The Internal Structure of Bare Quantifiers: A Cross-linguistic Comparison

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The Internal Structure of Bare Quantifiers: a Cross-linguistic Comparison

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Abstract

The status of quantifiers has been debated in Syntax research in the past decades. Some proposed that their internal structure has a full DP projection (Kishimoto, 2000; Zimmermann, 2011), while others claimed that they are made of functional categories (Leu, 2005) or that they are deficient items (Garzonio and Poletto, 2017). This thesis studies the syntactic behaviour of quantifiers through a cross-linguistic comparison of Italian, Spanish, and Dutch. RQ1 concerns the different distributions that quantifiers may display and the intra- and cross-linguistic and RQ2 investigates the correlation between their distribution and internal structure. To do this, I conducted an online survey of Yes/No (YN) and Forced Choice (FC) tasks. These tasks compared the behaviour of quantifiers among themselves and in comparison with a control group (DPs) in different syntactic environments: Left Dislocation, Right Dislocation, Quantifier before Post-verbal Subject and before Low-Manner Adverb. Consequently, the data was theoretically analysed. Concerning RQ1, results show that some quantifiers can only appear in DP positions, while others can also appear in adverbial positions. Also, intra-linguistic behavioural differences were found. As for RQ2, the results revealed that quantifiers have different external distributions, meaning that different structures were needed. Since previous proposals advanced a uniform structure, I propose building on Zimmermann (2011) and Doetjes (1997) that some quantifiers present a DP spine, whereas others are underspecified / deficient items.

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Contents

1 Introduction

This chapter first introduces the research topic and the reasons behind this study, and subsequently will provide an overview of what has been previously advanced in the literature, according to what will be relevant for this thesis.

1.1 Empirical phenomena and research questions

Quantifiers (Q) are scope-bearing elements that can take an overt Determiner Phrase (DP) as their scope and form a complex quantified expression (e.g., see Garzonio and Poletto (2017)). This is exemplified in (1), where the quantifier *tutto* 'all' quantifies over the DP *il pane* 'the bread', with the underlying structure shown in (2).

(1) *Ho* *mangiato* *tutt-o* *il* *pane.*
have.1SG eaten all-M.SG the bread
'I ate all the bread.'

(2) [$_{QP}$ tutto [$_{DP}$ il [$_{NP}$ pane]]]

However, Qs can also be used as full arguments, without selecting an overt NP, as exemplified in (3). When appearing in this form, they are referred to as bare quantifiers (Garzonio and Poletto, 2017; Doetjes, 1997; Cinque, 1996) or indefinite pronouns (Kishimoto, 2000; Leu, 2005; Wu, 2021). In this thesis, I will refer to them as bare quantifiers (Q).

(3) *Ho* *mangiato* *qualcosa.*
have.1SG eaten something
'I ate something.'

(4) *Ho* *mangiato* *tutt-o.*
have.1SG eaten all-M.SG
'I ate everything.'

There have been many contrasting proposals concerning the status of these words. Some scholars proposed that their internal structure involves either a full DP projection (Kishimoto, 2000; Zimmermann, 2011) or that they can occur both containing nominal material (like a DP-pro form) (Doetjes, 1997), or without it. Others claimed that they are made of functional categories (Leu, 2005) or that they are deficient items made of a quantificational part and a classifier-like noun (Garzonio and Poletto, 2017). This research aims to address these divergent accounts and add a new perspective by studying the syntactic behaviour of these items through a cross-linguistic comparison of three languages: Italian, Spanish, and Dutch. This will be done by investigating their internal structure and the generalizations that can (or cannot) be made about them. There are two main reasons behind the language choice of this thesis: firstly, it allows an inter-family comparison between languages in the Romance and the Germanic family; secondly, it allows an intra-family comparison between Spanish and Italian, two languages that display an interesting degree of variation while maintaining a similar base structure. The following quantifiers have been selected for each language

	Universal Qs	Existential Qs [-human]	Existential Qs [+human]
Dutch	alles	iets	iemand
Spanish	todo	algo	alguien
Italian	tutto	qualcosa	qualcuno

(*Table 1, Overview of the selected quantifiers*)

The two primary research questions of the thesis are as follows:

(i) Which similarities and differences do the quantifiers display in the three languages? To what extent does their external distribution show variation intra- and cross-linguistically?

(ii) Given the results from (i), what does the external syntax of these words reveal about their internal structure? Do the results fit one of the previous proposals or is a new account needed for the observed patterns?

The first research question is concerned with the external syntax of quantifiers, i.e., the positions in which they can occur in the sentence: (a) within languages (as in similarities between the types of quantifiers) and (b) cross-linguistically (comparing those types as different classes). If the different quantifiers behave the same way intra- as well as cross-linguistically, this implies that there is one unified structure that underlies all quantifiers. In contrast, if they behave differently, this implies that the different quantifiers have different structures.

The second research question will address the internal syntax of quantifiers. The internal structure of words can be determined by looking at their morphology, as morphological complexity implies that there is complexity in the syntax as well. Furthermore, the external syntax of words can also shed light on their internal structure, by looking at their distribution in the sentence and their behaviour in relation to other constituent. This is because the external syntax reveals patterns that configure the internal syntax of a word. According to the position that they can or cannot occupy, it is possible to understand what type of constituent they are and whether their behaviours are parallel those of a DP, an adverb, or any other category. The syntactic structures that have been tested in this thesis and are illustrated in the following chapter are: (Clitic) Left Dislocation (2.2), Right Dislocation (2.3), post-verbal subject position (2.4), and position with respect to the low-manner adverb (2.5). The observation of the external syntax of quantifiers and their placement in the sentence has been previously used by Garzonio and Poletto (2017). Their methodology is going to be partially adopted in this thesis, and their predictions will be tested and questioned. Garzonio and Poletto (2017) suggest that the structure that they propose can also be extended to other quantifiers. This implies, however, that the same results should be found for all quantifiers, not only for the universal ones, but also for existentials and, possibly, in quantifiers of different languages. In other words, is a structure like the one proposed by Garzonio and Poletto (2017) able to account for the possible cross-linguistic and intra-linguistic variation that quantifiers might display? Can this structure account for both *tutto* and *qualcosa* and their counterparts *alles* and *todo*, or *algo* and *iets*?

To answer the research questions illustrated above, I use quantitative and qualitative data extracted from a survey and in-person consultations with native speakers of each of the three target languages, which is described in Chapter 3. This is be followed by a theoretical analysis, first concerning Qs distribution (5.1) and subsequently concerning the relation between the distribution and the internal structure of these words (5.2). These sections are followed by a brief evaluation of previous accounts and how the current data can contribute (or not) for their evidence (5.3).

1.2 Existing Analyses

As mentioned, this section describes the pre-existing analyses concerning the quantifiers' internal and external syntax. The first account that will be outlined is Garzonio and Poletto (2017) as they are the starting point of this thesis, followed by other attempts describing quantifiers' behaviours like Kishimoto (2000), Leu (2005) and Wu (2021), and ends with the accounts that were found to have more correlations with my data: Zimmermann (2011) and Doetjes (1997).

1.2.1 Garzonio and Poletto, 2017

The authors look at the distribution of bare quantifiers in some Italian varieties (Sicilian of Messina, Palermo, and Catania) and in different syntactic contexts, of which some will be adopted to test other languages and quantifiers in this thesis. Garzonio and Poletto (2017) observe that in these varieties, the bare universal quantifier appears both as *tutto* and *tutti-cosi*: the latter is referred to as a 'paired form' since it is constructed of the quantifier itself and the nominal *cosi* 'things', resembling the English *everything*. However, the Italian one presents some differences, namely the plural marking and the gender agreement between the quantificational part and the nominal one. (5) shows that *tutti* agrees in gender and number with *cosi*, whereas (6) only displays plural marking, since *tuttu* is singular and *cosi* is plural.

(5) *Nun mi= piacerr-u tutt-i cos-i.*
Not 1SG= liked-3PL all-M.PL thing-M.PL
'I did not like everything.'

(6) *Nun mi= piaci-u tutt-u cos-i*
Not 1SG= liked-3PL all-M.SG thing-M.PL
'I did not like everything.'

(7) *Nun mi= piacer-u tutt-i i cosi.*
Not 1SG= liked-3PL all-M.PL the.M.PL thing-M.PL
'I did not like everything.'

(Garzonio and Poletto, 2017:49)

Lastly, (7) shows a variant of this paired form in which also the masculine determiner *i* is present: here, all the components of the quantifier agree both in gender and in number.

Providing evidence from Old Italian, Garzonio and Poletto (2017) also show that complex quantified expressions occupy different positions than bare quantifiers, i.e., they occur obligatorily before the verb in OV order, whereas DP arguments have to take VO order.

This distribution is still present in Modern Italian, where bare *tutto* can appear before low-manner adverbs, as exemplified in (8), where it precedes *bene* 'well', and before post-verbal subjects as in (9).

(8) *Ha fatto tutt-o bene.*
have.3SG done all-M.SG well
'S/he has done everything well'

(9) *Capir-à tutto Maria.*
understand-FUT-3SG everything Maria
'Maria will understand everything'

(Belletti, 2004:34)

Regular DPs would not be felicitous in neither of these positions, as shown in (10).

(10) *#Ha fatto il compito bene.*
have.3SG done the homework well
'S/he has done everything well.'

Crucially, the examples above show that the paired form *tutti-cosi* appears in an argument position, whereas the bare form *tuttu* is used when the quantifier is raised to a higher position; in this case, the paired form would be ungrammatical. This can be observed in (11), where *tuttu* occupies the adverbial position, and (11) where the paired form *tutti-cosi* occurs at the end of the sentence.

(11) *Ha statu tuttu fattu bonu.*
has been all done well
'Everything has been done well.'

(12) *Hannu statu fattu bonu tutt-i cos-i.*
have been done well all-M.PL thing-M.PL
'Everything has been done well.'

(Garzonio and Poletto, 2017:54)

Cosi can optionally be replaced by the wh-word *quanti*, 'how many', as illustrated in (13) below, when referring to a quantity.

(13) *Mi= li= so litte tutt-e quind-e.*
1SG= 3PL= are read all-PL how.many-PL
'I read them all.'

(Garzonio and Poletto, 2017:49)

The authors account for this asymmetry, following Cinque (1999), that *tutto* occupies the Plural Completive Aspect position, which can license only adverbial properties and not nominal ones. This provides an explanation as to why only the bare form *tutto* can occupy this position, while complex quantified expressions cannot; *tutto* is an adverb, whine complex quantified expressions are DPs and thus they can only occur in argument positions and not in adverbial positions. According to Garzonio and Poletto (2017), the mismatch in the allowed

positions supports the claim that bare quantifiers have different structures than quantified expressions: as bare quantifiers do not display the full functional structure of a DP, they are characterized by a structural weakness, meaning that they lack the internal structure that complex quantified expressions do have. As such, bare quantifiers are deficient items where the Q part is only pairs with a classifier-like noun that has no DP layers such as Number projection (NumP), or functional projections that can be occupied by modifiers; they only carry a [+-human] feature. The resulting internal structure is given in (14):

(14) $[_{\text{QP}}$ tutto $[_{\text{ClassP}}$ THING/PERSON$]]$

(Garzonio and Poletto, 2017:46)

In (14), *tutto* occupies the head of the quantifier projection (QP), whereas the classifier like noun is assumed to be a functional category with no thematic grid, corresponding to the nominal counterpart of the verbal small v (*vP*). In addition, as it will be explained in the following lines, it will not occur when *tutto* raises in a higher position [1] where only the Q portion is allowed. The presence or absence of the classifier in the Italian varieties is explained by Kayne (2006), who claims that if XPs are at the edge of a phrase, they are lexically null, but if they are not, they need to be spelled out. Therefore, classifier deletion is needed for the quantifier to be able to surface in a higher position, as shown in (11). In fact, the position of *tutto* postulated by Cinque (1990), namely ComplAsp, triggers the movement of the universal bare quantifier through the probe-goal mechanism. To do so, the quantifier moves first to the edge of vP to be probed, due to the Phase Impenetrability Condition. Since ComplAsp only looks for the QP feature and therefore only for the quantificational portion, the paired form needs to lose its classifier to be able to raise, so that this remains trapped in the phase edge, where it is not spelled out. Under this perspective, the classifier is needed to classify bare Q as an argument. This would prove that it is an argument that moves to an adverbial position and to be able to do so, it must be split from its nominal companion.

Garzonio and Poletto (2017) argue for this asymmetry to be the result of the fact that bare *tutto* 'everything' by itself can occupy the Compl-Asp adverbial position (situated in the low Inflection Phrase, namely IP area) as predicted by Cinque, but while raising from vP to ComplAsp, the classifier remains in vP, as Compl-Asp can only check the completive feature carried by the Q part. As a consequence, the quantifier is not spelled out. Secondly, they predict that the classifier remains stranded in the vP edge, and it is therefore not spelled out in its in-situ position, as it does not have the properties of a full-fledged argument. Crucially, they suggest that it is the argument moving to the adverb position, and it follows that the adverb is generated in the argument position and then raised.

1.2.2 Kishimoto, 2000.

Kishimoto (2000) argues for bare quantifiers, which he refers to as indefinite pronouns, to be constituted by two independet syntactic heads. More specifically, Kishimoto observes the English words *everyone* and *everything* and their internal composition by observing their modification patterns. The premise for this postulation is that, even if English generally

[1] This is the plural Completive Aspect position (ComplAspP) postulated by Cinque (1999)

only allows adjectives to be prenominal and therefore this language seems to lack N-raising [2] (Cinque et al., 1995), there is a class of nouns in which this occurs, according to the author. These are the type of nouns involving *-thing* and *-one* in their structure. These nouns have the peculiarity that they can have a full lexical status when used by themselves, but they are semantically light when part of indefinite pronouns. For instance, see the contrast between the expression *any body* and *anybody*. Kishimoto argues that, thanks to their lightness they can undergo overt N-raising. This claim will be used to argue for a specific structure concerning indefinite pronouns. Evidence for the existence of two independent syntactic heads is found in the fact that these two heads, namely *every* and *thing* or *one*, respond to different coordination and modification patterns. Kishimoto (2000) observed that the adverbs in (15) can modify the BQ *everyone*, as shown in (15-a), even though they are generally not capable of modifying nouns, as in (15-b), or ordinary pronouns, as in (15-c). It parallels the determiner 'all', which also carries universal quantificational force. It was thus argued that BQs like everyone is not a simple lexical word but consist of two separate heads. If the determiner part and the nominal 'one' were syntactically a single item, this could not occur since adverbs cannot modify parts of lexical nouns.

