Intensification strength in speech: Language-specific preferences and differences between first and additional language

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Abstract   In this article we analyse the use of intensification in the spoken productions of French-speaking learners of Dutch and English. We compare the strength of intensifiers used by learners in their first language (L1) and in their additional language (AL), and contrast these results with data from control groups of L1 speakers. Our corpus results indicate that L1 English speakers tend to intensify more frequently but opt for weaker intensifiers, while L1 French speakers intensify less frequently but use stronger intensifiers. L1 Dutch speakers take the middle position in both aspects. The analysis of the learner corpora reveals overall more similarities between AL English and L1 English than between AL Dutch and L1 Dutch, confirming the trends observed in previous studies on the same learners (Hendrikx, 2019).

Keywords intensification strength, additional language acquisition, French, Dutch, English

1 Introduction

Intensification, as a way to index a quality degree on a scale, has, so far, been considered "a linguistic universal" (Rainer, 2015, p. 1340). However, the semantic analysis of intensifiers and intensification strength often appears to be just a backdrop to a formal analysis of the use of degree modifiers, for example in research on *additional language* (AL)[1] acquisition (Lorenz, 1999, De Haan & van der Haagen, 2012, Hendrikx et al., 2017).

The present article attempts to operationalise a taxonomy of semantic intensification types and analyses the use of intensification in the spoken productions of French-speaking learners of Dutch and English. The data were collected in 2017 as part of a broad research project on Content and Language Integrated Learning (CLIL) in French-speaking Belgium.[2] At the time of the study, the learners' use of intensification in writing was analysed (Hendrikx, 2019). These results revealed differences in the intensification strength expressed in L1 French compared to the AL of the same pupils, namely Dutch and English: the learners tended to intensify to a higher degree in their L1 than in their AL. For instance, they used "stronger" intensifiers such as *extrêmement* 'extremely' and *complètement* 'completely' in French, whereas they used "weaker" intensifiers such as *heel* 'very' and *echt* 'really' in AL Dutch and AL English. In the present article, we will

investigate whether the students also use a lower degree of intensification strength when they speak their AL, and if so, we will attempt to explain this tendency.

Although intensification is often considered typical of spoken language rather than of written language due to the more informal character of the former, most research on intensification has focused on written productions (amongst others Tagliamonte, 2008; Liebrecht, 2015). Especially in learner language, we observe a gap in the research on intensification in speech. Lorenz (1999) analysed intensification in written AL English by German-speaking learners, and Hendrikx (2019) investigated intensification in written AL English and Dutch by French-speaking learners, but to the best of our knowledge, no studies have yet analysed intensification in the spoken language of AL learners of Dutch and English.

We aim to provide an in-depth analysis of the use of intensification in the spoken language of AL learners, comparing the strength of intensifiers used by learners in their L1 and AL, and intensifiers used by control groups of L1 speakers. To do so, we formulate two main research questions:

i.   Are there any crosslinguistic differences between the semantic types of intensifiers and their intensification strength in L1 French, English and Dutch speakers?
ii.   Are there any semantic differences with respect to intensification strength between the learners' use of intensifiers in their L1 (French) and their AL? And between the AL of the students and L1 speakers of the language (English or Dutch)?

In what follows, Section 2 presents the taxonomy of the semantic types of intensification and its operationalization for this study. Section 3 describes the data and methods used to conduct this study. The results are presented in detail in Section 4. Finally, Section 5 will discuss the main findings and wrap up with some key conclusions.

2 Intensification

2.1 Brief state of the art

While intensification applies to various parts of speech and can be expressed through many constructions (among others, Kirschbaum, 2002; Van Mulken & Schellens, 2012; Zeschel, 2012; Liebrecht, 2015; Rainer, 2015; Napoli & Rivetto, 2017), this study focuses on intensification of adjectives. Intensifiers, such as degree adverbs and prefixes, modify the degree of gradable adjectives (Quirk et al., 1997, p. 445): for example, English *very* in *very good*, or Dutch *super-* in *superkoud* 'super cold'. While several scholars incorporate upscaling 'amplifiers' and downscaling 'downtoners' in the class of intensifiers (Riegel et al., 1994; Quirk et al., 1997; Broekhuis, 2020, 3.1.2), in this study the term is used to refer only to upward scaling modifiers that strengthen the meaning of an

adjective – following scholars such as Granger (1998), Lorenz (1999) and Beltrama & Staum Casanto (2017).

Previous studies on intensifiers discussed, among others, the rapid renewal in the domain (Lorenz, 1999; Foolen, 2015) with popular intensifiers being used frequently for a short period of time before being replaced by more expressive ones. Another central topic in research on intensifiers concerns their strong identity-marking feature (Tagliamonte, 2008), which may explain why they are abundantly used in youth language (Lorenz, 1999, p. 25).

The few existing studies on AL learners' use of intensification reported an overrepresentation of highly frequent and relatively weak intensifiers such as "*very*, the all-round amplifier par excellence" in the written productions of learners (Granger, 1998, p. 151, see also Lorenz, 1999).

Although the constant renewal and variety of intensifiers are factors that complicate the acquisition of intensifiers in an additional language, the fact that they reveal various socio-linguistic clues (Tagliamonte, 2008; Beltrama & Staum Casanto, 2017) make them relevant to acquire. L1 speakers and AL learners alike seem to be aware of the fact that the appropriate use of intensifiers is an important aspect of language, since the choice of an intensifier expresses "speaker involvement" and "group-membership" (Lorenz, 1999, pp. 26–27). Nevertheless, intensification is not a main focus in target-language instruction; just like phraseology more generally is not frequently subject of explicit instruction (Meunier, 2012).

In addition, previous studies focused almost exclusively on the formal aspects of intensifiers (Lorenz, 1999). The semantic properties of intensifiers have received less attention (exceptions are Paradis, 2001 and Broekhuis et al., 2015), and to our knowledge this aspect has been largely overlooked in AL acquisition research. To fill this gap, this study presents a semantic taxonomy of intensifiers and adjectives and proposes an operationalization to compare the intensification strength of intensifiers used by learners and L1 speakers.

