ADDING INFORMATION IN ARGUMENTATIVE TEXTS: A LEARNER CORPUS-BASED STUDY OF ADDITIVE LINKING ADVERBIALS

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ABSTRACT: This article discusses the use of additive linking adverbials in argumentative essays written in English by university level students. Through two learner corpora and one reference corpus, the occurrence of linking adverbials in Brazilian learners' texts is compared to the occurrence in American and British students' texts in order to identify patterns of overuse and underuse of these cohesive devices. A quantitative analysis reveals an overuse of *besides* and an underuse of *also* by the Brazilian students in contrast to the native speakers. A more qualitative look shows learners' unfamiliarity to the register-specificity of additive linking adverbials and their preference for more colloquial items.

KEYWORDS: Additive linking adverbials; learner corpora; academic writing; corpus linguistics.

RESUMO: Este artigo discute o uso de conectivos aditivos em redações argumentativas em inglês escritas por alunos universitários. Através de dois *corpora* de aprendizes e um *corpus* controle, as ocorrências de conectivos em textos de alunos brasileiros é comparada com as ocorrências em textos de alunos americanos e britânicos com o objetivo de identificar padrões de sobreuso e subuso desses elementos de coesão. Uma análise quantitativa revela sobreuso do conectivo *besides* e subuso do conectivo *also* pelos alunos brasileiros em relação aos alunos nativos. Um olhar mais qualitativo mostra o desconhecimento da especificidade de registro de conectivos aditivos por parte dos alunos e a preferência por itens mais coloquiais.

PALAVRAS-CHAVE: Conectivos aditivos; corpora de aprendizes; escrita acadêmica; linguística de corpus.

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1. INTRODUCTION

There have been several studies concerning the learning of English as a second, foreign or additional language (ESL, EFL, EAL[4]) (e.g. HINKEL, 2016; MEUNIER; GRANGER, 2008; HAMMOND, 2014) on a variety of aspects, such as phonological knowledge (SILVA; CAMARGOS, 2016) and error management in EFL classes (CAVALARI, 2008). Others have focused on investigating specific linguistic features in writing, for instance, the use of intensifiers (OLIVEIRA, 2015; RECSKI, 2004), of modality features (TENUTA et al., 2015) and of lexical bundles (DUTRA; BERBER SARDINHA, 2013; DUTRA et al., 2014; BERTOLI; SHEPHERD, 2015). Nevertheless, there is a paucity of a thorough corpus-based investigation on the use of linking adverbials (LAs) by Brazilian university students. Such linguistic features are strictly connected to text cohesion, coherence, and comprehension, which are essential for successful academic prose.

Many studies already address the usage patterns of LAs in academic texts by EFL learners from different first language (L1) backgrounds (e.g. GRANGER; TYSON, 1996; NARITA; SATO; NUGIURA, 2004; CHEN, 2006; LIU, 2008; SHEA, 2009; ZIHAN, 2014; GAO, 2016). However, few studies have focused on the use of LAs by Brazilians, for example, LAs in research articles written by Brazilian researchers (COSTA, 2015) and the effects of redirecting adult learners' attentional foci to concessive connectives in subordinate clauses (MARQUES, 2010). This article thus, could fill up the gap in helping our understanding of how university Brazilian students use cohesive devices in academic writing.

Aiming to present an overall idea of Brazilian EFL learners' knowledge regarding additive LAs, this study develops a contrastive interlanguage analysis (CIA) (GRANGER, 1996; 1998) using three comparable subcorpora of argumentative essays — i.e. the Corpus of

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[4] ESL and EAL are often used to refer to the learning of English in countries where this language is used mainly as the mother tongue. Yet, there has been a preference to the use of EAL as it may imply that people who learn another language will have it as part of their lives. EFL has, traditionally, been used to refer to English learning in contexts where English is not the first language.

English without Borders (CorIsF), the Corpus of English for Academic Purposes (CorIFA)[5], and the Louvain Corpus of Native English Essays (LOCNESS)[6]. After a quantitative analysis, EFL learners' use of the LAs *also* and *besides* are compared and contrasted to native speakers' use of the same LAs in an attempt to determine patterns of overuse and underuse. Furthermore, reasons for the found patterns are discussed.

2. LITERATURE REVIEW

2.1. Linking Adverbials

When discussing LAs, it is of paramount importance that their definition and classification are clear. These cohesive elements were first acknowledged by Halliday and Hasan (1976) and called 'conjunctions'. In addition to conjunctions, Halliday and Hasan (1976) also discussed other mechanisms that unify a text cohesively: reference, substitution, ellipsis and lexical cohesion. Conjunctions then referred to coordinating and subordinating conjunctions as well as conjunctive adverbials, as they establish abstract and explicit relations between propositions in a text (HALLIDAY; HASAN, 1976).