(15) a. almost/virtually/nearly everyone
b. *almost/virtually/nearly people
c. *almost/virtually nearly them
d. almost/virtually/nearly all (the) students

(Kishimoto, 2000:561)

Furthermore, Kishimoto argues that with indefinite pronouns, adjectives occur post-nominally because N is raised across the adjective to check the formal feature in the head of NumP located between DP and NP. Since the D-head is always filled by a determiner, it cannot be the target for overt N-raising. Instead, NumP-head, carrying number-related features, can possibly induce N-movement. Consequently, it is possible to claim that *some* and *-thing* are syntactically separate heads even though they are merged into one word phonologically. Concerning the composition of the NumP, Kishimoto claims that it contains a weak N-feature and it can attract light nouns that are made of formal features only. Therefore, the NumP containing them must carry [+singular] to accommodate the N-feature attracting light nouns, since indefinite pronouns lack plural forms.

1.2.3 Leu, 2005.

After stating that previous proposals have failed in that they treat the nominal element like a category of N, Leu (2005) argues for indefinite pronouns (IPRs) to be formed by two functional categories, and an empty N category ($_{ec}$N). As illustrated in (16), the only lexicalized layers of the DP are a functional head carrying the quantificational force, and a semantic restrictor (IPR-R) containing the domain of the other functional component *some*.

(16) [DP [f some] [IPR-R thing] ec [N]]]

[2] phenomenon where the head N raises past the adjective, resulting in a construction characterised by the order noun ¿ post-modifier.

Such a structure has the advantage to account for the unproductivity of indefinite pronouns, as this is typical trait of functional forms. Furthermore, members of functional categories are enumerable, and lexical gaps in these forms (e.g., lack of plurals) are explained by unproductivity. Therefore, IPRs lexicalize parts of DP's functional field, corresponding to the extended projection of an empty nominal category. The main evidence shown by Leu (2005) is that firstly, the combination of *some* and a regular noun is not available to form an IPR, and in a second instance lexical gaps are observed in items belonging to this category. For instance, English has the word 'somewhat', which does not exist in French. A second point raised by Leu (2005) is that in Swiss German, indefinite pronouns behave like determiners in taking case morphology, meaning that the case it is overtly displayed on the determiner but not on the head noun in regular DPs, and parallelly it is suffixed on IPRs. Further evidence for Leu (2005) comes from modification patterns, showing that for example in English the adjective follows the IPR but in French the modifier is preceded by the particle *de*, as exemplified in (17).

(17) *quelchue chose de beau.*
Some thing of beautiful
'Something beautiful.'

Since this does not occur in the modification of regular DPs in these language, Leu (2005) claims that this element introduces nominal projections and that therefore an IPRs is made of two separate ones in which only the second one licenses the adjective which does not directly modify the IPR but a silent noun that is not displayed. Therefore, Leu proposes that the IPR-R is a functional category for the reasons explained above, and it is able to account for the [+/-] human distinction displayed by IPRs, but also to contain items specifying e.g., manner, time, location. This proposal reveals some similarities with Garzonio and Poletto (2017) in their treatment of bare quantifiers/indefinite pronouns as functional words, lacking a real DP component. Garzonio and Poletto (2017) go however further in this assumption, as they propose that Qs are deficient items only formed by a Q category and a classifier-like noun only carrying [+-] human, whereas Leu (2005) assumes a partial lexicalization of the functional DP layer. This proposal accommodates the lexical gaps and asymmetries observed across languages. However, as also pointed out by Wu (2021) it raises the question of what the syntactic boundaries of such a category are: in the same way of Kishimoto's proposal of light noun, this functional category is very blurred, and it requires to create a new word class without broader cross-linguistic evidence (Wu, 2021).

1.2.4 Wu, 2020.

Wu (2020), explores the syntax of what he calls 'compound pronouns', e.g., *someone, nothing*, in light of previously advanced analyses (Kishimoto, 2000, Blohdorn, 2009) and shows how they fail to account for the behaviour of these words which, as he argues, display the morphology of compounds but the syntax of phrases. By analysing modification and coordination patterns, Wu highlights the peculiarities of these items. The author observes that they can take adjectives and modifiers like nouns, although they cannot be preceded by them, as in, they do not allow pre-modifiers. This proves, according to the author, that

they are semantically and syntactically compositional, meaning that the two parts forming them are both functional and independent. More specifically, they are assumed to have a relation of the type [DP[N]], where the D base is active since it carries features, and it is clearly distinct by its selected noun. As illustrated in (18), *-any* corresponds to the D base which selects *one* as its nominal base, according to Wu's account.

(18) Anyone > [DP any [N one]]

For instance, in a relation of the type [DP[N]] illustrated in (18), the DP base is active, contrary to other compounds that are not compositional but cohesive (e.g., *outcast,inmate*), since the contribution of the two parts is no longer transparent, as they behave like regular nouns. In addition, Wu shows that the head *-any*, for instance, can be modified by pre-head adverbs (i.e., almost, not), as illustrated below in (19), and this provides further evidence for the independence of this D head, as it was also suggested by Kishimoto. Wu, in fact, adapts his examples:

(19) a. Almost anyone would agree
b. Not anyone would agree

Wu also accounts for these compound pronouns to be used as nouns, as in the case of *definite something, a nowhere, or somebodies*. What can be observed is that they can (i) take pre-modifiers, (ii) external determinatives (iii) plural inflections, precisely like nouns. However, these are marginal uses. Therefore, one of the main conclusions reached by the author is that it is not possible to not consider how the morphology of words affects syntactic operations they are concerned with.

1.2.5 Zimmermann, 2011.

Zimmermann (2011) investigates the functional architecture of complex pronominal quantifying expressions (PQEs) in Low German, comparing it to other German dialects and Germanic and Romance languages. He argues for the existence of different structures for different quantifiers, depending on their morphosyntax, differentiating two syntactic and semantic behaviours for simplex (i.e., one lexical unit, such as *wat* 'something') and complex (i.e., more than one lexical unit, such as *jeder-een* 'everyone') PQEs. The author shows that these two classes differ in syntactic status and feature content.

Concerning the former, complex PQEs are characterised by a complex functional architecture inside the DP and the functional element *–een* 'a, one' (an integral part of these constructions) is the syntactic head of NumP, which provides evidence for the existence of an intermediate functional projection between DP and NP. On the other hand, simplex PQEs like *wat* are mainly analysed as NP-proforms headed by a covert DP.

Concerning the feature content, the feature specification of Num as [+lattice] or [-lattice] is responsible for whether the quantifiers denotes into the domain of atomic or mass/plural entities, respectively. Quantifiers ranging on mass or plural entities are [+lattice], whereas if it ranges on singular or atomic entities it is characterised by [-lattice]. This feature is therefore responsible for the domain on which the pronominal quantifier can range. In the

complex PQEs of Low German, the syntactic Num-head *-een* carries a [-lattice] feature, thus ensuring that the PQE ranges exclusively over the domain of atomic entities, but not mass or plural entities. However, simplex PQEs like *wat* are argued to carry instead an unvalued lattice feature. This causes a lexical under-specification, meaning that words like wat can range over atomic entities and mass entities alike, but they are valued in a second step of the derivation. Furthermore, *wat* is also underspecified for the operator feature [rel/wh], for which reason it can also function as an interrogative expression (what) and as a relative pronoun (which), respectively, depending on the syntactic context. This indefinite nature is key in Zimmermann's approach, as it accounts for the observed flexibility in the syntactic distribution of *wat* (i.e., it is precisely because of its syntactic lightness and under-specification that can be used as an operator).

1.2.6 Doetjes, 1997

Doetjes shows that the some quantifiers in French can float. One of them is the universal quantifier *tous*. As illustrated in (20), the FQ *tous* is associated with the DP *les enfants*, which also functions as its semantic restrictor. Furthermore, they can appear both at the left and the right of this DP, with which they agree in gender and number. However, the Q always appears in a structurally higher position than its correspondent DP.

(20) *Les enfants ont tous dormi.*
The children have all slept
'The children have all slept.'

(Doetjes, 1997:202)

Doetjes (1997) proposes that these FQs are generated in adverbial position and they bind an empty category in argument position, which is, in cases such (20), the trace of the DP *les enfants*. Therefore, the author argues for *tous* to be a quantified noun phrase which contains a silent pronominal element, resulting in the structure below:

(21) [QP tous [DP pro]]

If the DP or the DP trace is not close enough to the floated quantifier, the sentence becomes ungrammatical, because the Q cannot be interpreted, whilst it would need to, as it contains a pronominal element. This type of structure is able to account for the fact that FQs behave like adnominal quantifiers even if they occur in adverbial position, because it is possible to assume that they are, in fact adnominal quantifiers themselves. Moreover, the agreement properties show that there is a bounding relation between the quantifier and the trace of the DP. It is this pronominal element that distinguishes them from another class of floating quantifiers, namely bare FQs. These are not associated with a DP, but they can be found in the same position of the other ones. The difference between them is that *tous* cannot float without an overt DP, whereas bare FQs can. This can happen, according to Cinque (1990), because they do not contain nominal material and they function as operators that license an empty category, as illustrated in the following example:

(22) *Il a [QP tout$_i$] lu$_i$.*
He has all read
'He has read everything.'

As a consequence, since bare quantifier phrases are by definition made only of a quantifier, their structure will be as follows:

(23) Q[$_{\text{XP}}$ Q]]

2 Theoretical Background

In this section, I provide information related to the basic structures of the relevant languages, which will be essential in understanding the methodology explained in the following chapter (ch.3). The ratio is to compare the behaviour of quantifiers to that of regular DPs in different syntactic environments, to identify common patterns and differences. The goal is to explore the external syntax and distribution displayed by quantifiers in each language. To do so, background on standard word order, the behaviour of regular DPs in Left and Right dislocation, and the position with respect to other sentence' constituents (i.e., adverbs) are provided. For each illustrated structure, it is be explained why it is relevant to RQ1 (see ch. 1.1), namely the intra- and cross-linguistic distribution of quantifiers.

2.1 Basic clause structure

A clause can be divided into a lexical and functional domain, which together form the extended projection of the lexical head. The lexical domain contains the lexical verb, its arguments, and some modifiers like manner adverbs. The functional field gives instead temporal information, such as tense, but also aspect, mood, and modality among the main ones. It is external to the lexical domain and it also carries the illocutionary force of the sentence (Zwart, 2011). Complementizers are assumed to occupy the head position of the clause (Rizzi, 2004).

2.1.1 Dutch

Dutch is a language of the Germanic family and has an SOV and V2 type of word order, meaning that there are two positions in which verbs can occur. This means that in principle, the clause can be divided into different fields, defined on the positions that can be occupied by verbs: verb second position and verb final position. The first is occupied by finite verbs, whereas the second is filled by the other verbs, although this does not mean that the verb is the last constituent that can occur in the sentence. These two positions define three topological fields: a clause-initial one, the middle-field one and the post-verbal one. The clause initial one contains maximally one constituent characterized by a specific information structure meaning (e.g., topic, contrasting topic, question word). Although weak pronouns cannot occur here, other constituents are allowed with relative freedom because of the information structure function of this position. After the verb second position, complementives or adverbial phrases occur. Subsequently, in the post-verbal field are located longer constituents such as complements, adverbial clauses, and extraposed constituents are located.

2.1.2 Italian

Italian is a Romance language, whose standard word order is SVO. However, it allows for different orders accommodating different information structure purposes. The only ones that are not found are SOV and VSO. It is always the direct object which precedes the other complements of the sentence, and the standard position of a DP is directly after the verb,

followed by Prepositional Phrases (PPs) and other phrases, as exemplified in (24). In the case of an auxiliary plus past participle construction for complex tenses, the DP is found after the past participle, as illustrated in (25).

(24) *Marco cerca una casa a causa del nuovo lavoro a New York.*
Marco searches a house to cause of.the new job in New York
'Marco is looking for a house because of his new job in New York .'

(25) *Marco ha chiamato sua sorella.*
Marco has called his sister
'Marco called his sister.'

2.1.3 Spanish

Spanish is also characterized by a basic SVO word order but, as with Italian, it allows flexibility for information structure purposes, and the only impossible combination is SOV. Therefore, the constituent order in declaratives is not strictly dependent on grammatical function. Spanish is a head-initial language, that is, complements always follow their heads and functional categories precede the lexical category they govern (Zagona, 2012). In parallel with Italian, the DP argument normally follows the main verb or the participle, as seen in (27) and it precedes other phrases (26). Furthermore, since Spanish is a pro-drop language, like Italian, the subject can be silent in declaratives and, when it is not, it can either precede or follow the verb.

(26) *Construyeron un puente en la ciudad.*
built-3PL a bridge in the city
'They built a bridge in the city.'

(27) *Habíamos llamado a la policia.*
have-1PL called to the police
'We have called the police.'

2.2 Clitic and Contrastive Left Dislocation

A lot of variation is displayed in Left Dislocation constructions (hencefort, LD or CLLD in case of Clitic Left Dislocation) between languages. However, the common property is that a phrase appears before the middle field of the sentence, the so-called Left Periphery (Rizzi, 1997). Normally this item relates to the internal clause through an anaphoric element, whose nature varies across languages. Pragmatically, the main clause will be 'about' the left dislocated phrase, and it needs to therefore satisfy the *aboutness* requirement, which can be done in different ways depending on the language and the type of Left Dislocation, e.g., with a clitic element, an epithet, or personal pronouns (Anagnostopoulou et al., 1997). The following subsections will briefly illustrate how this structure is present and construed in each of the relevant languages.

2.2.1 Dutch

Dutch distinguishes two different types of Left Dislocation, namely Hanging Topic Left Dislocation, exemplified in (29) and Contrastive Left Dislocation (De Vries, 2009) illustrated in (28). Generally, the resumptive element appears as a referential personal pronoun when it is clause-internal, e.g., 'hem' in (29) whereas it occurs as a demonstrative personal pronoun (D element) if it is fronted (28). Both will be defined and described below.

(28) *Jan, die heb ik niet gezien.*
Jan DEM have I not seen
'Jan, him I have not seen.'

(29) *Jan, ik heb hem niet gezien.*
Jan, I have him not seen
'Jhon, I have not seen him.'

(Taalportaal, 2020)

Hanging Topic Left Dislocation only allows for left dislocated NPs and occurs only in main clause contexts. Given the nominal nature of the dislocated element, the associated resumptive is normally a personal pronoun. However, this can be replaced by idiomatic expressions which do not necessarily display case agreement (Anagnostopoulou et al., 1997), as exemplified in (30).