2.2 Semantic taxonomy

In this study, we follow Paradis's semantic classification (1997, 2001) of gradable adjectives and intensifiers, while adding the categories of 'intensifiers expressing excess' and 'intensifiers with an undetermined intensification strength'. Although other classifications of intensifiers exist (e.g. König, 2017 and Rainer, 2015), we opt for Paradis's model that is particularly relevant for our study since it focuses on adjective intensification, pays special attention to the co-occurrence of specific intensifiers with specific adjectives and has already been applied in other cross-linguistic studies (e.g., Tribushinina, 2011).

2.2.1 *Semantic types of adjectives*
Based on Paradis's (1997, 2001) classification, gradable adjectives can be divided into three categories, namely *scalar*, *limit* and *extreme* adjectives.

Scalar adjectives express a property that is situated on an open scale (e.g., *good, long*). They can be used in the comparative and superlative forms, for example *good, better, best* or *long, longer, longest* (Paradis, 1997, p. 51). Paradis argues that even when they are not being used in the comparative form, scalar adjectives are interpreted in comparison to an implicit norm: something is considered small in comparison to an implicit norm of smallness (Paradis, 1997, p. 51).

A second type of gradable adjectives are *extreme adjectives*, which occupy the (positive or negative) extreme parts of a bounded scale (e.g., *excellent, terrible*) (Paradis, 1997, p. 54). Typically, they are not strengthened or scaled upwards: *?this one is even more excellent.*

The third and last type in Paradis's categorization concerns *limit adjectives* (e.g., *dead, empty*). The property they express is also situated on a bounded scale (**more dead, *deader*), but they differ from scalar adjectives in that they are free from subjective features: speakers will agree on whether a person is dead or not, but they might disagree on whether a person is beautiful or not.

These three semantic types of adjectives can be modified by different semantic types of intensifiers.

### 2.2.2 *Semantic types of intensifiers*

Like gradable adjectives, intensifiers (such as degree adverbs and intensifying prefixes) can be differentiated along the criteria of boundedness and oppositeness. This results in a distinction between bounded modifiers or *maximizers* and unbounded modifiers or *boosters.*

Maximizers denote the upper extreme of the scale and imply 'completeness' (Quirk et al. 1997, p. 590, Paradis, 1997, p. 72). They are compatible with bounded adjectives (limit and extreme adjectives), e.g., English *completely dead*, Dutch *totaal leeg* 'totally empty' or *absoluut ongeloofwaardig* 'absolutely unbelievable'. In the latter case, the maximizer reinforces the outer position of the extreme adjective (Paradis, 1997, p. 57).

Boosters, on the other hand, 'denote a high point on the scale' (Quirk et al., 1997, p. 591) and are found to modify especially unbounded (scalar) adjectives, e.g., Dutch *heel leuk* 'very nice', *diep ontgoocheld* 'deeply disappointed'.

The distinction between maximizers and boosters is however not as rigid as it may seem (Quirk et al., 1997, p. 590) and boundedness is not necessarily fixed in adjectives. An adjective can acquire a different status of boundedness depending on the context in which it occurs, through a process of contextual modulation or 'coercion' (Michaelis, 2004; Paradis, 2001, p. 48). Pérez-Paredes and Díez-Bedmar (2012) postulate that the process of 'coercion' may result in a certain fluidity between the two types of intensifiers: "'maximizers' can be used as 'boosters'; therefore, instead of examining them as a closed set of words, we should understand that the effect of amplifiers – denoting the upper extreme or a high point – is shaped by the speaker's communicative intentions" (Pérez-Paredes & Díez-Bedmar, 2012, pp. 106–107, see also Quirk et al., 1985, pp. 469–470; Paradis, 2001, p. 48; Michaelis, 2004).

Figure 1 Semantic types of intensifying constructions (Paradis, 1997, p. 62)
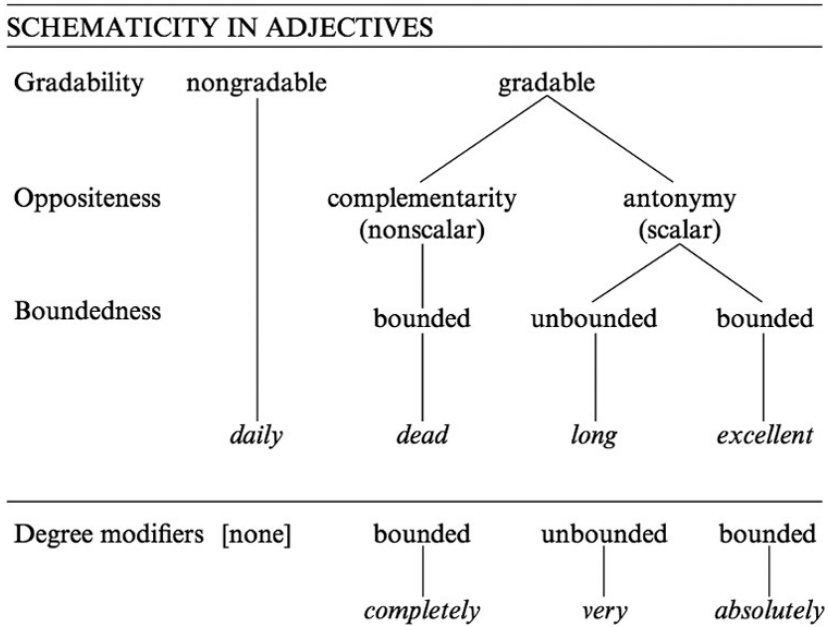
Besides Paradis's semantic categories of boosters and maximizers, represented mostly by degree adverbs, we add another semantic intensifying effect, namely the expression of 'excess' by so-called *excess markers*. This semantic category applies to adverbs and prefixes such as *te* 'too' and *over-* in *overvol* 'overcrowded', and differs from maximizers in that the highest degree of the scale is exceeded. Since excess still implies a high degree of intensity, we include this value in our taxonomy. Interestingly, the French adverb *trop* 'too' can both express excess or be used as a booster (e.g., *la soirée était trop bien* 'the party was too ('very') nice') (Riegel et al., 1994, p. 620). According to Rainer (2015, p. 1346), excess markers indeed quickly tend to become markers of high intensity; the French adverb *trop* may be going down this path of subtle meaning change.