Other terms have been used to define these devices, e.g. 'conjunctive adverbials' (CHEN, 2006), 'adverbial connectors' (SHEA, 2009), 'adverbial conjuncts' (YEUNG, 2009), 'linking adjuncts' (CARTER; McCARTHY, 2006; SINCLAIR, 1993). However, the term 'linking adverbial' used by Biber et al. (1999) is widely accepted (e.g. LIU, 2008; ZIHAN, 2014; COSTA, 2015; GAO, 2016) and seems to be more accurate to the purposes of this research. Biber et al. (1999), based on the corpus analysis of written and spoken registers — i.e. academic writing, fiction, written news, and conversation —, define LAs as lexical items

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[5] CorIsF and CorIFA are learner corpora compiled in Brazil and they will be described in the Methodology section.
[6] We would like to thank Dr. Sylviane Granger *(Université catholique de Louvain)* for granting us access to the Louvain Corpus of Native English Essays (LOCNESS)*,* which carries texts written by American and British university students.

that "connect stretches of text — phrases, sentences, paragraphs or longer" (BIBER et al., 1999, p. 549). In other words, they have a semantic function of making "explicit the relationship between two units of discourse" (BIBER et al., 1999, p. 765) which is often necessary and useful to make a text cohesive.

Differently from coordinating and subordinating conjunctions, which have syntactic and semantic functions, LAs are mostly optional (BIBER et al., 1999). Consequently, their use does not influence the grammaticality of the sentence or unit of discourse (HALLIDAY; HASAN, 1976; ZIHAN, 2014). In contrast, conjunctions are essential and their omission could make a sentence ungrammatical in English. In the excerpt below, the LA *in addition* could be deleted without making the passage ungrammatical, while the coordinating conjunction *and* could not.

> *People can now interact with other people anywhere on the planet at any time of day. This facilitates socialization between people. **In addition**, we may receive cultural influences from other places **and** not be isolated from the rest of humanity. (CorIFA-UFMG-B1.Ind.Ne.Ess.2013-1.0107.0050)*

Although the use of LAs are not mandatory, it is notable that a text gains texture and becomes clearer through the use of LAs (HALLIDAY; HASAN, 1976; COSTA, 2015). Likewise, it is not surprising to learn that they are more frequently used in academic prose than in conversation, fiction, and news (BIBER et al., 1999). Academic texts present a higher occurrence of enumerative, additive, summative, and appositional LAs (BIBER et al., 1999), since LAs are indispensable in organizing, linking, and developing ideas.

There is no dispute among linguists that LA help text organization. However, LAs have been categorized in different ways depending on the general semantic relationships identified. Biber et al. (1999), for example, distinguish seven categories, enumeration, addition, summation, apposition, result/inference, contrast/concession and transition, while Liu (2008) presents four categories, additive, adversative, causal/resultative, sequential, and 13 subcategories.

In this article, the researchers' choice to focus on additive linking adverbials was influenced by their frequency as well as by the researchers' perception that learners seem to misuse some additive LAs. These LAs can simply be defined as adverbials which add "items of discourse to one another" and which "mark the next unit of discourse as being added to the previous one" (BIBER et al., 1999, p. 875-876). Nonetheless, a more detailed definition shows that addition LAs "indicate that the second text segment adds to, gives further or more specific information on, reinforces or expands in some way the information in the first" (CARTER; McCARTHY, 2006, p. 257).

Both Biber et al.'s (1999) semantic categorization and Carter and MCCarthy (2006) hints about how LAs function are crucial for a better understanding of LA uses. More specifically on LA pragmatic functions, Yeung´s (2009) thorough investigation on the use of *besides* has shed some light on our study. As she compared a learner and an expert user corpora, she was able to detect how the groups used *besides* with different pragmatic functions such as:

a) listing points;

b) reinforcing arguments;

c) signaling a change of viewpoint;

d) marking an afterthought;

e) ending an argument with a well-considered conclusion

According to the author, the learner corpora presented several occurrences of (a), (c) and (d), when one of the other functions seemed to be more appropriate. She highlights the following:

> one can see that apart from a lack of awareness of appropriateness of register, the learners are by and large ignorant of the pragmatic function of the connective serving to signal a reinforcement of the ongoing argumentation in the text. While the learners may sense the function of 'besides' as ushering in a hitherto unexpected viewpoint, they overgeneralize this indicative function to other pragmatic shifts also, including change of speech acts, which appears untoward to the sophisticated reader. Perhaps more importantly, learners lack the ability to execute smooth transitions from one idea to the next and from one sentence to another by making skilful use of other lexical or syntactic cohesive devices. As a remedy, they tend to

put in the additive connective indiscriminately, resulting in either overuse or misuse. (YEUNG , 2009, p.339)