(30) *Pete, Ik heb net gesprok met die idiot.*
Pete, I have not spoken with that idiot.
'Pete, I have not spoken with that idiot.'

(Taalportaal, 2020)

Contrastive Left Dislocation, on the other hand, allows more flexibility both concerning the nature of the left dislocated category (DP, AP, PP, VP) and in that it can occur in embedded clauses. The resumptive element is a fronted D-pronoun that agrees in gender and number with its antecedent.

(31) *Deze jongen, die ken ik niet.*
This boy-N.SG, DEM-N.SG know I not
'This boy, I don't know him.'

(Taalportaal, 2020)

2.2.2 Italian and Spanish

Left Dislocation constructions in Italian and Spanish are very similar to each other, as they present the same characteristics. As such, they will be presented together. Two types of Left Dislocation can be observed in the two Romance languages: Left Dislocation and Clitic Left Dislocation, each subjected to different restrictions (Cinque, 1990). Overall, the Left dislocation of these two Romance languages can affect various types of phrases, from NPs to PPs, and the anaphoric element connecting the two parts of the sentence is a resumptive clitic carrying both gender and number features, which agrees with the verb of the main

clause and the left dislocated element.

Left dislocation is characterized by the restricted nature of the dislocated constituent, in that it can only be an NP or DP, as exemplified in (32), where the dislocated element is an NP, and (33) where the left dislocated element is a PP and results in an ungrammatical construction. The anaphoric element is not mandatory and, when present, it can be an overt phrase, a personal pronoun, as *el* and *lui* in (32) and (33), or an epithet. Moreover, it may occur with expressions of topicalization (e.g., *concerning*, *regarding*...), and it is not recursive nor allowed to occur in embedded sentences.

(32) a. *Juan, no me= acuerdo de él.*
John not 1SG= remember.1SG of him
b. *Juan, non mi= ricordo di lui.*
Juan not 1SG= remember.1SG of him
'Juan, I do not remember of him.'

(33) a. **De Juan, no me= acuerdo de él.*
Of Juan not 1SG= remember-1SG of him
b. **Di Giovanni, non mi= ricordo di lui.*
Of Giovanni not 1SG= remember-1SG of him
'Of Giovanni, I do not remember of him.'

Clitic Left Dislocation instead allows different types of left dislocated constituents and the co-referential element cannot be an overt category, but only a clitic. In contrast with the previous type, it can also occur in subordinates, and it is recursive. Crucially, the left dislocated element needs to display connectivity with the co-referential element (i.e., gender and number features).

(34) *A Juan, =lo vimos en la fiesta.*
To Juan, =3M.SG saw.1PL in the party
'Juan, we saw him at the party.'

(35) *Giovanni, =lo abbiamo visto alla festa.*
Giovanni, =3M.SG have-1PL seen to.the party
'Giovanni, we saw him at the party.'

(Zagona, 2012:221)

2.2.3 Quantifiers and Left Dislocation

As left dislocation is present in all three languages, this was considered a useful way to gain insight into quantifiers' behaviour on two main levels. Firstly, they will be compared to regular DPs, since all three languages allow DPs in this position. This will therefore shed a light on the extent to which quantifiers can be assimilated to actual DPs, as many of the accounts advanced on their internal structure assume, though with some differences, an underlying DP structure. Moreover, a uniform behavioral pattern would be expected if all quantifers have the same underlying structure, as advanced in some accounts (Garzonio and Poletto, 2017).

This test is based on the observations of Cinque (1996) concerning the difference between

bare quantifiers and regular DPs. The latter, according to Cinque (1996) behave like nouns in that they can have a wide scope and they cannot function as operators, which is possible for quantifiers. This difference, according to Cinque (1996), belongs at prima facie to the LF-structure level, whereas on an S-structure level, they seem to be the same in that they can both occupy the SpecCP position. However, when observed in Clitic left dislocation, this is no longer the case, since the resumptive clitic appears to be optional with left dislocated quantifiers, but it is obligatory with regular DPs and complex quantified expressions.

2.3 Right Dislocation

Right dislocation (RD) is a structure in which a constituent is dislocated to the outer right periphery of its preceding main clause. This element is anaphorically related to an element in the main clause, namely a correlate (De Vries, 2009).

2.3.1 Dutch

Dutch distinguishes two types of right dislocation, according to the type of information that the right dislocated constituent conveys. In *afterthought* right dislocation (36), the element provides discourse-new information, whereas the *backgrounded* RD (37) is used to specify something about a discourse topic that is already known to the reader. Moreover, the afterthought has a contrastive accent, whereas the second type lacks a prominent accent (De Vries, 2009).

(36) *Ik heb 'm gespròken, de DIRECTEUR. (afterthought)*
I have him spoken, the director
'I have spoken to him, the director.'

(37) *Ik heb 'm gespròken, de directeur. (backgrounded)*
I have him spoken, the director
'I have spoken to him, the director.'

(Taalportaal, 2020)

With respect to the right dislocated element, its nature can be nominal but also clausal, adjectival or adpositional. In addition, the clause internal correlate can perform various syntactic functions: adverbial, a full argument, or a complementive. The internal correlate is generally a phonetically light element (e.g., the weak form of personal pronouns).

2.3.2 Italian and Spanish

Italian (38) and Spanish (39) hold the same characteristics that are found in Dutch, therefore, for the sake of clarity two example sentences will be given for both of them, but the reader can refer to the previous paragraph for the description of the structure.

(38) *L'=ho già comprato, il giornale.*
DO=have.1SG already bought the newspaper
'I already bought it, the newspaper.'

(39) *Ya lo= compré, el periódico.*
Already M.SG= bought-1SG the newspaper
'I already bought it, the newspaper.'

Concerning the co-referential element, there are two competing analyses. One proposes that the clitic is optional (Cecchetto, 1999). The other, advanced by Cardinaletti (2002), proposes that the clitic is not optional in RD and, when it is not present, it is a phenomenon called marginalization.

2.3.3 Quantifiers and Right Dislocation

Right dislocation is another construction where the behaviour of quantifiers will be tested in comparison with the one of DPs: DPs are normally allowed in RD, and the results that will be observed for quantifiers will reveal whether or not these two items are allowed in the same position or not. This, with the other tests, will help to build the generalizations that are needed to understand the distribution of these words in more detail.

2.4 Post verbal subject position (only Italian and Spanish)

This is the position occupied by the subject when the standard SV word order is inverted, and it therefore occurs after the verb. Languages vary on whether they display it or not.

2.4.1 Dutch

The word order in Dutch is much stricter than in Italian and Spanish (as also observed in the basic clause structure section), therefore, this type of inversion does not exist, meaning that there is no post verbal position in Dutch. There is a lower position that the subject can occupy inside the VP, but it is not post-verbal.

2.4.2 Italian and Spanish

Both Italian and Spanish allow for subject inversion, a widespread phenomenon in Romance languages. This is probably correlated to the fact that these are pro-drop languages allowing for the preverbal subject position to be unrealized/empty (Belletti, 2004). The position of post-verbal subjects is therefore low in the sentence, as it is preceded by adverbs, which are low in Cinque's (1999) hierarchy.

2.4.3 Quantifiers and post-verbal subject

When the subject occurs post-verbally, it can be preceded by adverbs but not by DPs or other phrases. However, as observed by Belletti (2004) it can be preceded by the Universal quantifier *tutto*, suggesting that it does not occupy the regular object position but another one, namely the plural Completive Aspect position proposed in Cinque (1999), which is higher in the sentence. This is relevant in understanding whether other quantifiers have the same distribution and can surface in higher positions.

2.5 Low manner adverbs

Low manner adverbs are named as such because they appear as such in Cinque's (1999) hierarchy. They occupy the lowest position, which also means that they are relegated to a very low position in the sentence, and they can be preceded by other sentence constituents. However, languages display a difference in this regard.

2.5.1 Dutch

In Dutch, the regular object position is located before such adverbs, making the construction *goed*-DP incorrect, with the only grammatical order being DP-*goed*. Below, (40-a) shows the grammatical construction and (40-b) shows the ungrammatical one.

(40) a. *Ik begrijp het boek goed.*
I understand the book well
b. **Ik begrijp goed het boek.*
I understand well the book
'I understand the book well.'

When occurring with the past participle, the past participle occupies the final position of the sentence, therefore following the adverb, as illustrated in (41), where *goed* precedes *begrepen*.

(41) *Mark heft het boek goed begrepen.*
Mark has the book well understood
'Mark has understood the book well.'

2.5.2 Italian and Spanish

Spanish (42) and Italian (43) both present the opposite situation in this regard, with *bien/bene*-DP being the grammatical order, meaning that the DP occupies a lower position in the sentence hierarchy. The grammatical construction for the respective languages is shown in both the examples.

(42) a. *Maria leyó bien el libro.*
Maria read well the book
b. **Maria leyó el libro bien.*
Maria read the book well
'Maria read the book well.'

(43) a. *Maria ha letto bene il libro.*
Maria has read well the book
b. **Maria ha letto il libro bene.*
Maria has read the book well
'Maria has read the book well.'

2.5.3 Quantifiers and low-manner adverbs

As shown by Cinque (1999), the quantifier *tutto*, when used as an argument, can appear before the low manner adverb, showing that it occupies a higher position than other arguments that can only be lower in the sentence structure. The relevance of this contrast lies in that, once again, it allows us to observe whether quantifiers are found in the same positions as DPs or not. Additionally, it can show whether all quantifiers are allowed in a higher position, like the Italian Universal quantifier (providing evidence for a single structure), or if they are (or some of them are) closer to the behaviour of a DP.

3 Methodology

In this section, I will elaborate on the mixed methodology behind the paper. In order to do so, I will first outline the experimental side, that is, the surveys (3.1). Next, 3.2 will focus on the theoretical analysis workflow.

3.1 Experimental Syntax: carrying out an online survey

Two surveys with native speakers of Italian, Spanish and Dutch were carried out in order to answer the first research question stated above, made of two sub-questions:

(i) Which patterns of similarities and differences do quantifiers display in the three languages?

(ii) To what extent does their external syntax show variation intra- and cross-linguistically?

Therefore, the aim is to check for uniform behaviours to obtain and evaluate the external syntax of the quantifiers: (a) within languages, as in similarities between Universals and Existentials and (b) cross-linguistically (as in, contrasting existentials and universals of different languages). Uniform behaviours on these two levels predict that a unified structure can describe all quantifiers, while different behaviours predict different structures. In this section, I will firstly explain the type of syntactic tests (3.1.1.) and judgement tasks (3.1.2.) that were needed to answer the research question in Survey 1, then describe Survey 2 (3.1.3.). Finally, the whole data collection process is described in (3.1.4).

3.1.1 Description of the tests

As explained in the previous section, there were four main syntactic tests that were applied in this survey to compare the behaviour of quantifiers (i) among themselves and (ii) with respect to DPs.

The 'control group' will be represented by the constructions with the DP, as they are expected to show uniform behaviour cross-linguistically and through all the tests. The ratio is to identify matches and mismatches concerning the positions in which these items are allowed and to what extent their behaviour presents overlaps with regular DPs.

The first test is Left Dislocation, illustrated in examples (44), where a rationalized structure of the sample sentences is illustrated: (44-a-b) represents a sentence involving a left dislocated quantifier occurring with and without the clitic, whereas (45) represents a left dislocated DP which, as mentioned before, obligatorily occurs with a clitic.

(44) a. Q – clitic – main clause
b. Q – main clause

(45) DP– clitic – main clause

Secondly, Right Dislocation presents the opposite structure, exemplified both for quantifier and DP in example (46).

(46) a. Main clause – Q

b. Main clause – DP

Thirdly, the test of quantifier before post-verbal subject will only be considered for Spanish and Italian, since Dutch does not allow this type of order. As in the previous tests, it will be tested here which quantifiers can occupy the position before a post-verbal subject, from which DPs are normally excluded, as explained in the previous section. (47) and (48) illustrate this test and the correspondent structure.

(47) a. *Mangia tutto Maria.*
Eats everything Maria
'Maria eats everything.'
b. V - Q - S

(48) a. *Mangia il gelato Maria.*
Eats the ice-cream Maria
'Maria eats the ice-cream.'
b. V - DP - S

Lastly, the low-manner adverbs test will contrast once again the behaviour of Qs and DPs to check their position when occurring together with low-manner adverbs (i.e., *bene, bien, goed*). (49) illustrates the sample structure involving the Q, both before and after the adverb, whereas (50) illustrates the same alternation but with DPs.

(49) a. V – Q – low manner adverb
b. V – low manner adverb – Q

(50) a. V – DP – low manner adverb
b. V – low manner adverb – DP

3.1.2 Description of the judgement tasks and ratio

The survey was made up of 9 categorial judgements tasks, that is, there are only two possible and opposite categories: natural and unnatural. Among those, two types of tasks were selected. Most of the survey involves Yes/No (YN) tasks. Using this kind of tasks allowed definitive results to be obtained with smaller samples and participants, unlike other qualitative or gradient tasks like the Likert scale (Schütze and Sprouse, 2013). In addition, by reducing the variation in the participants' answers, the results can be interpreted as a single group for each language. Following Schütze and Sprouse (2013), participants were presented a set of 4 to 6 sentences for each task and were instructed to judge each of them as a member of one of two categories: acceptable/natural or unacceptable/unnatural (see Appendixes for examples). The parameters used for the generalization of results can be found in Table 2 below. The percentages are distributed in this way, because both unacceptable and odd were considered 'no' categories, with an internal distinction between what is fully unacceptable and what is almost acceptable (odd), whereas if a certain answer reached 50%, then no further distinction was made in its acceptability.

PERCENTAGE OF ACCEPTABILITY	CONSIDERATION IN THE ANALYSIS
$< 30\%$	UNACCEPTABLE
$30\% - 50\%$	ODD
$> 50\%$	ACCEPTABLE

(*Table 2. Acceptability rates)*

Although reduced to specific contexts, the second type of categorical judgements that were selected were forced choice (FC) tasks. This type of task was selected to differentiate between two options that were potentially equally grammatical or ungrammatical. The main goal was to understand which one was preferred, as a way to add the gradience that is lost by eliminating the Likert scale.

This was only necessary in one test (i.e., low manner adverb) to obtain a specific trend for each language, since Italian and Spanish allow a more flexible word order whereas Dutch is more restrictive. Once more, following Schütze and Sprouse (2013), participants were presented with two sentences, and instructed to choose the sentence that is most natural.

3.1.3 Second Survey

One of the main limits of Survey 1 is the impossibility of providing a specific context for each individual utterance and of obtaining the speakers' justification, as would be possible in individual elicitation sessions. Adding a second consultation with a designated native speaker of each language was aimed at helping to reach higher data reliability rate and reduce the quantitative limitations (see 6.3 for a further discussion on methodological choices and their impact on the results).

