistic contact is not within the scope of this research. For this reason, our formalization will only acknowledge its presence in a direct diasystematic association with {[NP possessed] of [N possessor]}, via analogy as a given default theoretical construct.

As briefly anticipated, the highest level of our binomial immediate network, the one right above the language-specific constructions, presents a completely schematic diaconstruction which emerges from similarity-based, form-and-meaning generalizations from exemplars of postnominal possessives in both linguistic systems at issue. Below this higher representation, we have the language-specific idioconstructions, filled in with linguistic material (the prepositions) of the specific system they belong to. Finally, the postulation of this diaconstructional unit is supported by i) the associative *modus operandi*, via analogy and categorization, of our cognition (cf. Goldberg, 2019), as well as ii) the greater formal and semantic similarity between [NP possessed] of [N possessor]} and {[N possessed] de [NP possessor]}. As formalized in our diaconstructional node, EAL speakers seem to be able to generalize across both languages (as a default analogy mechanism predicted by the theory). At the same time, and in a complementary fashion, their repertoire is not only made up of generalizations but also of specificities, represented by the idioconstructional nodes in our network. These nodes refer to EAL speakers` distributional convergence with

EL1 community, evidenced herein. That is: speakers are also able to map contextual specificities in the idioconstructional nodes, bringing together both language specific information as well as general representations shared by both systems at issue.

Final remarks

Our network formalization showed generalizing and specifying pressures can coexist and operate simultaneously in a complex way, molding linguistic representations in collaborative (and not mutually excluding) dynamics. The present research is an interesting demonstration of the explanatory potential of usage-based (diasystematic) constructional models. Their underlying theoretical assumptions can explain the totality of the speaker's (multilingual) knowledge (of which the competition dealt with here is part of), opening up increasingly fruitful avenues of grammatical investigation and providing valuable resources, not only for the interpretation of linguistic data but even for the refinement of pedagogical proposals in search of greater convergence with the *modus operandi* of our mind.

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