The position of a linking adverbial in a sentence has also been an issue discussed in the literature and addressed in pedagogical materials (e.g. CONRAD; BIBER, 2009) since it contributes to express slightly different pragmatic functions. The position of an LA before the subject is the most common position, helping the reader to detect the relationship between two sentences before they read the second sentence" (CONRAD; BIBER, 2009, p. 88). The position after the subject reveals that the subject is more important than the LA. Yet, the LA position immediately after the verb *be* occurs mainly when "the subject (often a pronoun) refers to the same thing as the subject of the previous sentence. The subject comes first, to create cohesion"   (CONRAD; BIBER, 2009, p. 88). Similar use to this last case, is the occurrence of an LA "inside the verb phrase or between the main verb and an object of that clause" (CONRAD; BIBER, 2009, p. 89).

In this section LA definitions and classification were described. It was also highlighted how the use of such linguistic elements can reveal the specific functions they may carry in a text. Since our methodology is corpus-based, in the next section, previous studies on our topic that were carried with similar principles will be presented.

2.2. Previous Studies on LA in learner corpora

Following Halliday and Hasan's (1976) publication, several studies focused on text cohesion, particularly those involving learner corpora. Most investigations examined learner language in contrast to native language in similar contexts so as to determine the pattern of LA usage in learners' discourse. Granger and Tyson (1996) were one of the first studies to do a contrastive interlanguage analysis using relatively large corpora. They used a subcorpus of the International Corpus of Learner English (ICLE) and LOCNESS to analyze the use of 108

LAs by French EFL learners and by English native speakers and to confirm their hypothesis of a general pattern of overuse by learners. The normalized frequencies showed, however, the overuse and underuse of individual LAs and the authors concluded that learners were probably unaware of LAs' register restrictions.

Narita, Sato, and Nugiura (2004) also used subcorpora from ICLE and LOCNESS for a similar analysis of LAs. In their research, they compared the Japanese EFL learners' use of 25 LAs to the United States students' usage pattern. After calculating the log-likelihood ratio of each item, the authors found the overuse and underuse of specific LAs and the overuse of LAs in initial-position. Again, these results seem to be respectively a consequence of learners' insufficient knowledge of LAs and a particular concern with making cohesive relations explicit.

More recent works aim to identify differences in the use of LAs across registers or disciplines. Zihan (2015), for example, discusses the use of LAs by local English newspapers written by journalism students in China compared to the use in spoken news and native corpora. One interesting finding is that the conjunctions *and* and *but* are frequently used in sentence-initial/intonation unit initial position and function as additive and adversative LAs, respectively, in broadcast and written news. Zihan (2015) also provides suggestions for journalism teachers and examples of teaching materials that can be used to teach linking adverbials for EFL learners. Gao (2016) is another comprehensive study of LAs which compared Chinese and English academic writing using a cross-disciplinary corpus of research articles. The differences between the use of LAs were not significant in terms of density, but there was an underuse of additive and adversative LAs by the Chinese students, among other findings related to non-science disciplines and hard science disciplines.

A corpus-based study of published research articles written in English by Brazilian and native speaker linguists was undertaken by Costa (2015), focusing on LAs as well. Two

corpora of 300,000 tokens in total were compiled for this research: the Corpus of Research Articles written by Brazilians (CRAB) and the Corpus of Research Articles written by Natives (CRAN). The results show that there are significant differences between the use of LAs by Brazilians and native writers, especially an overuse of some categories such as enumeration, addition and result/inference, and an underuse of others such as apposition, contrast/concession and summation. Still, no Brazilian learner corpora research related to the use of LAs was found.

3. RESEARCH QUESTIONS

This research attempts to answer the following questions:

1. What are the most frequently used additive LAs in academic essays written by university students, both native speakers and Brazilian learners?

2. Is there a significant quantitative difference between the use of LAs by native and Brazilian students?

3. Are there LAs that are either overused or underused in either learner corpora?

4. If overuse and/or underuse is detected, are the used patterns related to misuse of pragmatic functions?

4. METHODOLOGY

4.1. Data

The corpus linguistics methodological approach is employed to investigate the additive LAs produced in the writing of university level students. Therefore, the data analyzed come from two learner corpora and one native English corpus, which is used as a reference

corpus for comparative purposes. All three corpora consist of different texts written by university students (both undergraduate and graduate), but for this research we decided to analyze only argumentative essays.

The native English data is a subcorpus of argumentative essays from LOCNESS, a corpus compiled at the Université catholique de Louvain. It consists of 377 essays written by American and British university students, all about various topics. The American section contains 149,691 words while the British contains 79,229 words. Thus, the subcorpus has a total of 228,920 word tokens (see TAB. 1 below).