One or two speakers were selected for each language to individually assess the same tests of the survey. This time, along with quantitative answers (YN and FC, following the same model as Survey 1), elaborated and justified answers were provided. In order to do so, all these participants must fulfill several requirements. Firstly, participants must have higher education (undergraduate or higher), with a particular interest in Humanities and/or Communication Science. Secondly, they must prove sufficient meta-linguistic knowledge and, of course, must be familiar with very basic syntactic concepts (e.g., identify the constituents of a sentence , being able to define predicates/complements).

3.1.4 Data collection

The survey was carried out using Qualtrics (find in Appendix 1,2,3 the complete questionnaires), as it allows the design and data processing of online questionnaires for each language, i.e. Dutch, Spanish and Italian. This survey was carried on during March and April 2022, with the goal of obtaining a minimum of 10 speakers for each language. A total number of 45 participants completed the questionnaire, an average of 15 for each language (16 for Spanish, 18 for Italian, and 11 for Dutch). Participants were found using a 'friend-of-a-friend'

approach (Milroy, 1980), that is, only one or two speakers of the target languages were contacted and they will spread the survey among their close environment. This approach was further supported using social media as a means of dissemination. The target group of the first survey was purposefully wide, to be able to obtain a random sample of society. Therefore, the participants were both male and female native speakers of each language, all belonging to the second generation (that is, ranging from 20 to 65 years old) and including a basic or higher educational level (participants must at least have completed high school, and undergraduate studies were preferred but not required). All of the conditions to participate in the survey were clearly stated in a prior informed consent statement before the beginning of the survey, and contributions were completely voluntary (i.e., with no financial compensation) and anonymous.

The second qualitative survey was carried out using Qualtrics for the Italian participants (see Appendix 4). In-person sessions of 1 hour were conducted for Spanish and Dutch, following the same structure. These took place during April and the first week of May of 2022. Once again, all of the conditions to participate in the survey were clearly stated in a prior informed consent statement before the beginning of the survey, and contributions were completely voluntary (i.e., with no financial compensation) and anonymous.

3.2 Data analysis

The theoretical analysis is aimed at answering RQ2 (see 1.1), and it is also formed by two sub-questions:

(i) What does the external syntax of quantifiers reveal about their internal structure?

(ii) Do the results fit in one of the pre-existing proposals?

According to the position that quantifiers occupy (or they cannot), we can investigate what type of constituent they are and whether their behaviour can be assimilated to the one of a DP, an adverb, or any other (that is, the internal syntax of the word). Therefore, the final aim is to account for their distribution by advancing one or more structures that are adequate to account for these words' behaviour. In addition, an evaluation of pre-existing proposals (Kishimoto, 2000; Leu, 2005; Garzonio and Poletto, 2017; Wu, 2021; Zimmermann, 2011; Doetjes, 1997) will be given, in light of the current data, in order to understand to what extent they are able to explain this data set, and where (if) they fail in doing so.

4 Results

In this section, I briefly present and develop the results from the quantitative survey detailed above. Subsections 4.1. to 4.4. goes through the results for each language and quantifier grouped in the four different tests (i.e., CLLD, RD, quantifier before post-verbal subject, and the position with respect to low-manner adverbs). Subsection 4.5. provides a short summary and the main implications and connections with the theoretical discussion that follows this chapter.

4.1 Clitic Left Dislocation

4.1.1 Universal Quantifier – *Alles, todo, tutto*

The survey revealed that the universal quantifier (henceforth, UQ) was almost never accepted in any of the languages when left dislocated [3] (see Table 3). However, the Spanish *todo* has proven to be an exception, as it was accepted by the speakers when accompanied by the resumptive clitic (see 1-b, clitic in bold). On the contrary, Italian speakers still dismissed it, even in presence of the clitic (see 1-c in bold). Regarding (1-d) and (1-e), these sentences are discussed under Clitic Left Dislocation even though no clitic occurs, because of the reasons explained in 2.2.3 and 3.1.1.

1.a.	*Alles ***dat*** *moet ik helaas verkopen*	[20.00%]	Dutch
	Unfortunately, I must sell everything		
1.b.	Todo ***lo*** *rompí hoy, no solo un plato.*	[64.29%]	Spanish
	I broke everything today, not only a dish		
1.c.	*Tutto, *purtroppo*, ***lo*** *devo vendere.*	[28.57%]	Italian
	Unluckily, I must sell everything		
1.d.	*Tutto *ho rotto oggi, non solo un piatto.*	[21.43%]	Italian
	I broke everything today, not only a dish		
1.e.	*Todo *rompí hoy, no solo un plato.*	[7.14%]	Spanish
	I broke everything today, not only a dish		

(*Table 3, Universal Qs in Left Dislocation*)

[3] In this and the following examples, certain adverbs were included in the sentence, in order to make the sentence more natural.For the sake of this thesis, their possible influence in the results will not be considered, as they are marginal. However, pragmatic and semantic constraints would be worth exploring in future research.

4.1.2 Existential Quantifier [+human] – *Iemand, alguien, qualcuno*

Table 4 shows that *qualcuno* was accepted by Italian speakers when left dislocated (see 2-c), whereas Dutch *iemand* and Spanish *alguien* [4] were not acceptable.

2.a.	*Iemand ***die*** *zal ik uitnodigen*	[40.00%]	Dutch
	I will invite someone		
2.b.	**A* alguien ***lo*** *invitaré mañana*		Spanish
	I will invite someone tomorrow		
2.c.	Qualcuno ***lo*** *ho sicuramente spaventato.*	[85.71%]	Italian
	I have for sure scared someone		

(*Table 4, Existential [+human] Qs in LD*)

It is specially noticeable in Table 5 that 50% of the Spanish speakers assessed *alguien* without the clitic as 'natural', in contrast with the judgement given to *qualcuno* without the clitic.

2.d.	% *A* alguien *invitaré mañana.*	[50.00%]	Spanish
	I will invite someone tomorrow		
2.e.	*Qualcuno *inviterò domani.*	[21.43%]	Italian
	I will invite someone tomorrow		

(*Table 5, Existential [+human] Qs in LD*)

4.1.3 Existential Quantifier [-human] – *Iets, algo, qualcosa*

Table 6 shows that *iets* was judged as unnatural. The Italian *qualcosa* and Spanish *algo* were refused in absence of the clitic (Arregi, 2003) as can be seen in 3.b and 3.c.

3.a.	*Iets ***dat*** *hoor ik*	[20.00%]	Dutch
	I hear something		
3.b.	% Algo, *antes de esta noche, tengo que comprar*	[42.86%]	Spanish
	I need to buy something before tonight		
3.c.	*Qualcosa, *prima di stasera, devo comprare*	[14.29%]	Italian
	I need to buy something before tonight		

(*Table 6, Existential [-human] Qs in LD*)

[4] Unlike the rest, 2.b. was retrieved from the in-person session with the Spanish native speaker. She judged this sentence as completely ungrammatical.

As for Spanish, algo was not accepted with the clitic either.

3.d.	*Algo *al menos tengo que hacer**lo***	Spanish
	I need to do at least something	
3.e.	Qualcosa, *di sicuro, mi inventerò*	Italian
	I will for sure make something up	
3.f.	Qualcosa *di sicuro **la** devo fare*	Italian
	I will for sure need to do something	

(*Table 7, Romance Existentials [-human] in LD*)

4.1.4 Control item - DP

As expected, Table 8 shows that all the speakers of the three languages considered left dislocated NPs as natural with no fluctuation or ambiguity. Concerning specifically Italian and Spanish, a left dislocated DP always needs to take a resumptive clitic, otherwise it is ungrammatical (Cinque, 1995).

4.a.	*Anna **die** vindt chocolaatjes lekker*	[90.00%]	Du
	Anna likes the chocolates (lit. Anna finds the chocolates tasty)		
4.b.	*A Marcos **lo** invitaré mañana, a Juan no*	[100.0%]	Spa
	Tomorrow I will invite Marcos, not Juan		
4.c.	*Marco **lo** inviterò domani, Giovanni no*	[92.86%]	Ita
	Tomorrow I will invite Marco, not Giovanni		

(*Table 8, DPs in Left Dislocation*)

4.2 Right Dislocation

4.2.1 Universal Quantifier – *Alles, todo, tutto*

Alles was accepted by Dutch speakers when right dislocated, whereas todo and tutto were more ambiguous: 50% of the Spanish speakers judged it as acceptable, whereas in Italian it was considered unacceptable (see Table 9).

5.a.	*Ik geef 't terug* alles	[80.00%]	Dutch
	I give everything back		
5.b.	%*Se lo devolví a María* todo	[50.0%]	Spanish
	I gave everything back to María		
5.c.	%*Lo ho restituito a Maria,* tutto	[42.86%]	Italian
	I gave everything back to Maria		

(*Table 9, Universal Qs in RD*)

4.2.2 Existential Quantifier [+human] – *Iemand, alguien, qualcuno*

All the languages seem to follow the pattern of non-acceptability of a right dislocated existential quantifier. However, as Table 10 shows, Spanish and Dutch displayed a much stronger preference to unacceptability (>15%, see 6.a and 6.b), whereas Italian seems to suggest a more ambiguous interpretation once more (ca. 36%, see 6.c).

6.a.	**Ik zou 'm inhuren,* iemand	[10.00%]	Dutch
	I would hire someone		
6.b.	**Le he visto pasar a* alguien	[14.29%]	Spanish
	I saw someone passing by		
6.c.	%*Lo ho visto passare,* qualcuno	[35.71%]	Italian
	I saw someone passing by		

(*Table 10, Existentials [+human] in RD*)

4.2.3 Existential Quantifier [- human] – *Iets, algo, qualcosa*

As it was observed for the [+human] existential quantifier, all the three languages discarded the inanimate existential quantifier when right dislocated. Italian has shown again a higher degree of acceptability (ca. 29%, see 7.c) if compared to the very strong preferences of Spanish and Dutch speakers (see 7.a and 7.c).

7.a.	**Ik geef 't terug,* iets	[0.00%]	Dutch
	I will give something back		
7.b.	**Lo compré ayer* algo	[0.00%]	Spanish
	I bought something yesterday		
7.c.	**Lo ho comprato ieri,* qualcosa	[0.00%]	Italian
	I bought something yesterday		

(*Table 11, Existentials [-human] in RD*)

4.2.4 Control Item – DP

As expected, Table 12 shows that all the speakers of the three languages considered right dislocation natural in the NPs with no fluctuation or ambiguity. It is especially relevant the increasing acceptability in similar constructions from *iemand* (clearly non-acceptable in 6.a.), to *een man* (acceptable in 8.b) and *die boeken* (perfectly acceptable in 8.a).

8.a.	*Ik geef ze terug, die boeken*	[90%]	Dutch
	I will give those books back		
8.b.	*Ik zou 'm inhuren, een man*	[60%]	Dutch
	I would hire a man		
8.c.	*Los devuelvo mañana los libros*	[50%]	Spanish
	I return the books tomorrow		
8.d.	*Li restituisco domani, i libri*	[66,7%]	Italian
	Them I will return the books tomorrow		

(*Table 12, DPs in RD*)

4.3 Quantifier before post-verbal subject

Since in Dutch the word order displayed by Spanish and Italian (VQS) does not exist, this test will only be considered for the Romance languages.

4.3.1 Universal Quantifier – *Todo, tutto*

Italian and Spanish have shown here different preferences: *tutto* was acceptable, *todo* seemed subject to more ambiguity . However, it can also be observed that Spanish and Italian acceptability rates are very close.

9.b.	%*Entenderá* todo *Luis*	[42.86%]	Spanish
	Luis will understand everything		
9.c.	*Capirà* tutto *Luigi*	[53.85%]	Italian
	Luigi will understand everything		

(*Table 13, Universal Qs before post-verbal subject*)

4.3.2 Existential Quantifier [+human] – *Alguien, qualcuno*

The human Existential Quantifier was accepted in this position in Italian, but received mixed judgements in Spanish.

10.b.	%*Encontrará a* alguien *Estefanía, no se quedará solas*	[42.86%]	Spanish
	Estefanía will find someone, she will not remain alone		
10.c.	*Incontrerà* qualcuno *Stefania, non rimarrà sola*	[61.54%]	Italian
	Stefania will find someone, she will not remain alone		

(*Table 14, Existential Qs [+human] before post-verbal subject*)

4.3.3 Existential Quantifier [-human] – *Algo, qualcosa*

As shown in Table 15, *algo* was here accepted, in contrast with *qualcosa* that received mixed judgements

11.b.	*Entenderá* algo *María*	[50.00%]	Spanish
	María will understand something		
11.c.	%*Capirà* qualcosa *Maria*	[38.46%]	Italian
	Maria Will understand something		

(*Table 15, Existential Qs [-human] before post-verbal subject*)

4.3.4 Control item – DP

As expected, DPs were not accepted before the post-verbal subject, neither in Spanish nor in Italian (see Table 16).

12.b.	**Entendió el libro Martina*	[28.57%]	Spanish
	Martina understood the book		
12.c.	**Ha capito il libro Martina*	[15.38%]	Italian
	Martina understood the book		

(*Table 16, DPs before post-verbal subject*)

4.4 Position with respect to low-manner adverbs

In this test, the speakers were asked to choose the preferred order between (i) Quantifier preceding Low manner adverb and (ii) Low manner adverb preceding Quantifier.

In this section I report the preferred order for each quantifier in the three languages, as the control group DP is not allowed before the low manner adverb. Moreover, since a FC modality was chosen, there is no relevance in reporting the percentages.

4.4.1 Universal Quantifier – *Alles, todo, tutto*

In Table 17, Spanish patterns with Dutch in a [Quantifier > low manner adverb] order. On the other hand, Italian prefers [Low manner adverb > Quantifier] in a forced choice context. Find below the chosen constructions with the adverb in bold.

13.a.	*Ik versta* alles ***goed***	Dutch
	I understood everything well	
13.b.	*María entendió* todo ***bien***	Spanish
	María understood everything well	
13.c.	*Maria ha capito* ***bene*** tutto	Italian
	Maria understood everything well	

(*Table 17, Universal Qs with low-manner adverb*)

However, the construction *tutto bene* ('everything well') was also widely accepted when not in competition with the other one (see Table 18).

14.a.	*Stefania ha capito* tutto ***bene***	[77.78%]	Italian
	Stefania understood everything well		

(*Table 18, Universal Qs with low-manner adverb*)

4.4.2 Existential Quantifier [+human] – *Iemand, alguien, qualcuno*

In this case (Table 19), Spanish and Italian both prefer to have the existential quantifier after the low manner adverb, while Dutch strongly prefers [Quantifier > low manner adverb] in the forced choice task.