Finally, we add a category of undetermined degree of intensity – a posteriori – to account for instances of intensification indicating that the adjective is intensified 'to some extent', without being categorizable as boosters or maximizers (e.g., *so true! how nice! Quite nice!*[3]).

2.2.3 *Summary of the semantic aspects of intensification*

As explained above, the different types of intensifiers and adjectives were defined by Paradis (1997, 2001) in relation to the axes of scalarity and boundedness. Figure 1 presents a summary of this semantic classification.

Figure 2 Broekhuis's (2020, p. 3.1.2) test for intensifier (amplifier) status

Amplifier test

a.	NP_i is A;	$pronoun_i$	is zelfs	MODIFIER	A
	NP is A		is even		
b.	Jan is aardig;	hij	is zelfs	zeer	aardig.
	Jan is nice	he	is even	very	nice

2.3 Operationalization of intensification strength

To operationalize the definition of intensification and reliably identify different degrees of intensification strength, we start from Broekhuis's (2020, p. 3.1.2) strategy, illustrated by Figure 2, a snapshot from the *Taalportaal* website. Broekhuis proposes to identify intensifiers in Dutch by formulating the sentence "[NP_i] *is* [Adj], [$Pron_i$] *is zelfs* [tested condition]" (in English: [NP_i] *is* [Adj], [$Pron_i$] *is even* [tested condition]). Figure 2 shows that the test is effective for Dutch and English. In French, the test can be translated by the following sentence: "[NP_i] *est* [Adj], [$Pron_i$] *est même* [tested condition]" and is also applicable, as shown in (1).

(1)   *Jean est sympathique, il est même **très** sympathique.*
      ['Jean is nice, he is even very nice.']

However, this test only allows us to identify intensifier status. In order to measure intensification strength based on the above-mentioned distinctions (Section 2.2), we propose the following strategy. We consider that boosters are the basic level of intensification because they indicate a high point on the scale, while maximizers denote the upper extreme of the scale. Tests should therefore discriminate between boosters, on the one hand, and stronger types of intensification, i.e., extreme adjectives (with and without a maximizer) and excess markers, on the other. To effectively distinguish between boosters and stronger intensifiers, we created test sentences for each level of intensification in order of increasing strength (cf. Table 1).

Now that our taxonomy has been introduced, we will turn to the implementation of our study in the next section.

Table 1 Operationalization of intensification strength

Level of intensification	Test	Example	
1. Booster	NP *is* ADJ, PRON *is even* BOOSTER ADJ.	En.	*My sister is beautiful, she is even **very** beautiful.*
		Du.	*Mijn zus is mooi, ze is zelfs **heel** mooi.*
		Fr.	*Ma sœur est belle, elle est même **très** belle.*
2. Extreme adjective	NP *is* BOOSTER ADJ, PRON *is even* EXTREME ADJ.	En.	*My sister is very beautiful, she is even **stunning**.*
		Du.	*Mijn zus is heel mooi, ze is zelfs **oogverblindend**.*
		Fr.	*Ma sœur est très belle, elle est même **éblouissante**.*
3. Maximizer	NP *is* EXTREME ADJ, PRON *is even* MAXIMIZER EXTREME ADJ.	En.	*My sister is stunning, she is even **totally stunning**.*
		Du.	*Mijn zus is oogverblindend, ze is zelfs **totaal oogverblindend**.*
		Fr.	*Ma sœur est éblouissante, elle est même **totalement éblouissante**.*
4. Excess marker	NP *is* MAXIMIZER EXTREME ADJ, PRON *is even* EXCESS MARKER ADJ	En.	*My sister is totally stunning, she is even (a bit) **too beautiful**.*
		Du.	*Mijn zus is totaal oogverblindend, ze is zelfs (een beetje) **te mooi**.*
		Fr.	*Ma sœur est totalement éblouissante, elle est même (un peu) **trop belle**.*

3 Data and methods

In the framework of a project on CLIL (Van Mensel & Hiligsmann, 2020), spoken data from 64 students in the 6th grade (mean age: 17,33 years old) from three different secondary schools spread over French-speaking Belgium was collected in 2017 and is stored in the MulTINCo database (Meunier et al., 2020).[4] The entire dataset represents the speech of 38 girls and 26 boys whose ages ranged from 15 to 18, in the form of 16 English conversations, 17 Dutch conversations, and 32 French conversations. The participants were asked to talk in pairs about two different topics (holidays and a party). The exercise was first performed in their target language, either Dutch or English (on one of the two topics, about 5 minutes), and then in their first language, i.e., French (on the other topic, also about 5 minutes). The pairs were always the same.[5]

To complete the study, comparable spoken data in L1 Dutch and L1 English was analysed. The L1 Dutch data comes from the *Corpus Gesproken Nederlands* (CGN),[6] from which we selected conversations between family members and friends, choosing to analyse only the productions of speakers aged 14 to 18. Only one of the speakers is Flemish, while all the 10 others are Dutch. The L1 English data comes from the English subcorpus from SACODEYL *European Youth Language*,[7] composed of interviews of young British speakers aged 13 to 17. We acknowledge that the comparability with the data

Table 2 Overview of the dataset

	Number of students	Number of adjectives	Number of intensified adjectives	Intensification ratio	Number of words[8]
L1 French (MulTINCo)	64	316	73	0,23	52,595
L1 Dutch (CGN)	11	317	89	0,28	/
L1 English (SACODEYL)	16	307	115	0,37	14,974
AL English (MulTINCo)	31	216	75	0,35	16,704
AL Dutch (MulTINCo)	33	193	39	0,20	19,802

from our project is limited in several respects: data from the CGN and SACODEYL are older than the learner data (the CGN dating from 2002 and SACODEYL from 2008) and the genres and tasks are not quite the same (spontaneous or telephone conversations in the CGN and interviews with an adult in the SACODEYL). Moreover, the audio files could not be used as they were unavailable for SACODEYL. However, these were, to our knowledge, the best available corpora of spoken Dutch and English involving young L1 speakers.