As for the learner data, subcorpora from CorIsF and CorIFA, both compiled at the Federal University of Minas Gerais (UFMG), were chosen. The CorIsF subcorpus consists of 238 essays written by 231 Brazilian students placed at B1 level[7] compiled in 2014, 2015, and 2016. These are independent essays about one of the three following topics: religion, thought and mind, and facebook (see APPENDIX B for the tasks). The CorIFA subcorpus consists of 312 essays written by 182 Brazilian students placed at B1 level compiled in 2013 and 2015. The themes are the same from Br-ICLE[8] (see APPENDIX C) and many students wrote more than one essay, using different themes. All essays included in CorIsF and CorIFA were previously authorized by students after they read the consent form and agreed to its terms (see APPENDIX A for a sample of the informed consent form).

TABLE 1

Subcorpora size

SUBCORPUS	Number of texts	Word Types	Word Tokens

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[7] According to the *Common European Framework of Reference*, which is a guide to linguistic proficiency level of foreign language learners. The levels vary from A1 to C2, in which A1 is the most basic level and C2 is the most advanced. Therefore, the level B1 is an intermediate level (VERHELST et al., 2009).
[8] Br-ICLE is the Brazilian subcorpus of ICLE, containing only essays written by Brazilian learners of English.

LOCNESS	377 (230 American, 147 British)	12,888	228,920
CorIsF	238	4,125	48,442
CorIFA	312	6,193	81,586

Source: Designed by the authors, 2017

4.2. Procedures

The methodology for this investigation included four steps. First, taken from corpus-based grammars (Sinclair (1993), Biber et al. (1999) and Carter; McCarthy (2006) a list of 23 additive LAs. This list includes: *in addition, additionally, further(more), also, by the same token, likewise, moreover*, *gain, above all, as well, besides, correspondingly, equally, too, on top of it all, on top of that, to cap it all, to crown it all, what's (is) more, at the same time, in the same way, similarly*. A total of 1,658 word tokens of supposed additive LAs were compiled in the three subcorpora.

Second, the concordance lines of all these LAs in the three subcorpora were generated by the concordance program *AntConc 3.4.4* (ANTHONY, 2016). These concordance lines were then transferred to a spreadsheet and carefully checked one by one to see which ones presented actual uses of LAs. The analysis led to 561 occurrences that were not considered LAs, such as *further* followed by a noun or *too* followed by an adjective:

> *While the road system is being improoved[9] there seems to be an endless series of roadworks which restrict the highways and cause **further** delay while the roadworks are in place. (LOCNESS Transport 12)*

> *Actually, with the growing development of science, the number of ceticists and atheists is growing **too** fast, compared to centuries ago, when the religion was seen as the absolut source of truth. (CorIsF-UFMG-B1.Ind.AEss.NE.ago2015.1146.0720)*

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[9] The samples are excerpts from the original learner texts. No misspelling was corrected.

These items were easily identified, but, during the classification, it was important to keep in mind two questions: a) is this lexical item organizing the text?; and b) is it possible to remove this item without making the sentence ungrammatical?

The third step in this study was to analyze quantitatively all the LAs identified. Having the raw frequencies for each LA, the normalized frequency per 100,000 words was calculated and the Log-Likelihood (LL) test[10] was adopted, so as to determine whether the occurrences of LAs in the subcorpora were statistically significant or not.

The fourth and final step was to analyze qualitatively two LAs. Despite the fact that several LAs are used significantly differently across the subcorpora (see Table 2 in the next section), *besides* and *also* were chosen for further investigation. This choice was motivated by the LL test result that revealed that, while *besides* is overused, *also* is underused in both learner corpora. These different characteristics called the research group attention leading the members to focus on a pragmatic function analysis of the users' choices.

5. RESULTS AND DISCUSSION

A total of 1,097 additive LAs were identified in the three subcorpora. Their frequency and distribution across LOCNESS, CorIsF, and CorIFA as well as the LL test results, comparing each learner corpus with the LOCNESS, can be seen in TAB. 2 below:

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[10] The LL test basically compares each LA raw frequency in a learner corpus with the raw frequency in the reference corpus and identifies a pattern of overuse or underuse in the learner corpus relative to the reference corpus. The statistical cut-off point here was LL > 3.84 at the p < 0.05 level, which means that the LL value found is 95% certain and not due to chance.