15.a.	*Je begrijpt* iemand ***goed***	Dutch
	You know someone well	
15.b.	*María conoce* ***bien*** *a* alguien	Spanish
	María knows someone well	
15.c.	*Maria conosce* ***bene*** qualcuno	Italian
	Maria knows someone well	

(*Table 19, Existential [+human] Qs with low-manner adverb*)

4.4.3 Existential Quantifier [-human]- *Iets, algo, qualcosa*

Lastly, *algo* and *iets* behave exactly like *todo* and *iemans*. This means that they prefer the quantifier preceding the low manner adverb, in contrast with *qualcosa*, which prefers [Low manner adverb > Quantifier] order (see Table 20).

15.a.	*Ik versta* iets ***goed***	Dutch
	I understand something well	
15.b.	*María entendió* algo ***bien***	Spanish
	Maria understood something well	
15.c.	*Maria ha capito* ***bene*** qualcosa	Italian
	Maria understood well something	

(*Table 20, Existential [-human] Qs with low-manner adverb*)

4.5 Summary and first theoretical implications

Concerning (Clitic) Left Dislocation, it is interesting that Dutch speakers always refused a left dislocated quantifier with a very clear preference. On the other hand, more ambiguities have emerged in Spanish and Italian. First, the left dislocated Universal quantifier would in principle be allowed in that position without a clitic (Cinque, 1990) but it was perceived as strange by the speakers of both languages. Furthermore, Spanish speakers accepted the Universal quantifier only with the resumptive clitic, whereas Italian did not (although it is in principle grammatical, see Cinque (1990)). Thirdly, a mirrored behaviour can be observed with the left dislocated Existential quantifier [+ human] in Spanish, which was perceived

as weird both with and without clitic (2.b and 2.e), probably due to a lack of reference-specificity, which will be discussed in the following chapter. On the other hand, the Italian Existential [+human] quantifier was this time accepted in presence of the clitic as can be observed in 2.d. However, it was not accepted without the clitic, which suggests a different use of the two quantifiers in the two languages. Lastly, the left dislocated [-human] quantifier was not accepted as completely natural in Dutch and Spanish but was accepted for Italian (see 3.e above).

In contrast with Left dislocation, none of the quantifiers in any of the three languages were well accepted when right dislocated. Interestingly, the only exception is represented by the Dutch *alles*, in striking contrast with the other two quantifiers (it was considered felicitous by the 80% of the speakers, against 20% and 0% in Spanish and Italian, respectively). However, *alles* is normally perceived as ungrammatical in RD, unless there is a strong pause intonation. Since this text did not include an audio sample, it could be possible that the speaker judged the sentence after mentally adding that specific intonation (Barbiers, personal communication). It is also worth noticing that the Spanish *todo* has a higher rate of acceptability (50%) than *alguien* and *algo*, which were discarded categorically. Interestingly, *algo* was perceived as completely wrong whereas *todo* was considered infelicitous. The DPs behaviour, on the contrary, was the same in all the three languages, as they were always accepted in Right Dislocation.

Dutch was the only language in which all the quantifiers were accepted when preceding the post-verbal subject. On the other hand, Spanish has shown fluctuating results for *algo* and *todo* due to the reason explained in the previous section. A similar observation can be made for Italian, where *tutto* was accepted, but *qualcosa* was perceived as odd (*tutto* obtained a 53% whereas *qualcosa* only a 38%). Instead, *qualcuno* and *alguien* were both completely felicitous.

The low manner adverb test revealed several interesting patterns. Dutch has shown a fixed order for the Quantifier-Adverbial positions, which is expected due to specific syntactic constraints. When it comes to *todo*, Spanish seems to pattern with the Dutch *alles goed*, since it prefers the quantifier before the low-manner adverb (*todo bien*). In contrast, Italian speakers preferred tutto in the lowest DP position, although the opposite is indeed possible as well (that is, *tutto bene*). A similar situation is found in *algo* and *iets*, since the preferred order is again with the quantifier preceding the low manner adverb, whereas Italian prefers the quantifier after the adverb. It must be noticed that the opposite order (that is, *qualcosa bene*) would sound odd, in contrast with the felicitous *tutto bene*. It is only with *alguien* and *qualcuno* that Spanish and Italian pattern together, preferring the quantifier after the adverb. Overall, the fact that quantifiers behave in different ways in nearly all the tests, points towards different structures for different languages, which would account for each pattern differently.

5 Discussion

Many of the existing studies on the internal structure of bare quantifiers have focused their argumentation on the observation of coordination and modification patterns that characterise these words and distinguish them from regular DPs. This research aimed at observing

the behaviour of Qs cross-linguistically and from a different syntactic perspective. More specifically, it investigated how Qs behave in the broader hierarchy of the sentence (i.e., environments of dislocation, both left and right) and in relation to other constituents (i.e., a specific type of adverb) , and the subject (post-verbal subject), as was also done by Garzonio and Poletto (2017). In order to gain a more extended and diverse set of data on this, it was decided to analyse two existential quantifiers and one universal quantifier in three different languages. This is summarised in Table 21 below:

	Universal Qs	Existential Qs [-human]	Existential Qs [+human]
Dutch	alles	iets	iemand
Spanish	todo	algo	alguien
Italian	tutto	qualcosa	qualcuno

(Table 21, Overview of the selected quantifiers)

The implication of this study will now be elaborated in this chapter, which will address the two research questions in two different sub-chapters, 5.1 for RQ1 and 5.2 for RQ2. The RQs stated in section 1.1 will be repeated below:

(i) Which similarities and differences do quantifiers display in the three languages? To what extent does their external distribution show variation intra- and cross-linguistically?

(ii) Given the results from (i), what does the external syntax of these words reveal about their internal structure? Do the results fit in one of the proposals that have been previously provided or is a new one needed to account for the observed patterns?

As previously mentioned, being able to answer the first question is essential to answer the second one. RQ1 investigates what bare quantifiers are and which relation they have with other constituents. This provides information about their external syntax (i.e., the surface positions occupied by words in the sentence structure). It is essential to stress that this can reveal crucial information about their internal structure as well, that is, RQ2. Depending on the way they behave with respect to other constituents or in specific constructions, as the ones used for the tests performed above, it is possible to define whether or not they carry certain specific features. This is because the position of words in the syntactic structure of a sentence is constrained by their nature, so that different positions are allowed only for certain word classes. Therefore, section 5.1 treats the external syntax of bare quantifiers and how it varies cross-linguistically. It will identify patterns of similarity and difference among types of quantifiers in the three languages and explain them. Subsequently, and given the patterns observed in 5.1, section 5.2 provides a formal account for bare quantifiers using the accounts previously suggested in the literature and evaluate to what extent they function with the current data, and in case they do not, providing a new structure(s).

5.1 External Syntax: common patterns and cross-linguistic variation

This chapter is concerned with the external syntax observed in quantifiers and their patterns of similarities and differences. First, existential quantifiers are analysed in 5.1.1, and universal quantifiers follow in 5.1.2. Existentials with [+human] feature are be separated from [-human] existentials. For all of them, the analysis is be structured in the following way: first their similarities and the consequent implications are listed and accounted for, following the order of the tests. These are followed by their differences, again according to the order of the tests.

5.1.1 Existential quantifiers

The following tables summarise the results of existential Qs and regular DPs described in the previous chapter, to provide a reference for the analysis that follows. The symbol + indicates that the word was accepted in the corresponding construction, whereas – means it was not. As before, % indicates that received mixed judgements the survey, but it is accepted in the literature. Lastly, when the test could not be applied to a language, it is signaled in the table as *n.a* (non applicable).

		Existential Quantifiers					
		[+human]			[-human]		
Test		iemand	alguien	qualcuno	iets	algo	qualcosa
Left dislocation	+clitic	-	-	+	-	-	%
	-clitic	-	+	-	-	+	%
Right dislocation		-	-	-	-	-	-
Post-verbal subject		n.a	+	+	n.a	+	-
Low manner adverbs		Q>Adv	Adv>Q	Adv>Q	Q>Adv	Q>Adv	Adv>Q

(*Table 22, Existential Qs results*)

		Regular DPs		
Test		Dutch	Spanish	Italian
Left dislocation	+clitic	+	+	+
	-clitic	+	-	-
Right dislocation		+	+	+
Before post-verbal subject		n.a	-	-
Low manner adverbs		DP>Adv	Adv>DP	Adv>DP

(*Table 23, DPs results*)

Similarities in Existentials' behaviour

[-human]. It can be observed in the data that there are more differences than similarities among the behaviours of these words. They only pattern together in their inability to be right dislocated, contrary to regular DPs, which are regularly accepted by the speakers in this position in all three languages. De Vries (2009) proposes in his analysis that backgrounded Right Dislocation (see 2.3.1) is made of a clause-internal pronoun resuming a certain discourse topic, which is displayed in the right dislocated clause. Therefore, the features of the right dislocated item can only be [add, about] or just [add], since it refers to a resumed discourse topic. However, even though the right dislocated element is discourse given, it needs to be richer than its correlate in the host clause. Precisely because the RD's function is to provide more specific information to the clause-internal associate and because of the semantics of the clitic or weak pronoun, it can be argued that a right dislocated DP does add information about the previously used resumptive clitic or weak pronoun. In addition, it is also able to have an anaphoric relation with the clause-internal element. In contrast, an existential quantifier cannot establish an anaphoric relation with the correlate due to its indefinite nature.[5]

[+human]. These quantifiers share, cross-linguistically, the inability to be right dislocated. It can be observed in the results section how human existentials are significantly excluded from a right dislocated position. This most certainly happens for the same reasons illustrated for [-human] ones, as they do not carry the proper features of [about][add] to satisfy the requirements for being right dislocated, marking once again the difference with full and regular DPs. The cross-linguistic inability of both [+/- human] existentials to occupy a right dislocated position points to an at least partially shared underlying structure, and to a lack of properties that instead characterize regular DPs in all the three languages.

Differences in Existentials' behaviour: [-human]

(I) Clitic Left Dislocation and [aboutness]. Informative features such as [aboutness] are pragmatic and, as such, they are not entailed in the syntax or the semantics of the word. Thus, the possibility to occupy a dislocated position comes with some conditions. According to De Vries (2009) what is [about] needs to be existentially presupposed. Moreover, A left dislocated constituent needs to be specific, otherwise the demonstrative pronoun (in the case of Dutch) cannot take it as a referent in the middle field of the clause (De Vries, 2009). As a consequence, indefinite items with a non-specific reading are excluded from this position, and this seems indeed to be the case of the [-human] Dutch existential, as shown in (51).

(51) **Iets dat moet ik kopen.*
Something this must I buy
'Something, I have to buy it.'

[5] In Dutch this is also expected for full indefinite DPs (Barbiers, personal communication). This is in contrast with Italian, where an expression like *Vorrei davvero adottarlo, un cane* 'I'd really like to adopt it, a dog', is instead grammatical.

Interestingly, whilst *iets* is not allowed in this position, the situation is more diverse when looking at Spanish and Italian. Specifically, Italian speakers mostly refused *qualcosa* because the construction was not completely felicitous, as they considered it to be grammatical but not pragmatically felicitous probably because it is not frequent. However, there are several examples from both written and spoken Italian showing that it is in fact possible to left dislocate the [-human] existential (Delfitto, 2002; Floricic, 2013). An instance of left dislocated *qualcosa* with the clitic is illustrated below, where the Q is in relation with *la*, which carries a feminine feature.

(52) *Qualcosa, prima o poi, la= farò.*
'Something before or after F.SG= do-FUT.1SG
'Something, sooner or later, I will do.'

Spanish on the other side, as shown in (53), does not allow *algo* in this position with the clitic. However, as visible from the survey results (see 4.1.3), it is indeed acceptable when occurring without clitic. Therefore, it can be stated that in both languages it is possible to find these Qs left dislocated, though with different levels of acceptability.

(53) **Algo lo= haré.*
Something M.SG= do-FUT.1SG
'Something, I will do it.'

In fact, there seems to be a certain scalarity in the acceptance degree of these items in a CLLD environment: from the complete non acceptance of *iets*, *algo* shows the possibility of being left dislocated without the clitic in some contexts, whereas *qualcosa* can appear both with and without clitic. Floricic (2013) states that in Italian, bare quantifiers can obtain the [aboutness] requirement needed for a word to be considered a topic. It was also noticed by Cinque (1996) that the clitic might be missing in the case of left dislocated bare quantifiers, meaning that they are able to act as operators which can c-command (i.e., bind) an empty category in argument position. However, this optionality seems to be a peculiarity of Italian, as it cannot be observed in Spanish or Dutch. Spanish also presents a peculiar status of *algo* in this sense: it can be left dislocated but it cannot appear with a clitic (contrasting in this way with the Spanish UQ, as it will be observed in the following subsection). Arregi (2003) suggests that this is expected due to *algo*'s inability to determine a 'set of individuals'. *Algunos (libros)* 'some (books)' can be used to refer to a subset of the books mentioned, but *algo* 'something' cannot. This might suggest that this construction is different from Left Dislocation, but Arregi (2003) shows that for left dislocated *algo* shares all the other characteristics of CLLD in Romance on a phonological, syntactic and semantic level. Therefore, the author concludes that CLLD of *algo* is not acceptable unless an explicit contrastive reading is provided. *Algo* seems to act as an operator in the sense of Cinque (1990), since it does not need the clitic to identify the empty category. Arregi (2003) formulates the hypothesis that the indefinites that are able to undergo CLLD have an unrestricted scope, which is not allowed in *algo*. This marks a reading difference between the two Romance quantifiers. Floricic (2013) uses the oscillation of the clitic associated with *qualcosa* in Left Dislocation to argue for a non-referential relation between the quantifier and its clitic. This relationship is instead assumed by Cinque (1990) who considers *qualcosa*

of the following examples as a quantified NP with either feminine, in (54), or masculine features in (55).

(54) *Qualcosa, la= ho imparat-a.*
something 3F.SG= have learnt-F.SG
'Something, I have learned it.'

(55) *Qualcosa l'=ho imparat-o*
something 3M.SG=have learnt-M.SG
'Something, I have learned it.'

Interestingly, if (54) was not carrying the clitic and,instead, the past participle was still displayed with the feminine feature, the sentence would be ungrammatical, as exemplified in (56) below. This shows that this *qualcosa* is ungrammatical without the clitic. On the other side, if the past participle is unmarked (which in Italian corresponds to the masculine), the sentence is grammatical, as shown in (57).