All adjectives and intensifiers were annotated for their semantic type by two of the authors using the tests presented in Sections 2.2 and 2.3. All cases of doubt were discussed, in particular modifiers such as *so* and *how* with an unclear degree of intensification, for which we decided to add the category 'undetermined intensification'. Table 2 gives an overview of our data sets in terms of the number of participants and the number of (intensified) adjectives per subcorpus. In the number of intensified adjectives, we include extreme adjectives, which are inherently intensified. On average, every third adjective (in L1 English) or every fifth adjective (in AL Dutch) is intensified. These proportions turn out to be similar in the written productions of the same learners (ranging from 0,14 to 0,27) (Hendrikx, 2019).

Table 2 shows that the L1 English data contains a significantly greater proportion of intensifiers than the L1 French data (χ^2 = 15.24, $p < .001$). In the L1 Dutch data, we also observe more frequent intensification than in L1 French, but not significantly so (χ^2 = 2.06, $p = .15$).

The AL English learners use intensifiers in a target-like proportion, that is to say, not significantly less frequently than in the L1 English corpus (χ^2 = 0.28, $p = .60$), but significantly more frequently than in their L1 French (χ^2 = 9.29, $p < .001$).

The AL Dutch learners show the opposite tendency. They use significantly fewer intensifiers than the L1 Dutch speakers (χ^2 = 3.95, $p = .04$). Indeed, their frequency of use of intensifiers reflects their use of intensifiers in their L1 French (χ^2 = 0.58, $p = .44$).

4 Results

In this section, we will present the main results of our corpus study, starting with the analysis of intensification strength in L1 speech (Section 4.1) before proceeding to learner speech (Sections 4.2 and 4.3).

4.1 Intensification strength in L1 English/Dutch/French

First, we consider the ascending levels of intensification strength in the three L1 data sets (Figure 3).

Figure 3 shows that boosters, such as *very* and *really*, are the most frequent intensifiers in the three L1's, see example (2). This tendency is clearest in L1 English (76%), followed by L1 Dutch (72%). In L1 French, we observe significantly fewer boosters than in both Germanic languages (51%) (L1 Dutch χ^2 = 6.82, p = .01, Cramér's V = 0.22; L1 English χ^2 = 11.31, p < .001, Cramér's V = 0.26).[9] On very few occasions we observe a reduplicated booster, expressing a slightly higher degree of intensification (see example 3) in L1 English (2 occurrences: 2%) and in L1 French (1 occurrence: 1%).

(2) *So, so yeah hopefully if I get **really** good results then yeah I'd like to go to university.*
     (L1 English, SACODEYL)

(3) *... going into something which is **very very** shallow.* (L1 English, SACODEYL)

The second level of intensification strength in our taxonomy consists of extreme adjectives, such as *fantastic, great* and *horrible* (see example 4). In the three L1's, they represent the second most frequent intensification strategy. The largest proportion of extreme adjectives occurs in L1 French (29%), followed by L1 English (23%) and L1 Dutch (20%). The differences are however not significant (L1 English/L1 French χ^2 = 0.90, p =.34; L1 Dutch/L1 French χ^2 = 1.60, p = .21; L1 English/ L1 Dutch: χ^2 = 0.17, p = .68).

(4) *... les montagnes etcetera c'est / c'est **majestueux** et / (...)*
     'the mountains etcetera it's / it's majestic and / (...)' (L1 French, MulTINCo)

Maximizers such as *completely, absolutely* and *totally* (see also example 5) occur much less frequently than boosters or extreme adjectives in our data sets. They occur however significantly more frequently in L1 Dutch (8%) than in L1 English (2%) (the Fisher exact statistic[10] = 0.04, p < .05) and L1 French (0%). As shown in example (5), the maximizers in L1 Dutch tend to modify scalar adjectives instead of extreme adjectives, by means of the process called coercion which we already discussed in Section 2.2.2.

Figure 3 Types of intensification in L1 French, L1 Dutch, and L1 English
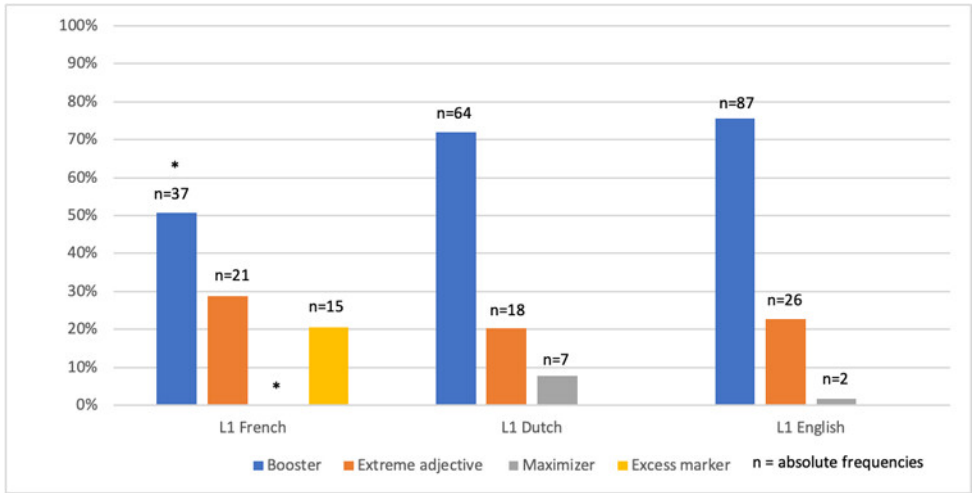
(5)   ... *die is **helemaal** blij met z'n scooter.*
        '... that one is **completely** happy with his scooter.' (L1 Dutch, MulTINCo)

The highest level of intensification strength, expressed by excess markers, such as French *trop* 'too' only occurs in the data of L1 French speakers (21%) (see example 6) and not in the other L1 speakers.