TABLE 2
Frequency and distribution of Linking Adverbials (raw and normalized per 100,000 words) and Log-Likelihood (LL) values calculated with the log-likelihood and effect size calculator[11]

LAs	LOCNESS		CorIsF			CorIFA		
	raw	norm.	raw	norm.	LL	raw	norm.	LL
too	31	13,54	26	53,67	+ 24.06**	44	53,93	+ 34.81**
moreover	7	3,05	7	14,45	+ 7.71**	31	37,99	+ 50.83**
furthermore	9	3,93	9	18,57	+ 9.91**	24	29,41	+ 30.97**
besides	**7**	**3,05**	**5**	**10,32**	**+ 3.84***	**24**	**29,41**	**+ 30.97***
in addition (to)	16	6,98	4	8,25	+ 0.09	16	19,61	+ 8.16**
in the same way	1	0,43	2	4,12	+ 3.54	4	4,90	+ 6.30*
at the same time	10	4,36	6	12,38	+ 3.61	5	6,12	+ 0.37
further	1	0,43	0	0	- 0.38	2	2,45	+ 2.14
additionally	0	0	0	0	0.00	1	1,22	+ 2.67
also	**567**	**247,68**	**39**	**80,50**	**- 64.37***	**117**	**143,40**	**- 32.50***
similarly	8	3,49	0	0	- 3.07	0	0	- 4.88*
again	16	6,98	1	2,06	- 2.03	1	1,22	- 4.82*
as well	35	15,28	5	10,32	- 0.74	7	8,57	- 2.20
likewise	6	2,62	0	0	- 2.30	1	1,22	- 0.59
above all	1	0,43	0	0	- 0.38	0	0	- 0.61

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[11] http://ucrel.lancs.ac.uk/llwizard.html

equally	1	0,43	0	0	**- 0.38**	0	0	**- 0.61**
what's (is) more	1	0,43	0	0	**- 0.38**	0	0	**- 0.61**

Source: Designed by the authors, 2017

Note: There were no occurrences in all 3 corpora of the LAs *by the same token*, *correspondingly*, *on top of that*, *on top of it all*, *to crown it all* and *to cap it all*. For this reason, they were not included in TAB. 2. *= $p < 0.05$; **= $p < 0.01$

As can be seen, four LAs present a pattern of overuse, marked with a plus sign, in both CorIsF and CorIFA when compared to LOCNESS. These are *besides*, *furthermore*, *moreover*, and *too*. Only one LA, *also*, showed a pattern of underuse, marked with a minus sign, in both learner subcorpora. Other four LAs represent a pattern of overuse, *in addition (to)* and *in the same way*, and underuse, *again* and *similarly*, on CorIFA only. It has already been argued that *also* and *besides* will be analyzed more carefully in this article, but it should be added that these two LAs are often regarded as not so typical of academic prose. They are mostly associated with spoken registers (LEEDHAM; CAI, 2013) and, consequently, are taken as part of an informal register (COSTA, 2015). They are, therefore, register-specific LAs (BIBER et al., 1999; LIU, 2008; GAO, 2016) that should be presented to students and used with caution in academic texts.

5.1. *Also* as an LA

The LL results show an underuse of *also*, that is, it has been used less than expected by learners in CorIsF and CorIFA in comparison to LOCNESS. In terms of raw frequency, *also* has been used in the native subcorpus 617 times, being 567 instances considered to be functioning as an LA. Furthermore, the 567 instances can be divided into 105 uses in initial,

441 in middle and 21 in final position, showing that *also* is preferred in the middle position by the native students.

In relation to the two learner subcorpora, *also* has been used 49 times in CorIsF, being 39 instances considered to be functioning as an LA. In initial position, its frequency is 10 in initial position. In mid-sentence position, there were 27 occurrences and, there were only 2 instances of it in final position. In CorIFA, *also* has been used 170 times, being 117 instances considered to be working as an LA. Initial, middle and final position frequency, respectively was, 20, 92 and 5. In fact, the use of *also* is preferred in middle position by the learners as it is by the native university students.

In order to investigate further the pragmatic function in the studied corpora, we decided to separate the sentences in which *also* is used in initial, middle and final position.

5.1.1. *Also* in initial position

In the excerpts below *also* is used to add more information to what has been written in the previous sentence. That is, an LA in the initial position warns the reader the type of the relationship that is set between the previous sentence and the sentence that is about to start. In such initial position, *also* would, prototypically, be followed by a comma. The occurrence of *also* in initial position followed by a comma was rare in all three corpora. The comma is expected as it marks the adverbial pause, giving the reader the chance to understand that an idea is being not only added, but also reinforced.