(56) **Qualcosa ho imparat-a.*
something, have learnt-F.SG
'Something, I have learned it.'

(57) *Qualcosa ho imparato.*
something have learnt
'Something, I have learned it.'

Floricic (2013) argues for a partitive reading that can be received by *qualcosa* and that affects the whole sentence. However, if we look at sentence (56) and (57), we can notice how (57), which is unmarked, is not equivalent to (56), marked for feminine. This means that in this last case, *qualcosa* is not a bare quantifier and therefore it is ungrammatical without the clitic. This points to the fact that *qualcosa* can be a bare quantifier but also a quantified NP, due to its morphological complexity (Cinque, 1996). *Algo*, on the other hand, does not show at all this type of complexity at all, nor does the Dutch *iets*. There is therefore evidence to say that some existentials are able to establish the anaphoric relation needed in Left dislocation, whereas others are not.

(II) Position preceding post-verbal subject. In this case, Spanish and Italian seem to arguably pattern together. *Algo* was accepted with a higher degree (53%) than *qualcosa*, which was slightly below 50%. It must be observed that VOS sequences are allowed in Italian only with a specific (focus) interpretation for nominal expressions. Otherwise, these are ungrammatical. In the survey, as expected, they were not accepted. The results change when *tutto* is in such a position since, as pointed out in Belletti (2004)'s analysis (see 2.4.3), the post-verbal subject is visibly low in the sentence structure because it is followed by low adverbs (Cinque, 1999). Regarding this, existentials are found to be different, in that the Spanish ones are able to raise to the same position of the adverbs preceding the post-verbal subject, whereas Italian existentials are not allowed to do so. Moreover, as predicted by Belletti (2004)'s analysis, they are both in striking contrast with the DP in the same position. Cinque (1999) proposes that the bare quantifier *tutto* occupies a position that is

higher than the usual object one, where (quantified) nominal expressions are located. In this account, all adverbs are located in Spec of functional projections (FP). Each of these projections expresses a single feature, and the past participle raises to the head positions of these FPs, which is why it is found on the left of the adverbs. This indeed seems to be the case for *algo*, but it is slightly more problematic for *qualcosa*.

(III) Position when occurring with low-manner adverbs. The position that existentials occupy with respect to the low manner adverb 'well' (*goed, bien, bene*) is relevant because 'well' is located in a very low place in Cinque's 1999 hierarchy of adverbs (explained in ch.2). Moreover, the fact that a quantifier can precede it, means that this latter can occupy a higher position, which is not allowed for regular DPs. What can firstly be observed is that *iets* behaves like *qualcosa*, since they both occupy the argument position of their respective languages, whereas *algo* raises to a higher one. Low manner adverbs are VP adverbials, meaning that they are VP internal, and they semantically modify the predicate they are connected to by restricting its denotation (Jackendoff, 1972). According to Cinque (1999), the head of 'well', namely VoiceP, is lower than *tutto*'s one, which occupies the ComplAsp position right above it. (58) provides a closer look to this issue:

(58) a. *Ik versta iets goed.*
I understand something well
b. *María entendió algo bien*
María understood something well
c. *Maria ha capito bene qualcosa.*
Maria has understood well something

The Dutch *iets* is placed, with a very significative preference in the survey, before the adverb *goed*. Moreover, if we frame the sentence with AuxOV order, the quantifier is still placed before it. This provides stronger evidence for the adverb to be lower in the sentence structure. However, in Dutch this is the usual object position, meaning that *iets* was not occupying a position that is different from the one regular DP. The preference of *algo* before the low manner adverb and the opposite for *qualcosa*, both with very strong preferences of the speakers, proves that they indeed occupy different positions. *Algo*, as it will be shown in the next section, shares its position with *tutto* and *todo*, whereas *qualcosa* is preferred in the object position. It must be noticed that in this, *qualcosa* patterns with regular DPs, which are never allowed before the adverb. This might suggest that *qualcosa* has a more layered structure (shared with its [+human] correspondent), which does not allow it to be as syntactically flexible as *algo*. Dutch, on a completely different line, only allows existentials in the normal object position. Cinque (1999) proposes that the Universal quantifier occupies the Plural ComplAsp position, found in the SpecP of a dedicated FP. However, the same cannot be claimed for *qualcosa* for it is preferred lower in the tree, like a DP.

Differences in Existentials' behaviour: [+human]

(I) Left Dislocation Human existentials differ, similarly to their [-human] counterparts, in their distribution in Left dislocation. The Dutch quantifier is once again not grammatical

when left dislocated, in contrast with the two Romance languages. Following De Vries (2009), it can be assumed that they do not have the right specificity for them to be taken as referents by the clitic responsible for the connection between the internal clause and the left dislocated one. The Spanish existential was accepted but without the clitic, as it happens with *algo*, thus providing further evidence for Arregi's 2003 hypothesis. In this, the Spanish existentials seem to mark a difference with Italian, where *qualcosa* is accepted in both ways (Floricic, 2013) but *qualcuno* is not. However, *qualcosa* received mixed judgments in the survey both with and without the clitic. This means that, for it to be normal, a specific intonation is required, whereas *qualcuno* is more easily accepted. This, together with the fact that *qualcuno* is preferred with the clitic, could provide evidence for it to be close to a DP.

(II) Position preceding post-verbal subject In the case of the quantifier preceding the post-verbal subject, the human existential can also precede the subject in this construction, without being focused. This happens for both Romance languages. However, it seems that a contrastive reading is needed for it to be fully felicitous (Belletti, 2004). In the survey's sentences there is a contrast between the two conditions of meeting someone or remaining alone .

(III) Position when occurring with low-manner adverbs Lastly, it was noticed that, when occurring with low-manner adverbs, the Dutch [+human] existential behaves in the same way as its [-human] counterpart, providing evidence for them to occupy the same position. On the other hand, the Spanish and Italian [+human] are preferred in the lower position of the sentence, as was seen for *qualcosa*, posing them in a contrast with *algo*, which is located higher in the structure. However, this provides further evidence for a non-uniform treatment of these quantifiers, which will be further developed in the following sections.

Interim Summary – Existentials.

A different degree of acceptability was observed for both [+human] and [-human] in Left dislocation, due to the different semantic readings that existentials are allowed to take in the different languages. These have been explained with the possibility of Italian existentials to receive a free choice reading (Floricic, 2013), in contrast with Spanish and Dutch. In *algo*'s case, this Q can take a restricted scope, whereas a quantified NP can have a wider one. This claim can be supported by Baunaz (2011)who establishes a hierarchy of strength where 'strong' corresponds to specific and partitive reading. Spanish and Italian existentials [+/-human] can both precede the post-verbal subject, providing evidence for a higher position in which they are accepted. *Iets*, *iemand*, *algo* and *alguien* seem to be more structurally lighter in their features. In the case of *algo*, this is reflected in a higher syntactic flexibility, which allows it to appear in positions of DPs but also adverbs. Concerning Dutch Qs instead, their positions are much more constrained. Furthermore, there seems to be evidence for two different structures characterizing *algo* and *qualcosa* on the first place, and for the second one to be much more similar to *qualcuno*. These points and their implications will be further developed in chapter 5.2, in comparison with Universal quantifiers.

5.1.2 Universal quantifiers

This section will deal with UQs, and the conventions used in the following table are the same that were adopted for the tables concerning existentials.

		Universal Quantifiers		
Test		Alles	Todo	Tutto
Left dislocation	+clitic	-	+	%
	-clitic	-	-	%
Right dislocation		-	-	-
Before post-verbal subject		N/A	+	+
Low manner adverbs		Q>Adv	Q>Adv	Q>Adv and Adv>Q

(*Table 24, Universal Qs results*)

Similarities in Universal Quantifiers

Similarities among UQs were observed in Right Dislocation, in the position occupied wit respect to a post-verbal subject and to a low-manner adverb.

(I) Right Dislocation. Like existentials, UQs are never allowed to be right dislocated, which is expected if we consider that Right Dislocation is a mechanism used to add further information to something that has been mentioned previously in the sentence (De Vries, 2009). As mentioned above and confirmed by the literature, DPs are always felicitous in this position, meaning that UQs display an opposite trend in this sense. This can be explained with the same reason that holds for existentials.

(II) Position preceding the post-verbal subject. Spanish and Italian UQs are accepted before the post-verbal subject, proving that they both have a similar distribution that allows them to not be treated as regular DPs.

(III) Position when occurring with Low-manner adverb. In contrast with existentials, UQs seem to show a uniform pattern, as they can precede the low-manner adverb. This is expected if we assume that *tutto*'s position is the one of Plural ComplAsp, higher in Cinque (1999)'s hierarchy than the position occupied by the adverbial class of *bene*, occupying the Spec of VoiceP. It can be assumed that this position is shared for both the Italian and the Spanish UQs. Crucially, the Italian and Spanish UQs are allowed both before and after the low manner adverb, showing a similarly flexible behaviour, in contrast with the more intricate situation of existentials. As for Dutch, even though it precedes *goed*, *alles* is occupying the regular object position as observed in the Dutch existentials.

Differences in Universal Quantifiers

(I) Left Dislocation. In the instances in which the Spanish and the Italian UQs are allowed in Left Dislocation, the Dutch one is indeed ungrammatical. This is interesting if we consider that *alles* is allowed to occupy all the regular argument positions (Zwart, 2011) and DPs in Dutch are allowed to be left dislocated, as in Spanish and Italian. Spanish and Italian display a further difference between each other, since the Italian Quantifier is allowed in principle both with and without the clitic (Cinque, 1996), whereas the Spanish one always requires the clitic. According to Cinque (1996) this implies that the Italian quantifier can bind an empty category in the main clause as it functions as a variable, but the Spanish one cannot. Moreover, it must be observed that in the survey, *tutto* was never accepted by the native speakers. This could provide evidence for Delfitto's 2002 argument that bare quantifiers, apart from the two existential ones, are excluded from Left Dislocation in Italian. To do so, Delfitto (2002) assumes that the Top-head in Italian has an interpretable [top] feature that can only be checked by a so-called discourse entity.[6] On the other hand, the Spanish [top] feature does not hold this constraint. In other words, the consequence is that bare quantifiers can be accepted in that position in the same way as generalized quantifiers (DPs). Delfitto's 2002 account might explain the rigidity shown by Dutch when compared to the two Romance languages, in allowing items in the Top-Head. This means that none of the Dutch quantifiers can receive a general quantifier reading when occurring without an overt DP, which would make the construction grammatical. This is exemplified in (59).

(59) *Alle boeken die ik heb gelezen.*
All books DEM I have read
'All the books I have read'

Floricic (2013) discards this account by demonstrating that there are Italian constructions in which the UQ is perfectly grammatical when left dislocated. Even in these constructions, the UQ is subject to very strong restrictions that might not completely exclude what is claimed by Delfitto (2002) instead. Furthermore, according to Leonetti (2009), negation is an important trigger for the partitive reading, which is argued to be an extremely important condition for the bare quantifier to be a topic. (60) shows an instance of this claim, with *tutto* being a perfectly grammatical topic in presence both of negation and clitic. It seems, in this respect, that *alles* lacks a feature that is present in its Spanish and Italian counterpart.

(60) *Il Governo? Tutto non lo può fare.*
The government? Everything-M.SG not =M.SG can do
'The government, it cannot do everything.'

Both (CL)LD and RD are characterized by a resumptive element working as a connector between the peripheral phrases and the predicate in the mid-field of the sentence. In the case of Dutch, this connection does not seem to hold in any of the cases. DPs are always

[6]This author follows the Discourse Semantics framework. Within this framework, discourse entities are components of the discourse not related to 'real' word entities, as in, referential entities (Cumming, 2014).

grammatical because they can easily be bound to the D particle respecting the anaphoric chain. In fact, they can carry [+definiteness] [+giveness] [+specificity] [+old] [+referentiality], which are some of the defining features of a topic (Floricic, 2013) and quantifiers instead seem to lack.

5.1.3 External Syntax: summary of claims

This section showed that variation among quantifiers is found on multiple levels: intra- and cross-linguistically. The main conclusions are here summarized, to understand what the observed patterns imply for the internal syntax of these words, which is discussed in 5.2. As previously mentioned, the final aim is to understand whether or not Qs can be represented by one unified structure, as proposed in previous accounts (Garzonio and Poletto, 2017; Kishimoto, 2000; Leu, 2005; Wu, 2021).

Firstly, although quantifiers are allowed in all argument positions, the situation has been shown to change when they are dislocated in the left or right periphery of the sentence.

As for the former, Dutch quantifiers cannot be left dislocated (contrary to what occurs in DPs), whereas the Romance ones can. In Dutch, a left dislocated element needs to be specific, otherwise the D pronoun cannot take it as a referent. Existential quantifiers have a non-specific reading (De Vries, 2009), so are not referential, and the same happens for the Dutch Universals. Dutch generics instead can, even if they are not specific (Barbiers, personal communication). However, Spanish and Italian present a more complicated situation. According to Cinque (1990), a bare quantifier has the status of operator, meaning that it can bind an empty NP variable, which makes it possible for it to appear in LD without a clitic. In contrast, left dislocated DPs and quantified DPs cannot bind an empty variable. Therefore, when the variable cannot be empty, its position is filled by a clitic. This is interesting if we observe that the Spanish existentials are only left dislocated without a clitic, whereas the Italian existentials can occur with or without the clitic, depending on whether or not they have a referential reading (Cinque, 1990). This suggests another structural difference, this time between Spanish and Italian Existential Qs. The more layered structure of *qualcosa* and *qualcuno* allows them to also behave as DPs, whereas the more 'simplex' (Zimmermann, 2011) Spanish correspondents cannot. Interestingly, for UQs, the situation is different, suggesting a contrast between Spanish and Italian.

Concerning the latter (i.e., RD), none of the quantifiers can be right dislocated since they cannot convey new information, contrary to DPs. They must have [add][about] or [add] features, but they cannot add more information to the clause internal element since they do not have descriptive content. This is in contrast with what happens with CLLD, where the distribution is less homogeneous. This is because RD is characterized by a tighter syntactic bond to the main clause than LD and it codes more continuous referents (Ashby, 1988).

Mixed judgements were observed regarding the post-verbal subject position. This position involves a constituent order that is not the default one, and therefore this might have played a role in the perception of the sentence. However, it is still noticeable that the less-layered Spanish existentials were allowed in that position, whereas the Italian ones were only partially allowed (*qualcosa* was not accepted). In the low-manner adverb position test, only *algo* and the Universals of the two Romance languages could precede it, suggesting once

again a structural difference, with the structure of *qualcuno* and *qualcosa* being closer to the one of a DP. As for Dutch, however, the fact that all quantifiers are only found in the position of object DPs seems to point to them being instances of a DP.