(6)   *il y aura un feu d'artifice c'est **hyper** impressionant*
        'there will be fireworks that'll be **hyper** impressive' (L1 French, MulTINCo)

In sum, boosters are the 'standard intensifiers' in all three L1 data sets, but in L1 English they are used most frequently. Extreme adjectives are the second most frequent (used most often in L1 French and least often in L1 Dutch), followed by maximizers, which are used slightly more frequently in the L1 Dutch data set. Excess markers tun out to be typical of L1 French in our sample.

   We will now take a closer look at the specific intensifiers used in L1 speech. Table 3 presents the top 5 of the most frequent intensifiers in the L1 data sets.

   Table 3 shows that the top five of the most frequent intensifiers in the Germanic languages consists mainly of boosters, with *heel* 'very', *really* and *very* standing out in frequency (each more than 30%), while in French we find more variation: besides boosters (*super* 'super', *très* 'very' and *vraiment* 'really'), we observe frequent use of excess markers (*hyper* 'hyper', *trop* 'too') and extreme adjectives (*super* 'super'). In L1 English only the five intensifiers in Table 3 occur more than once, the other intensifiers in the data set are hapax legomena.

Table 3 Most frequent intensifiers in L1 French, L1 Dutch, and L1 English

L1 French	#	%	L1 Dutch	#	%	L1 English	#	%
1. *super* 'super'	15	21	1. *heel* 'very'	29	33	1. *really*	44	38
2. *hyper* 'hyper'	9	12	2. *echt* 'really'	8	9	2. *very*	35	30
3a. *très* 'very'	6	8	3. *super* 'super'	7	8	3a. *so*	6	5
3b. *trop* 'too'	6	8				3b. *great**	6	5
3c. *vraiment* 'really'	6	8						
3d. *super** 'super'	6	8						
			4a. *erg* 'very/ terribly'	6	7	4. *extremely*	2	2
			4b. *perfect** 'perfect'	6	7			
Total	48			56			93	

* Used as extreme adjective

Table 4 Cooccurrence of adjectives and intensifiers in L1 French, L1 Dutch, and L1 English

		L1 French		L1 Dutch		L1 English	
		#	%	#	%	#	%
Scalar adj.	Without intensifier	243	77	229	72	193	63
	Booster	37*	12	64*	20	86*	28
	Maximizer	0	0	7	2	2	1
	Excess marker	15	5	0	0	0	0
Extreme adj.	Without intensifier	21	7	13	4	25	8
	Booster	0	0	4	1	1	0,3
Total		**316**		**317**		**307**	

To conclude this section, we will now compare the cooccurrence of intensifiers and adjectives in the three L1 data sets (Table 4).

Table 4 shows that boosters intensifying scalar adjectives (example 7) is the most frequent combination in all languages (L1 English 28 %, L1 Dutch 20 % and L1 French 12 %). However, the proportions differ significantly between the languages (L1 English/L1 French χ^2 = 26.89, p < .001, Cramér's V= 0.22; L1 Dutch/L1 French χ^2 = 7.54, p= .006, Cramér's

V=0.12; L1 English /L1 Dutch χ^2 = 6.04, *p* = .01, Cramér's V=0.11), with L1 English using this combination most frequently. The other intergroup differences are not significant or could not be calculated because one of the variables had a value of zero.

(7)   *I am **really sad** to be back in school.* (L1 English, SACODEYL)

Note that in L1 English and in L1 Dutch all maximizers in the data set intensify scalar adjectives (see example 8). As observed above, this indicates a process of coercion at work (cf. Section 2.2), where the speaker coerces a bounded meaning onto a scalar adjective.

(8)   *hij is **helemaal trots** op dat ding.*
      'He is **completely proud** of that thing.' (L1 Dutch, MulTINCo)

In the following subsections, we will compare the findings for the spoken language of the L1 speakers with intensification in the learners' speech. We will start in Section 4.2 with the AL English learners' use of intensifiers.

4.2 Intensification strength in AL English

First, we compare the types of intensification and their intensification strength in the AL English learner data to their spoken productions in their L1 French and to the data of the L1 English speakers (Figure 4).

Figure 4 shows that the learners' use of boosters (57%) does not differ significantly from their use of boosters in their L1 French (46%) (χ^2 = 0.16, *p* =.69), whereas they use these intensifiers significantly less frequently than the L1 English speakers (76%) (χ^2 = 8.16, *p* =.004, Cramér's V=0.22). Note also that learners reduplicate boosters on four occasions to express a slightly higher degree of intensification than a simple booster (*really really beautiful*). The smaller variety of intensifiers is also visible in Table 5, as we will discuss just below. Rather strikingly, the learners (45%) use extreme adjectives more frequently than the L1 English speakers (23%) (χ^2 = 9.82, *p* < .001, Cramér's V=0.24) and also use them slightly more frequently in their AL (45%) than in their L1 (27%) (χ^2 = 3.67, *p* =.06). Lastly, we can observe that the learners do not use excess markers in their AL, while they do quite frequently in their L1 (22%).