> *Many people could make these journeys by bus or train, and once people started doing this, the bus and train companies would have more money to improve services or run more vehicles, thereby (hopefully) encouraging more and more people to use these services. both buses and trains can transport people more efficiently (less energy used per person transported) and more safely than cars (compare injuries due to bus or train crashes with those due to car crashes).* ***Also,*** *buses take up less space on the road than cars, considering the number of people they transport. (LOCNESS Transport 07)*

*And the second point is my blind niece. She cooked delicious and special foods for us. **Also** she did sweater knitting for all of us without see nothing by her eyes, only by her hands. (CorIFA-UFMG-B1.Ind.Ne.Ess.2013-1.0011.0011)*

The use of certain linking adverbials in initial position give the text a tone of informality (COSTA, 2015). Yet, "it is difficult to definitively categorize a lexical item as ''informal'' or ''formal'' since much depends on the text and context in which the item appears" (LEEDHAM; CAI, 2013, p. 375). However, essays, as academic written genres, are not expected to be informal. They are written in a school setting to show how students can organize a text and build their arguments. This study results show that *also* in all corpora occur in initial position, although much less frequent than in mid-sentence position, This may show a tendency to informality among university students highlighted in the beginning of a sentence.

5.1.2. *Also* in middle position

When the LA *also* is used in mid-sentence position, it carries a clear additive meaning, reinforcing a point not yet made in the previous sentence. This is clearly the preferred position in all corpora and learners could be instructed how to use it in this position even more frequently. Very few problems grammatical were found in the use of *also* in this position, such as a word order issue that can be seen in the last excerpt below.

Transport is **also** very important for British industry lorries and trains are used to transport goods up and down the U.K. (LOCNESS Transport 06)

And his attitude may **also** influence one's attitude or that can influence how someone treats you. (CorIsF-UFMG-B1.Ind.AEss.NE.abr2015.0821.0402)

And the culture **also** influences the types of institutions and rules created in that society. (CorIFA-UFMG-B1.Ind.Ne.Ess.2013-1.0012.0012)

To do that, the employee has to explicitly declare his user as the same person that he is in front of the of the authorities or society **who also is openly declared** as the

employee of the employer which is deciding to fire him. (CorIsF-UFMG-B1.Ind.AEss.NE.jun2016.1605.0912)

5.1.3. *Also* in final position

The linking adverbial *also* rarely occurred in final position in all three corpora. As the excerpts below show, the sentence seem to carry a complete meaning, with no need of addition or reinforcement. The LA *also* in this position comes as if the additive meaning could come as an afterthought.

> Another case for retaining it is the fact that people are still prepared to buy a ticket, and if the demand for a ticket is there, there is no reason why the supply should not be **also**. (LOCNESS 008)
>
> Day after day, more and more companies realized that Facebook it's a tool to capture the feeling of clients about himselves, but they realized too, that this function can be used to monitor your employees **also**. (CorIsF-UFMG-B1.Ind.AEss.NE.jun2016.1600.0907)
>
> The sustainable development is the key to a better and secure future for everyone, we need grow but we need respect the planet **also**.
> (CorIFA-UFMG-B1.Ind.Ne.Ess.2013-1.0156.0002)

Another concern of our analysis was to identify the pragmatic functions of the LAs. In the case of *also* there were no patterns related to misuse of pragmatic functions. All cases of learner use were attested in the native speaker corpus, expressing reinforcement (initial or mid-sentence position) or additive meaning as an afterthought (final position).

5.2. *Besides* as an LA

The LL results show an overuse of *besides*, meaning that this lexical item has been used too much by learners when compared to its use by native university students. In terms of raw frequency, *besides* has been used in the three subcorpora 61 times, being 35 instances considered to be functioning as LAs (TAB. 2) and 26 as not. In all corpora, this LA was used

in sentence-initial position. Moreover, these occurrences had different functions that will be shown below.

The most prototypical and expected use of *besides* as an LA, in relation to form, is in sentence-initial position followed or not by a comma, as in the excerpt below. This use occurred 27 times in the subcorpora, more specifically, 6 in LOCNESS, 5 in CorIsF, and 18 in CorIFA. The raw number do not tell us much, but the difference in frequency between each learner corpus and the native speaker corpus was statistically significant (TAB. 2). Due to this result, that showed a clear overuse of *besides*, as it had been revealed in Costa (2015) in an analysis of articles written by Brazilian researchers, we decided to investigate the pragmatic functions of this LA in CorIFA and CorIsF based on Yeung (2009).

> It can take quite sometime learning how to use them. **Besides,** as soon as one programme or computer is brought out it becomes out of date because people are thinking about how to improve it. (LOCNESS ICLE-ALEV-0001.6)

5.2.1. *Besides* as link for listing

Once an argument has been set, it seems that Brazilian learners use the LA *besides* as device to help them list similar ideas. In the example below the argument presented is that technology affects people's lives. At first, this fact is illustrated by how people cannot go on with their lives in case technology fails. The second idea presented as an example of how humans are affected by technology is the negative consequence of it in health issues. Such use of *besides* disregards its reinforcement characteristic.