To sum up, the emerging patterns show that more morphological complexity leads to more constraints in the positions that can be occupied by Qs, whereas less allows for more flexibility but a poorer meaning specification. In addition, Dutch Qs [7] have a much more coherent behaviour than the Romance Qs, in that they are allowed and discarded in the same positions with no intra-linguistic variation.

5.2 Internal Syntax – A formal account based on distributional patterns

5.1 revealed a rather complex picture for the behaviour of these quantifiers. Table 25 represents a summary and a rationalization of these patterns, so that it is possible to generalize the findings from a broader perspective. On the left column the relevant positions are displayed, and on the right ones they are checked for whether they can be occupied only by DPs or also by quantifiers, so that it is clear where there are overlaps between the them. For instance, the first row tells us that in Right Dislocation (and, in the case of Dutch, also Left dislocation) only DPs could occur. The position in which both Qs and regular DPs were allowed was instead the argument position and the left dislocated one, this latter exclusively for Romance languages. As for the adverbial positions, only quantifiers were allowed (as expected).

	DP	QS
RD	+	-
ARG POSITION, LD (No Dutch)	+	+
ADV POSITION (No Dutch)	-	+

(*Table 25, distribution generalization*)

It can be observed that both in Dutch and in the Romance languages, the distribution of quantifiers largely corresponds to that of DPs. However, there are positions where DPs are allowed but quantifiers are not. Firstly, it was observed in all languages that quantifiers could not occur right dislocated, due to the nature of this type of construction, which requires something new to be added to the old clause-internal content or something more to be said about an already known element. Quantifiers, due to their indefiniteness, cannot satisfy any of these requirements.

The patterns seen in the first row of Table 25, can be explained from a syntactic point of view if we take into consideration the elliptical account of Right Dislocation advanced by Ott and de Vries (2014). The authors propose that the right dislocated element is the remnant of a clausal ellipsis process affecting the second clause i.e., the right dislocated one. This justifies the signs of connectiveness that are displayed despite the extrasentential status observed for right dislocated elements. In other words, there is a C1 clause hosting a C2

[7] Please, note that his statement refers to the quantifiers that are analysed in the current study.

one, the latter being the one undergoing ellipsis after the fronting of the element that will be the remnant. Even though in principle this does not pose restrictions for which category can be fronted, Ott and de Vries (2014) accounts for the restriction observed with non-specific quantifiers with the fact that the relation between the fronted remnant and its C1 is the one of cross-sentential anaphora. Therefore, quantifiers are excluded because no relation is allowed between them and the cataphoric free pronouns. This can explain why, in none of the relevant languages, quantifiers could occur in RD.

A second set of patterns is the one concerning the positions in which Qs surface and DPs are not allowed. These cases involve universal quantifiers in Italian and Spanish, and Spanish existentials. They were able to appear before low manner adverbs and before the post-verbal subject.[8] This is in contrast with existentials in Italian, showing that there is indeed variation in the structures associated with them. Furthermore, as this pattern is observed for Romance languages but not for Dutch, a difference between Qs in each of the three languages can be assumed. As Dutch shows very different behavioural patterns, it needs to be accounted for in a different way. In other words, the fact that quantifiers can occur in some positions together with DPs, but not in others, shows that they are different, to an extent, from regular DPs. It is possible to account for the different distribution patterns that are observed by assuming that some quantifiers involve a full DP projection, but some do not. This variation could also explain the discrepancies between the survey results and the existing literature; the survey found that quantifiers in Romance languages received mixed judgements in positions in which the literature proposes they should be allowed (e.g., Clitic left dislocation (Cinque, 1990)).

Table 27 and Table 28 below show which interpretations are given to these quantifiers in light of the positions they can occupy.

	qualcosa	qualcuno	tutto	algo	alguien	todo
DP	+	+	+	-	+	+
Bare Q	-	-	+	+	+	+

(*Table 26, Romance Qs interpretations*)

	iets	iemand	alles
DP	+	+	+
Bare Q	-	-	-

(*Table 27, Dutch Qs interpretations*)

Therefore, in contrast with earlier findings, no evidence of a unified structure was detected in this study. On the contrary, three distinct categories emerge, which are discussed in the following sections: (i) Qs that do present an underlying DP structure (5.2.1), (ii) Qs that do present a duality in their status (5.2.2), and (iii) Qs that do not show DP layers and seem therefore to be pro-forms or deficient items (Garzonio and Poletto, 2017; Zimmermann, 2011) (5.2.3). The existence of these three categories is argued for in the next section, providing

[8]With the exception of *alguien* in post-verbal subject position, where it is not accepted and for which further research is needed

an internal structure for each. More specifically, each sub-section describes and account for each of these classes by firstly illustrating which set of behaviours identified in 5.1 allows us to qualify that category as such and, building on this, providing an internal structure able to account for those observations will be provided.

5.2.1 Quantifiers with full DP projection

This class includes those Qs that mostly occupy DP positions, ans were less accepted in non-DP positions. More specifically, Italian Existentials (*qualcosa*,*qualcuno*) and Dutch quantifiers (*alles*, *iemand*, *iets*). However, the latter group did not have the same freedom as Romance languages and was found to occupy only a subset of DP positions. First of all, it was observed that both *qualcuno* and *qualcosa*, were not able to be right dislocated. However, this concerns the syntactic and semantics requirements of that construction, which have been explained in the section above. Second, in Left dislocation, Italian existentials were mainly preferred when occurring with a clitic: this shows that a referential reading is more natural for them in this environment. Moreover, as shown in example (54) in 5.1.1 for *qualcosa*, they can take a masculine and a feminine clitic, providing evidence for these Qs to be subject to gender agreement, since this could not be possible otherwise. Furthermore, *qualcuno* needs to get the form *qualcuna* when the clitic is feminine, as illustrated in (61). These first two aspects mark an important correspondence with the behaviour of regular DPs, as these always occur with the clitic, with which they always show gender agreement.

(61) *Qualcuna la ho incontrata.*
Someone-F =3F have-1SG met-F
'Someone, I met her.'

Furthermore, Italian existential quantifiers in adverbial positions are less felicitous than, for example, universals occupying the same positions. This is visible in the mixed judgements obtained for *qualcuno* and *qualcosa* in the post-verbal subject position and also in that they were always following the low-manner adverb. Crucially, the unacceptability in these positions is shared with regular DPs.

This set of observations provides overt evidence for this class of Qs to have an internal DP spine and not, as claimed in other proposals, only a quantificational part combined with a classifier (Garzonio and Poletto, 2017) , nor are they only made of functional categories as Leu (2005) proposes. Therefore I propose, building on Zimmermann's analysis of Low German quantifiers, that this class of Qs is made of a DP projection inclusive of a NumP head, whose feature content is responsible for the entities they can range on.[9] Zimmermann (2011) shows that Low German quantifiers provide overt evidence for the existence of a functional DP architecture with a NumP head between the DP and NP layer. This NumP carries the feature [+/-lattice], distinguishing whether quantifiers range over mass and plural entities and/or atomic entities. This revealed that accounting for a difference in feature content and structure allows for an explanation of why quantifiers are subjected to different constraints cross-

[9] Although the differentiation into three categories of Low German quantifiers cannot be translated directly to my data (given that they are language-specific), there is a parallelism between morphosyntactic complexity and whether they can or not take an overt NP (when not occurring as full DP arguments).

linguistically. Zimmerman's functional DP architecture can welcome different components and features depending on the specific word.

In my data, *-cosa* has a different feature specification than its counterpart *qualcuno*, since they can range over the domain of different entities: *qualcosa* can range over the domain of plural and mass entities ([+lattice]) as long as they are inanimate, whereas *qualcuno* can only range over singular or atomic ones ([-lattice]). Therefore, the feature specification of *qualcosa* will be [+LATTICE; +THING], and is under-specified for gender features (see (62-a)). *Qualcuno* is specified for gender features, as it presents both the masculine and feminine form, and it carries a [-lattice] feature, ensuring that it only ranges over the domain atomic entities (see (63-b)).

(62) a. [$_{\text{DP}}$ qual [$_{\text{NumP}}$ cosa [+lattice; +thing]] $_{\text{NP}}$ empty]

b. [$_{\text{DP}}$ qual [$_{\text{NumP}}$ uno [- lattice]] $_{\text{NP}}$ empty]

This type of structure is able to account for the DP-like behaviour and characteristics of these quantifiers and the fact that they are infelicitous when appearing in adverbial positions.

Furthermore, *-uno* in Italian can also range on inanimate entities as *-een* in Zimmermann (2011), making it impossible to claim that it has only a [+human] feature.[10] As exemplified in (63), the existential in (63-a) can refer to some of the buildings [-human], or to someone who is still standing, whereas in (63-b) it clearly refers to a person [+sg; +human].

(63) a. *Qualcuno sta ancora in piedi.*
Some(one)-SG is still in feet
'Some (of the buildings) are still standing.'

b. *Qualcuno ha suonato il campanello.*
Someone-SG has rung the doorbell.
'Someone rang the doorbell.'

Therefore, *qualcuno* rather has a human feature that is unvalued, and it is only valued according to the surrounding syntactic context, as in, the contextual information that is provided and allows to understand to which entity *qualcuno* refers to. However, it must also be mentioned that when it is intepreted as [-human], a partitive reading is triggered (64).

(64) *Qualcuna è ancora matura.*
Someone-F.SG is still ripe
'Some of the apples are still ripe'

Similarly, Dutch Qs also present a DP projection; they are only able to appear in DP positions, and they are specified for [+/-human]. The difference between Dutch universals and existentials is that the former class has a QP projection that is higher than the DP level (Sportiche, 1988), as shown in (65), whereas the latter has DP as its highest projection. The

[10]Zimmermann shows that animacy does not play a role in the presence of *-een* 'one' in the Low German system. In fact, quantifiers ending in *een* can only appear when the quantifier domain is of singular discrete (atomic) entities.

resulting structures are illustrated below:

(65) a. [$_{QP}$ alles [$_{DP}$ [$_{NumP}$[+SG] [$_{NP}$ empty]]]]

b. [$_{DP}$ iemand [$_{NumP}$ [+human; +sg] $_{NP}$ empty]]]

c. [$_{DP}$ iets [$_{NumP}$ [-human;+sg] $_{NP}$ empty]]]

5.2.2 Qs with a double structure

This class includes both the Spanish and Italian Universal quantifiers, since they have shown very similar patterns in their external syntax, pointing to a common structure. First of all, they were both allowed to appear in Left Dislocation and both of them are in principle allowed to optionally occur with the clitic (Cinque, 1990). However, in the survey the Spanish one was preferred with the clitic, whereas the Italian one received mixed judgments. This could be due to the different semantic readings given by the speakers, since Left Dislocation is not the most frequent type of structure. However, they have shown identical behaviours in adverbial positions: in both the post-verbal subject test and the low-manner adverb one they were allowed to occupy positions from which DPs are excluded. Crucially, this is in contrast with the behaviour of Qs belonging to the previous category. However, Romance UQs also show common points with Qs of the category illustrated above. As shown in the literature (Cinque, 1996; Floricic, 2013; Delfitto, 2002), also the Italian UQ occurs left dislocated with and without clitic. This means that, as with the previous category of Qs, universals are also characterised by a DP component in some cases, but not in others, which is why they appear felicitously in adverbial positions. To account for the common structure in Spanish and Italian UQs', the proposal advanced by Doetjes (1997) will be adopted. Doetjes (1997) identifies two structures for the French universal quantifier, depending on whether or not it contains nominal material, as explained in chapter1. As shown by Cinque (1990), Italian quantifiers can license an empty object position when left dislocated without the clitic. The presence of the clitic has an implication for the sentence meaning, since it is necessary when the speaker has something specific in mind. The same difference occurs between French *tous* and *tout*, the latter being unable to take a clitic, and can only function as an operator. Besides this, Doetjes (1997) suggests that both forms have the same configuration. However, Italian and Spanish do not present two different forms of this universal quantifier. Instead, the same form can get two different interpretations depending on whether they take a complement or a clitic, or not. It is interesting, however, that the survey of this study revealed that Spanish speakers only accepted *todo* dislocated with a clitic. This means that a specific reading was forced. Also, *tutto* and *todo* are also able to carry features that are typical of DPs. (i.e., gender and number) Furthermore, it was observed for both Romance Universals that they were allowed in adverbial position (as also confirmed by the literature, see Cinque 1990), whereas DPs are excluded. However, UQs could be also found in a regular argument position, showing an ambiguity that can be accounted for with the proposal by Doetjes (1997). The presence of the DP-pro makes it possible for the Spanish and Italian UQs to carry their gender and number features when used as full arguments or when they establish

the co-referential relation with the clitic of the Left Dislocation. The barer structure instead accounts for their non-DP like characteristics, while maintaining the assumption by Doetjes (1997) that besides this they maintain the same configuration. See (66) below:

(66) a. [$_{QP}$ tutto [$_{DP}$pro [+/-SG; +/-FEM; +/- MASC] [$_{NP}$ empty]]]
b. [$_{QP}$ todo [$_{DP}$ pro [+/-SG; +/-FEM; +/- MASC] [$_{NP}$ empty]]]

Concerning their adverbial position and that they only appear as variables in left dislocation, the structure proposed is the following, building on Doetjes (1997). The lack of DP-like features in these cases allow them to raise in higher positions felicitously, namely the ComplAsp one (Cinque, 1999). In fact, when they occupy such position, only their quantificational force can be licensed.

(67) a. [$_{QP}$ tutto]
b. [$_{QP}$ todo].

5.2.3 Qs as NP pro-forms

The distribution of Spanish existential quantifiers marks a differentiation with their Italian counterparts, but also with the universals of the same language. First of all, in contrast with Italian existentials, *algo* and *alguien* are both found also in adverbial positions felicitously. In addition, they can only be left dislocated without a clitic, showing that the duality present in both the universal quantifiers of the Romance languages does not hold for *algo* and *alguien*. Interestingly, as previously mentioned in 2.2.3, all items can be left dislocated, but DPs require a clitic to do so. Therefore, when looking at Spanish existentials, this aspect, which was found in Italian ones, is missing. Furthermore, gender features are present in *qualcuno* but not in *alguien*, which is in line with the observation that these Qs carry less features than universals and Italian existentials. *Algo* cannot establish an anaphoric relation with a feminine clitic when left dislocated with it, in contrast with *qualcosa* that, whilst not displaying the variation *-uno/a* for masculine and feminine, is able to be defined as masculine or feminine depending on the clitic. These two aspects put Spanish existentials on a different level than the other Qs previously analysed, providing evidence for a third category emerging from the data of the current study.