In Table 5 we compare the most frequent intensifiers in L1 French, AL English and L1 English. The top 4 most frequent intensifiers used by the learners is quite similar to the use of intensifiers by the L1 English speakers, except for the much more frequent use of the extreme adjective *great* (χ^2 = 31.61, *p* < 0.001, Cramér's V= 0.42) and the much less frequent use of the intensifying adverb *really* (χ^2 = 8.50, *p* < .001, Cramér's V = 0.22). The intensifying adverbs *very* (χ^2 = 0.05, *p* =.82) and *so* (χ^2 = 0.15, *p* = .70) are used in a very similar proportion to L1 English. Adding up the percentages of the most frequent intensifiers (together they make up 92% of the intensifiers in AL English and 81% in L1 English), the

Figure 4 Types of intensification in L1 French, AL English and L1 English
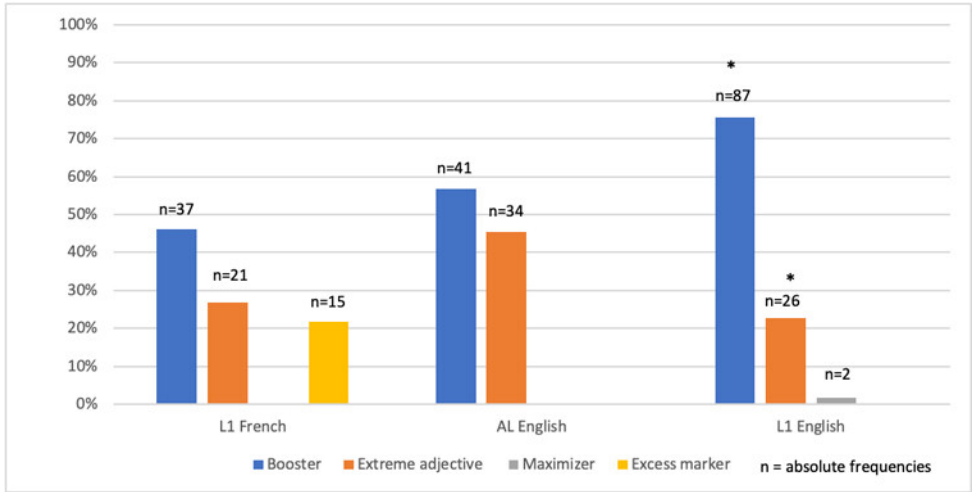
Table 5 Most frequent intensifiers in L1 French, AL English and L1 English

L1 French			AL English			L1 English		
	#	%		#	%		#	%
1. *super* 'super'	15	21	1. *great**	29	39	1. *really*	44	38
2. *hyper* 'hyper'	9	12	2. *very*	24	32	2. *very*	35	30
3a. *très* 'very'	6	8	3. *really*	13	17	3a. *so*	6	5
3b. *trop* 'too'	6	8				3b. *great**	6	5
3c. *vraiment* 'really'	6	8						
3d. *super** 'super'	6	8						
			4. *so*	3	4	4. *extremely*	2	2
			5. /°					
Total	48			69			93	

* Used as extreme adjective
° The other intensifiers in AL English and L1 English occurred only once.

learners appear to use a smaller variety of intensifiers. While in L1 English five intensifiers occurred more than once, this applies to only four intensifiers in AL English.

Before turning to the analysis of the data of the AL Dutch learners, we first examine the semantic types of the intensifiers and adjectives with which they cooccur, in AL English, L1 English and L1 French (Table 6).

Table 6 Coocurrence of adjectives and intensifiers in L1 French, AL English and L1 English

		L1 French		AL English		L1 English	
		#	%	#	%	#	%
Scalar adj.	Without intensifier	243	77	137	63	193	63
	Booster	37	12	38	18	86	28
	Maximizer	0	0	0	0	2	1
	Excess marker	15	5	0	0	0	0
Extreme adj.	Without intensifier	21	7	38	18	25	8
	Booster	0	0	3	1	1	0,3
Total		316		216		307	

In L1 English boosters are used significantly more frequently to intensify scalar adjectives (28%) than in AL English (18%) (χ^2 = 4.05, p =.04, Cramér's V = 0.10). The difference observed between AL English (18%) and L1 French (12%) is however not significant (χ^2 = 3.67, p =.06).

Finally, we find that the AL English learners appear to use fewer coercion strategies (cf. Section 2.2) than L1 English speakers: we observe fewer combinations of maximizers intensifying scalar adjectives, or boosters intensifying extreme adjectives.

4.3 Intensification strength in AL Dutch

Like the AL English learners, we will now compare the AL Dutch learners' use of intensifiers to their L1 French and to the control data of the L1 Dutch speakers. First, we consider the strength of the intensifiers used in these data sets (Figure 5).

The AL Dutch data set contains significantly more boosters (74%) than the L1 French data (51%) (χ^2 = 4.2, p =.04, Cramér's V=.21), but not significantly more than the L1 Dutch data (72%) (χ^2 = 0.08, p = .77). The learners' use of extreme adjectives (21%) is also rather similar to the target of L1 Dutch (19%) (χ^2 = 0.00, p = .97). Note that extreme adjectives do not occur significantly more frequently in L1 French (29%) than in AL Dutch (21%) (χ^2 = 0,90, p = .34). In contrast, the learners use maximizers slightly less frequently (3%) than the L1 Dutch speakers (8%) (χ^2 = 1.30, p = .25). In their L1 French, maximizers are absent. On the other hand, excess markers are quite frequent in the L1 French data set (21%) and the learners also use them sporadically in their target language (5%) (χ^2 = 3.75, p = .05) while they are absent in L1 Dutch.

Subsequently, we assess the most frequent intensifiers in L1 French, AL Dutch and L1 Dutch, as presented in Table 7. The top five of the most frequently used intensifiers by

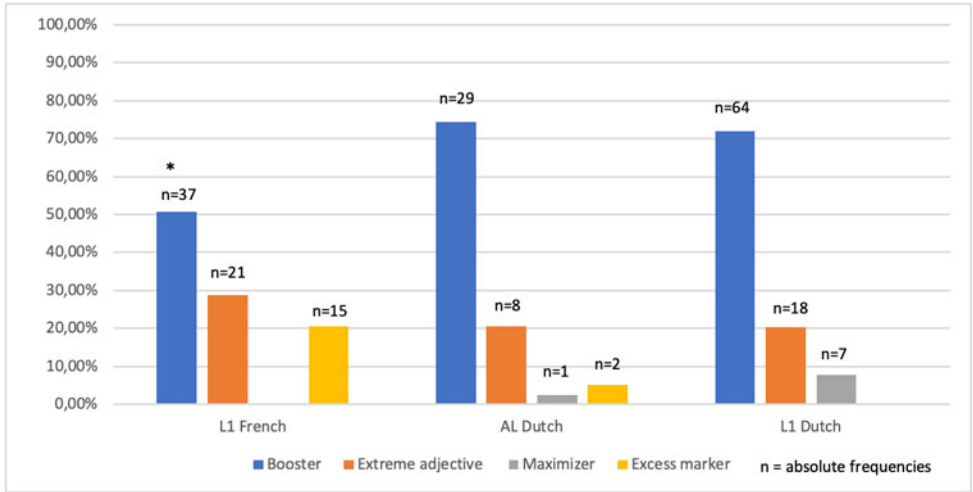**Figure 5** Types of intensification in L1 French, AL Dutch and L1 Dutch