> The dependency of technology affects people from all over the world. If the connection with the Internet fails or the electricity has a problem, it is a real and a big problem because all data are saved online and people need Internet to do everything. There are backups, of course. But people don't know to live completely without Internet. They are slaves of it.
> **Besides,** there are health problems connected with technology. Some people type on computers for many hours. This fact causes a disease that the person feels pain on fists and on arms. This is a real problem because there are people who have to retire and they cannot work anymore. (CorIFA-UFMG-B1.Ind.Ne.Ess.2013-1.0118.0064)

5.2.2. *Besides* as a redundant feature

The use of *besides* followed by *this* or *that* occurred in all three corpora, being most frequent CorIFA. The addition of the pronoun right after the LA is oftentimes considered redundant, even if it demonstrates the learners' intention to explicitly express a linking of ideas.

> In some countries, religion is losting space at the humans lifes. **Besides that,** is not difficult to find a person who believe in some type of God and frequently prays at home. (CorIsF-UFMG-B1.Ind.AEss.NE.out2014.0392.0292)

> In the same way, with the use of votings machines the couting becomes quicker and faster and this also required a minimal amount of trained people to work in the elections, which it isn't possible with the use of papper ballots, how requires a lot of people working. **Besides this,** the expanses of papper to produce the ballots to all people of a nation is huge, and also are the waste of this material because it isn't reusabel in another elections as the voting machines are. (CorIFA-UFMG-B1.Ind.Ne.Ess.2013-1.0057.0024)

Such pattern of overuse of *besides* might be due to learners' unfamiliarity with "the pragmatic function of the connective serving to signal a reinforcement of the ongoing argumentation in the text" (YEUNG, 2009, p. 339). The occurrences of *besides* in LOCNESS, however, clearly showed natives' intuition that this LA serves as a link of rhetorical discourse (first excerpt below) or a link to a different viewpoint (second excerpt below).

> Firstly you could see that the introduction of computers has made us think more because of all the programmes used on them. It can take quite sometime learning how to use them. **Besides**, as soon as one programme or computer is brought out it becomes out of date because people are <?immiediately?> thinking about how to improve it. After all it was man that invented the computer. Computers can't replace the human brain (not yet anyway!). (LOCNESS ICLE-ALEV-0001.6)

> It would be unintelligent to blame these factors at the development of computers. These are in fact external factors besides the invention of the computer which have heavily contributed to the factors I have mentioned. (LOCNESS ICLE-ALEV-0010.6)

As for the occurrences in the learner corpora, *besides* has been mostly used as a link for listing points and even redundantly instead of another LA (YEUNG, 2009). These are

functions that confirm learners' unawareness and strict association of the LA to the uses of *in addition* or *also* (YEUNG, 2009).

6. CONCLUSION

There are quantitative significant differences in frequency between each learner corpus (COrIFA and CorIsF) and LOCNESS in the use of *also* and *besides*. The qualitative analyses of both additive LAs makes it possible to conclude that Brazilian university learners of English use *also* quite similarly to native speakers both in terms of sentence position and pragmatic function as reinforcement or additive meaning as an afterthought. Yet, the use of *besides* shows clearly overuse of this LA in CorIFA and CorIsF. Above all, this overuse reveals a misunderstanding of the scope of this LA, as it is used as a listing or a redundant device and not as a link of rhetorical discourse, to reinforce an argument or to present a different viewpoint.

The contrastive study of LAs based on learner corpora is revealing as it shows patterns of use that could go unnoticed. However, this study is limited as the subcorpora investigated are small. Statistically significant differences in frequency across the studied corpora were still detected for the use of *besides* and *also*. It would be interesting to analyze if such differences are kept as the Brazilian learner subcorpora are enlarged. Another aspect that would be worth studying is the occurrence of LAs in other academic written genres, such as abstracts, dissertations and articles across disciplines. Due to space restrictions this article analyzed only two LAs in the vastness of cohesive devices available to writers. This study represents a first step for future research which could examine several LAs from the different semantic categories. As the research is expanded using the same methodology, pedagogical applications may be derived from it.

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APPENDIX A

Consent Form

CARTA DE CONSENTIMENTO LIVRE E ESCLARECIDO:
Para os participantes (alunos da graduação)

<u>Caro(a) Senhor(a)</u>

A coordenação do Programa Inglês sem Fronteiras/UFMG conduz pesquisas que visam estudar o desenvolvimento das habilidades de leitura, de escrita, de audição e de fala de aprendizes de língua inglesa para fins acadêmicos. Cada projeto de pesquisa está devidamente autorizado pela Câmara de Pesquisa da Faculdade de Letras da UFMG.

A fim de que os projetos possam ser desenvolvidos, é necessária a sua autorização, vez que as pesquisas constarão da coleta das suas redações produzidas enquanto aluno do curso. A sua participação nesta pesquisa é voluntária e não determinará qualquer risco nem trará desconfortos. Além disso, sua participação é importante para o aumento do conhecimento a respeito dos processos de aquisição e desenvolvimento das quatro habilidades supracitadas por alunos universitários brasileiros, podendo beneficiar outros alunos futuramente na melhoria do ensino de língua inglesa no nível superior.

Informamos que o/a Sr(a). tem a garantia de acesso, em qualquer etapa dos estudos, sobre qualquer esclarecimento de eventuais dúvidas. Se tiver alguma consideração ou dúvida sobre a ética da pesquisa, entre em contato com a coordenação do programa (3409-3839) ou com o Comitê de Ética em Pesquisa (CoEP) da Universidade Federal de Minas Gerais, situado na Av. Antônio Carlos, 6627. Unidade Administrativa II - 2° andar - Campus Pampulha, telefone 3409-4592 / 3409-4027.

Também é garantida a liberdade da retirada de **consentimento** a qualquer momento e deixar de participar do estudo.

Fica também garantido que as informações obtidas serão analisadas em conjunto com as de outras pessoas, não sendo divulgada a identificação de nenhum dos participantes.

O/A Sr(a). tem o direito de ser mantido atualizado sobre os resultados parciais das pesquisas e, caso seja solicitado, todas as informações que solicitar lhe serão fornecidas.

Não existirão despesas ou compensações pessoais para o participante em qualquer fase dos estudos. Também não há compensação financeira relacionada à sua participação.

Os participantes das pesquisas comprometem-se a utilizar os dados coletados somente para pesquisa, e os resultados serão veiculados através de artigos científicos, em revistas especializadas e/ou em encontros científicos e congressos, sem nunca tornar possível a sua identificação.

Abaixo se encontra o Termo de **Consentimento Livre e Esclarecido**, para concordância caso não tenha ficado qualquer dúvida.

Deise Prina Dutra – Coordenadora Geral do IsF/UFMG
Ana Larissa Adorno Marciotto Oliveira – Coordenadora Pedagógica do IsF/UFMG

TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO

Acredito ter sido suficientemente informado a respeito dos estudos conduzidos pela coordenação do Programa Inglês sem Fronteiras/XXXX. Ficaram claros para mim quais são os propósitos dos estudos, os procedimentos a serem realizados, as garantias de confidencialidade e de esclarecimentos permanentes. Ficou claro, também, que a minha participação é isenta de despesas e que tenho garantia do acesso aos resultados e de esclarecer minhas dúvidas a qualquer tempo. Concordo voluntariamente em participar e estou ciente de que poderei retirar o meu consentimento a qualquer momento sem penalidade ou prejuízo ou perda de qualquer benefício que eu possa ter adquirido.

O Concordo
O Discordo

APPENDIX B

Task example

INDEPENDENT WRITING TASK

Thought and mind (B1)

Read the question below. Give yourself 30 minutes to plan, write, and revise your essay. Typically, an effective response will contain a minimum of 300 words.
- Do you agree or disagree with the following statement? The first impression is the most important one. Use specific reasons and examples to support your opinion.

Religion (B1)

Read the question below. Give yourself 30 minutes to plan, write, and revise your essay. Typically, an effective response will contain a minimum of 300 words.
- It appears that religion has been around in one form or another for most of human history. Do you think it is getting stronger, dying out, or staying about the same level of importance. Why?

Facebook

Read the question below. Give yourself 30 to 40 minutes to plan, write, and revise your essay. The essay should be about 200 or 300 words.
- Should what you say on Facebook be grounds for getting fired?

APPENDIX C

Themes from Br-ICLE also used in CorIFA

(1) Crime does not pay

(2) The prison system is outdated. No civilised society should punish its criminals: it should rehabilitate them

(3) Most university degrees are theoretical and do not prepare students for the real world. They are therefore of very little value

(4) A man/woman's financial reward should be commensurate with their contribution to the society they live in.

(5) The role of censorship in Western society

(6) Marx once said that religion was the opium of the masses. If he was alive at the end of the 20th century, he would replace religion with television

(7) All armies should consist entirely of professional soldiers: there is no value in a system of military service

(8) The Gulf War has shown us that it is still a great thing to fight for one's country

(9) Feminists have done more harm to the cause of women than good.

(10) In his novel Animal Farm, George Orwell wrote "All men are equal: but some are more equal than others" How true is this today?

(11) In the words of the old song "Money is the root of all evil"

(12) In the 19th century, Victor Hugo said : "How sad it is to think that nature is calling out but humanity refuses to pay heed. "Do you think it is still true nowadays ?

(13) Some people say that in our modern world, dominated by science technology and industrialisation, there is no longer a place for dreaming and imagination. What is your opinion?