Table 7 Most frequent intensifiers in L1 French, AL Dutch and L1 Dutch

L1 French	#	%	AL Dutch	#	%	L1 Dutch	#	%
1. *super* 'super'	15	21	1. *heel* 'very'	17	44	1. *heel* 'very'	29	33
2. *hyper* 'hyper'	9	12	2. *zeer* 'very'	8	21	2. *echt* 'really'	8	9
3a. *très* 'very'	6	8	3a. *veel* 'many'	2	5	3. *super* 'super'	7	8
3b. *trop* 'too'	6	8	3b. *echt* 'really'	2	5			
3c. *vraiment* 'really'	6	8	3c. *enorm** 'enormous'	2	5			
3d. *super** 'super'	6	8	3d. *te* 'too'	2	5			
			3e. *perfect** 'perfect'	2	5			
			4. /°			4a. *erg* 'very/ terribly'	6	7
						4b. *perfect** 'perfect'	6	7
Total	48			37			56	

* Extreme adjective

° The other intensifiers in AL Dutch occurred only once.

the AL learners is quite different from the top five of the L1 Dutch speakers, although the learners use *echt* 'really' in quite similar proportions ($\chi^2 = 0.56$, $p = .45$). The overrepresentation of the most frequent intensifiers in AL Dutch, especially the basic degree adverbs *heel* 'very' and *zeer* 'very', reveals that the learners use a smaller variety of intensifiers,

Table 8 Cooccurrence of adjectives and intensifiers in L1 French, AL Dutch and L1 Dutch

		L1 French		AL Dutch		L1 Dutch	
		#	%	#	%	#	%
Scalar adj.	Without intensifier	243	77	154	80	229	72
	Booster	37	12	28	15	64	20
	Maximizer	0	0	1	1	7	2
	Excess marker	15	5	2	1	0	0
Extreme adj.	Without intensifier	21	7	7	4	13	4
	Booster	0	0	1	1	4	1
Total		**316**		**193**		**317**	

just like in AL English. The AL Dutch top 5 makes up 90 % of all intensifiers in the learner data, while the top five of the most frequent intensifiers in the L1 data makes up only 64 % of all intensifiers.[11] Surprisingly, the Dutch quantifier *veel* 'many', mistakenly used as intensifier (e.g. **veel verschillend* 'many different'),[12] occurs in the third position in the top five of most frequent intensifiers in the learner data.

Lastly, we examine the cooccurrence of adjectives and intensifiers in L1 French, AL Dutch and L1 Dutch (Table 8).

Table 8 shows that the learners' use of boosters in combination with scalar adjectives (15 %) takes the middle position between L1 French (12 %) and L1 Dutch (20 %), just like in AL English, although these differences are not significant (L1 French / AL Dutch χ^2 = 0.84, p =.36; L1 Dutch / AL Dutch χ^2 = 2.62, p = .11).

One final observation involves the learners' use of coercion strategies. Like in English, the learners appear to use the coercion strategies [maximizer + scalar adjective] and [booster + extreme adjective] less frequently than L1 Dutch speakers, and make use less frequently of the combination [excess marker + scalar adjective] than in their L1 French. However, the frequencies of these coercive combinations are very low in these data sets and, except for the last difference (χ^2 = 4.23, p = .04, Cramér's V = 0.11), the other ones are not statistically significant.

5 Discussion and conclusions

In this study, we conducted a contrastive analysis of intensification in spoken L1 English, Dutch and French, followed by a comparison of learners' use of intensification in spoken language. As explained in Section 2.1, the appropriate use of intensifiers in both L1

and AL is important, among others since it contributes to "speaker involvement" and "group-membership" (Lorenz, 1999, pp. 26–27).

Before discussing the results, we wish to draw attention to some potential limitations of this study that should be considered before their interpretation. First, we have analysed intensification strength mainly following Paradis's (1997) taxonomy, as motivated above. However, we are aware of the fact that this method focuses on the semantic strength of intensifying constructions and does not fully capture how these constructions are perceived in terms of strength. Therefore, we would suggest adding a measure of the perception of the strength of the individual intensifiers in follow-up studies (see for instance Puntoni et al., 2009 on perception of emotional intensity in advertising language). Second, our study deals with intensification of adjectives, while we acknowledge that intensification can be expressed in multiple other ways (Liebrecht, 2015). To generalize our findings, future research should therefore ideally involve a broader perspective. Finally, the results of our study and their interpretation come with the caveat that the size of our data sets is limited; this also leads to few statistically robust results and small effect sizes. Therefore, we would suggest to replicate the study on larger sets of data to confirm or infirm the findings. Nevertheless, we would like to add that, to the best of our knowledge, no larger comparable spoken corpora of the languages under study exist than the ones used in the present analysis. Moreover, despite the relatively small size of the data sets, we believe that this study offers a valuable contribution to research on intensification in learner language, since it is the first exploration of intensification strength in spoken learner language.

With these caveats in mind, we now turn to the discussion of our corpus results. First, the comparison of the three L1 data sets showed that intensification occurred most frequently in the L1 English data and least frequently in the L1 French data; the L1 Dutch data set being situated in between. Looking at intensification strength, based on our taxonomy, we observed however that the L1 English speakers in the sample used generally the weakest intensifiers (mostly boosters), while L1 Dutch speakers used more maximizers, and L1 French speakers used even more strong intensifiers (extreme adjectives and excess markers). Based on these findings, we can conclude that the L1 English speakers in the sample tend to intensify more frequently but opt for weaker intensifiers, while L1 French speakers tend to intensify less frequently while using stronger intensifiers. L1 Dutch takes the middle position in both aspects.

In addition, we considered the combination of intensifiers and the adjectives they modify in the L1 data sets. Boosters intensifying scalar adjectives (e.g., *very nice*) was the most frequent combination in all three L1 data sets, but was found most frequently in L1 English. Remarkably, in the Germanic languages (L1 English and L1 Dutch) maximizers were used to intensify scalar adjectives, hence coercing a bounded meaning on the adjectives (e.g., *totally happy*) as well as boosters to intensify extreme adjectives, coercing an unbounded meaning on the adjective (e.g., *really amazing*). Possibly these coercion strategies in the Germanic languages can be considered as an alternative for

the modification of scalar adjectives by excess markers, which turned out to be a quite common intensification strategy in L1 French (e.g., *trop bien* lit. 'too good, very good'). As mentioned in Section 2.1, intensifiers often lose their strength when they are frequently used, and go down a path of semantic bleaching. The results of our study indicate that this process may well be at work in the case of the excess markers in L1 French.

In a second stage of our study, we compared the learner data to the L1 data. In terms of intensification frequency, first, we observed that the AL English learners used intensification in a more similar manner to the target (L1 English) than the AL Dutch learners (in comparison to L1 Dutch). This observation may seem surprising, since the frequency of intensification in L1 Dutch was more similar to L1 French, but it fits a general tendency observed in the previous results from the broader research project on AL learning in French-speaking Belgium. Indeed, the French-speaking learners of English produced in general a more target-like output in terms of phraseology, written complexity and written intensification than the learners of Dutch (Bulon, 2020; Van Mensel & Hiligsmann, 2020; Hendrikx, 2019). These findings were related to the learners' greater exposure to (informal) English than to Dutch, a rather paradoxical observation in itself, since Dutch is a national language in Belgium, while English is not (Van Mensel & Hiligsmann, 2020).

The use of different types of intensifiers showed a slightly different picture from one AL to the other, with differences that are rather difficult to interpret. While the AL English data was situated in between the L1 French and the L1 English data with regard to the use of weaker intensifiers (boosters), the AL Dutch data displayed a more frequent use of boosters than in both L1 Dutch and L1 French. It is not possible to conclude that the use of intensification in one of the AL's is more target-like than in the other in this respect. The overrepresentation of the weaker (often simpler) adverbial intensifiers (e.g., *heel* and *zeer*, both meaning 'very') in AL Dutch may be due to different factors, among others incomplete mastery of the language, insufficient collocational knowledge, and lack of strategies others than the use of basic intensifiers, all of these related to an insufficient degree of exposure to the target language.

Since we included a wide variety of different semantic types of intensification in our analysis, we were not only able to confirm the overrepresentation of particular all-round intensifying adverbs (such as *heel* and *very*), already reported in previous studies (e.g., Granger, 1998; Lorenz, 1999), but we could also to point to the overrepresentation of the extreme adjective *great* in AL English.

Considering the cooccurrence of intensifiers and the adjectives they modify, we witnessed a general tendency to fewer occurrences of coercion in the learner data than in the control data. It appears that while L1 speakers are constantly seeking for newer and stronger intensification strategies (cf. Section 2.1.), learners may not yet have acquired these more innovative patterns. Acquiring these patterns is especially difficult if learners are only exposed to the formal language used in the foreign language classroom. In addition, learners may refrain from using such creative coercion strategies in order to avoid mistakes.

Finally, comparing the top 5 of the most frequent intensifiers in the AL and L1 data, we observed that the learners showed a less varied use of intensifiers, and, once again, we found more similarities between AL English and L1 English than between AL Dutch and L1 Dutch, confirming once more the tendency observed in the analyses conducted in the framework of the overarching project (Van Mensel & Hiligsmann, 2020). Possible explanations are the greater exposure to (informal) English than to Dutch in French-speaking Belgium (Van Mensel & Hiligsmann, 2020), as mentioned before, but also a better motivation and more positive attitudes towards English as a target language than to Dutch as a target language (De Smet et al., 2020).

Notes

1   Following Ortega (2013) and Höder et al., (2021), we prefer to use the term *additional language* (AL) instead of second language (L2), third language (L3) and so on, because it is unclear to which extent L2 acquisition differs from L2+*n* acquisition. Moreover, in our corpus study based on French-speaking learners in Belgium, Dutch is not necessarily the L2 of the learners.

2   For more information on CLIL in French-speaking Belgium, we refer to Van Mensel & Hiligsmann (2020).

3   American English speakers sometimes use *quite* as a maximizer, British English speakers use *quite* most frequently as a downtoner (Ito & Tagliamonte, 2003: 278; Quirk et al., 1985: 598).

4   13 students were following the CLIL program and 20 were enrolled in the traditional language learning program. However, we do not take into account this distinction because it would make the samples too small. Note that the samples are mixed CLIL/non-CLIL for both ALs.

5   More information about the database is available in Meunier et al. (2020).

6   https://lands.let.ru.nl/cgn/

7   https://www.um.es/sacodeyl/

8   The design of the CGN did not allow for a search in terms of specific text samples with a definite word count. Therefore, the number of words is unavailable for our L1 Dutch data and normalized frequencies were not calculated in the following sections.

9   Cramér's *V* is a measure of effect size. Its value ranges from 0 (no association) to 1 (perfect association). Values between 0.1 and 0.3 indicate a small effect size. Values between 0.3 and 0.5 suggest a moderate effect. If the value is higher than 0.5, the effect can be considered strong (Levshina, 2015: 209).

10 Since one of the values is lower than 5 (only 2 maximizers in L1 English), we used the Fisher exact statistic instead of the Chi-square statistic.

11 Note, however, that these percentages are based on only 7 intensifiers in AL Dutch and 5 in L1 Dutch.

12 As observed by one of the reviewers, *veel* 'many' can however correctly be used as an intensifier with a comparative adjective: for instance, *veel beter* 'much better'.

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