It has been shown that Spanish existentials lack some of the main characteristics that characterise a full fledged DP, but they nonetheless can be used as arguments. Zimmermann (2011), as illustrated in section 1.2, argues for the quantifier *wat* to be an indeterminate NP-proform, in light of the evidence concerning its lack of gender inflection (as pointed out by the author, gender inflection is only overt on functional categories and not on NPs in Low German) and its impossibility to be focused, on a pair with the English *something*, due to its nature of indeterminate pronoun. According to the author, *wat* would be an indeterminate NP-proform with the syntactic status of a singular mass noun, which would be headed by a covert DP, as illustrated below in (68).

(68) [$_{DP}$ empty [$_{NumP}$ empty [$_{NP}$ wat]]]

Therefore, this might suggest that since they can occupy argument positions and be left dislocated and it is not possible to assume that they are not, to an extent, instances of a D

category which occurs in their structure at least covertly. This is seen in their modification pattern in (69), where (69-a-b) are on a par with (70), which is a regular DP modified by the adjective *rico*, 'tasty'.

(69) a. *Algo bonito.*
'Something beautiful.'
b. *Alguien lindo.*
'Someone beautiful.'

This patterns with regular DPs in this context:

(70) *El pan rico.*
The bread tasty
'The tasty bread.'

In light of the observations provided at the beginning of the section concerning the syntactic environments where these quantifiers are found, it emerges is that they have a behaviour that is flexible, and therefore a structure that is 'lighter' than a regular DP structure, as they can also appear in other positions of the sentence, such as the adverbial positions. However, they maintain DP characteristics, in that they can be modified by adjectives, as illustrated in (69). This suggests quite a few similarities with the NP-proforms proposed by Zimmermann (2011). Example (71) shows that *algo* refers to non-human entities, and will therefore carry a [+thing] feature. *Alguien* instead, can only refer to [+human] entities and will therefore carry a [+human] feature.

(71) a. **Alguien está todavía maduro.*
Someone is still ripe
'Someone is still ripe'
b. *Algo está todavía maduro.*
Something is still ripe.
'Something is still ripe.'

Concerning their number, they can only be singular, as they only present one form which is singular. Zimmermann (2011) proposes that formal features can be lexically unvalued in a first moment, and obtain their value in a next step of the derivation depending on their syntactic environment. He therefore proposes that *wat* will have its lattice feature checked for + or -[lattice], depending on the Num-head from which it is selected (see ch.1 for a more extensive explanation). If we apply this to *algo*, we can account for the fact that it can range over countable and uncountable entities, explaining its structural ambiguity in this sense in comparison with *qualcuno*, which can only range on singular and countable entities. Considering this, *algo* will carry an unvalued [lattice] feature, and *qualcuno* will carry a negative one, resulting in the two structures below:

(72) a. $[_{DP}\ [_{NumP}\ [_{NP}\ \text{algo}\ _{[sg;\ \text{-human};\ latt]}]]]$
b. $[_{DP}\ [_{NumP}\ [_{NP}\ \text{alguien}\ _{[sg;\ \text{+human};\ \text{-latt}]}]]]$

This type of structure accounts for their syntactic flexibility, because a lighter structure than

a regular DP and their under-specification, visible in their inability to have a co-referential relation with a clitic, allows them to occur in different syntactic environments. However, the fact that they are NP-proforms still allows us to assume the existence of a covert DP (Zimmermann, 2011) heading them, and therefore to account for their DP-like characteristics.

However, given their syntactic lightness, another possible account for these words could be the one that Garzonio and Poletto (2017) proposed for all the bare quantifiers, namely that they are deficient items only specified for the feature [+/- human] with the presence of a classifier-like noun. However, this is ruled out by the Low German evidence provided by Zimmermann (2011), in that even these bare occurrences seems to be more rich and diverse than the ones proposed by Garzonio and Poletto (2017).

5.3 Current data and previous accounts

Given the considerations in 5.1 and 5.2, and in light of the results in Ch.4, this section evaluates the remaining proposals in order to understand and highlight to what extent they account for the observed variation, despite not being used in the analysis.

5.3.1 Kishimoto (2000)

Among the main accounts that have been advanced, Kishimoto (2000) argues for these bare quantifiers to be constituted by two separate syntactic heads:*-some* and *-thing*, even though they are merged into one word phonologically.

When looking at the universal quantifiers of all the three languages this finds further evidence: *alles*, *todo*, and *tutto* show a non-compound form and they can be modified by the same adverbs Kishimoto (2000) uses for his *everything*. However, it must be noticed for the Spanish and Italian universal quantifiers, that they occur in a position that is higher than the one of a regular DP. This makes it impossible to account for the existence of the nominal part postulated by Kishimoto, since if that was present, it would be impossible for them to appear in ComplAspP position, as in fact happens for regular DPs. This finds further evidence if we consider that *qualcosa*, a morphologically more complex item, is not allowed in this same position.

Concerning the composition of the NumP, Kishimoto (2000) proposes that it contains a weak N- feature which can attract light nouns that are made of formal features only. Therefore, the NumP containing them must carry [+singular] to accommodate the N feature attracting light nouns, since indefinite pronouns lack plural forms. However, *tutto* in Italian can carry a number and gender feature, and *qualcuno* can as well carry a gender feature. This poses the question of whether the structure proposed by Kishimoto (2000) can account for languages, such as also the Low German data of Zimmermann (2011). This data provides overt evidence for the existence of more features, that are not necessarily [+sg]. A possible solution could probably be to assume that there are more possible features in NumP, as proposed by Zimmermann (2011). Therefore, the idea of a light noun can find evidence in items like *qualcosa* or *qualcuno*, whose CLLD behaviour is bivalent (they can occur both with and without the clitic, according to Cinque (1990). In other words, assuming that *-cosa/-uno* are light nouns with no full lexical status, as Kishimoto (2000) claims, could justify the fact that they can be both operators and expressions containing a DP-proform.

This means that the clitic would be able to refer to this lighter nominal counterpart. At the same time, the fact that it is not a full lexical noun would make it possible for this word to also be an operator. However, this hypothesis remains problematic for two main reasons: the presence of the clitic in CLLD suggests that they cannot be light, because it requires that the entity being referred to has the ability to establish an anaphoric relation. This means that only an item with a full-semantic status (as a DP) can occur with it, as gender and number agreement always needs to be displayed. Otherwise, the resulting construction would be infelicitous, as it happens with *algo*. It follows that a structure like the one proposed of Kishimoto (2000) would not work for this quantifier, which is a much simpler form.

5.3.2 Leu (2005)

Leu (2005) assumes an only partial lexicalization of the functional layer of a DP and therefore treats suggests treating bare quantifiers as functional words, lacking a real DP component. One of the main arguments advanced by Leu (2005) is that quantifiers are characterised by unproductivity which results in lexical gaps, typical of functional words. This means that they only have one form, specified only for a specific set of features, and the production of another one with different gender or number features (depending on the language) is not possible. However, Italian *tutto* is able to carry the same features of a regular pronoun, such as gender and number (*tutto, tutta, tutti, tutte*), whereas its Dutch correspondent does not. The same differences are displayed intra-linguistically in the fact that both in Spanish and Italian, *tutto* can spell out more features than the existential quantifiers. As a consequence, while some of these mismatches are related to the unproductivity characterising some Qs, others are due to grammatical differences between them, which is again a sign of different structures characterising them.

On the one hand, Leu (2005)'s structure effectively account for the evident irregularities observed in quantifiers (e.g, Italian *qualcosa* only having this form and not a plural one, or the Spanish *algo* also not being productive, in contrast with DPs). Moreover it would also explain the lack of quantifiers in Right Dislocation, and the lack of Dutch Qs in Left Dislocation. This is because, if they are only made of functional categories, the nominal head that should have the semantic features allowing the Q to appear in RD is empty. At the same time, it leaves out aspects that clearly affect the distribution of these words, such as the duality observed in Romance universal quantifiers, and the structural difference between Spanish and Italian existential quantifiers, in contrast with the more regular behaviour of Dutch Qs. One possible way to accommodate this structure on a wider cross-linguistic level, is to assume that the lexicalization degree of the DP layers can vary, explaining in this way the different distributions observed in this study's data. However, the reasons and limitations of this hypothesis remain to be further explored and verified.

5.3.3 Wu (2020)

The main contribution of Wu's account is that it suggests that the different and not linear behaviours that characterize quantifiers in this study can be explained by taking the morphological structure into account. This can be observed in the oscillation observed in CLLD: Dutch Qs do not allow this, but Italian and Spanish Qs do. Furthermore, among

Spanish and Italian it can be observed how the morphosyntactic complexity of *qualcosa* differentiates it from the Spanish correspondent *algo*, which is a simpler form. Another piece of evidence of morphology affecting syntactic operations can be found in the adverb tests: some Qs were allowed before the low manner adverb (*tutto, algo, todo*), but others were not (*qualcosa, qualcuno, algiwien* ,and the Dutch Qs that were all limited to the regular argument position). Crucially, Dutch was characterized by more complex morphology, through which the relation [D[NP]] postulated by Wu for CoPros (Compound pronouns) was more transparent and therefore restricting these variants' positions. Crucially, it is interesting to consider this aspect when looking at *qualcosa* against *algo*: the former can take a clitic in left dislocation and the latter does not. This suggests that the clitic might be able to bind the part of the compound *-cosa*, which is nominal to an extent. On the contrary, since *algo* lacks that part, it cannot take the clitic. This difference is even more evident if we observe that also with low-manner adverbs they obtain different results: *qualcosa* prefers to follow the adverb as a DP, whereas *algo* prefers to precede it. Therefore, this is another piece of independent evidence for both parts, in the case of *qualcosa*, being active and playing a role in the external syntax of the word. In such cases, the morphological development still plays a role in their syntactic behaviour because the previous syntactic functions of its constituents are still active in the two different bases. Therefore, different internal structures will predict different behavioural outcomes, which is confirmed by my data. It also proves that other hypotheses not taking this into account oversee a factor that is fundamental in the analysis of quantifiers. On the other hand, Wu (2021)'s proposal does not offer a more detailed insight on the actual structural differences among these words, if any, nor it considers other languages than English to confirm his claims.

5.3.4 Garzonio and Poletto (2017)

Concerning Garzonio and Poletto (2017), whose methodology was partially adopted for this thesis and whose claim was tested, the tests of the current study revealed several discrepancies with their findings. First of all, the authors proposed that their structure could be adopted to describe all other types of quantifiers but it was not able to account for the behavioural variety shown in this thesis. First of all, different quantifiers were allowed in different positions. This can partially be expected, as universals are characterised by a projection that is missing in existentials (QP) but also among existentials differences were found across languages. Therefore, it is not clear how it is possible to claim that one single structure can account for all the quantifiers nor how it is possible to claim that they are all deficient items. If *tutto* was only a deficient item, then this would not explain why it can eventually take the clitic in left dislocation, which is instead explainable with Doetjes account (see section 5.2.2). Furthermore, the feature content of the proposed classifier-like noun, which is argued to only carry [+/- human] features, is in contrast with Zimmermann (2011) who provides evidence for different feature contents characterizing different quantifiers.

6 Conclusions

6.1 Summary: results and implications

This thesis aimed at researching the internal structure of quantifiers when occurring as full arguments in the sentence (i.e., when not accompanied by a NP complement). Throughout the years, a extensive research has been done in this respect and several proposals have been advanced concerning the structure of these elements, as extensively illustrated in chapters 1 and 5. Most of them, however, are focused only on one language and always propose a unified structure. This approach was tested and questioned: is it possible that a unified structure accounts for all quantifiers or do different categories emerge? Therefore, this thesis had two main objectives. The first was to provide a new set of data by doing a cross-linguistic comparison of quantifiers in three languages (Dutch, Spanish and Italian) and in different syntactic environments (see ch. 1, 2, 3 for detailed explanation) to obtain different levels of comparison. This choice allowed the comparison two languages belonging to the same language family, and of the Romance family to the Germanic one. The second instead was to understand, relying on the evidence from external syntax, which kind(s) of structure(s) characterise these words.

The results of the external syntax revealed a rather complex picture, as several patterns of similarities and differences were observed: Dutch (also because it belongs to a different family which determines different syntactic rules and structure) was the language showing more internal uniformity in Qs behaviour. This was in contrast with Spanish and Italian that displayed much more variation in this respect and between them. Differences were found both intra-linguistically for the differences between existentials and universals, but also cross-linguistically, because for instance Italian and Spanish existentials were very different from each other. The non-uniformity and non-homogeneity observed in these words' distribution did in fact suggest that only one structure was not enough to describe all of them.

6.2 Limitations of previous accounts and current proposal

On the same note, what has been outlined above shows that a different morphology entails a different outcome in the positions in which these items are allowed or not in the sentence. In other words, while the structures commented above raised interesting points of discussion which fit the current data, they do not fully consider this morphology-syntax interaction (although the proposal advanced by Wu (2021) briefly explores this overlap). Therefore, most of previous accounts found strong counter evidence in my data. Kishimoto (2000) postulates a unified DP structure, but does not specify anything about the fact that they occur in places where DPs do not. In addition, Leu (2005) proposes that quantifiers are functional categories. However, this would not predict CLLD. His arguments for the proposed internal structure based on modification but no explain differences in syntactic distribution. Wu (2021) proposes an analysis where quantifiers are listed as single words in the lexicon: they are morphologically compounds, but syntactically phrases. However, again this does not account for places where Qs occur but no DPs. Lastly, Garzonio and Poletto (2017) propose a structure that is not able to account for the DP behaviour of bare quantifiers, such in the case of *algo*, and that does not account for the complexity of Italian existentials in contrast

with the Spanish ones and also with the Dutch ones. Therefore, in section 5.2 , relying on the evidence on behavioural patterns provided by 5.1, I proposed that in the current data three distinct categories of quantifiers can be distinguished:(i) Qs that present an underlying DP structure (5.2.1), (ii) Qs that present a duality in their status (5.2.2), and (iii) Qs that do not show DP layers and seem therefore to be pro-forms or deficient items. This categorization and the corresponding proposed structures have draw on the proposals of Doetjes (1997) and Zimmermann (2011). Doetjes (1997) was used as a starting point to analyse Universal quantifiers, since it offers an explanation for the ambiguities between bare and quantified nominal expressions that are very evident in the two Romance languages. On the other hand, Zimmermann (2011) offered an account that is able to capture the variation observed between the two Italian existentials and the Spanish ones. Zimmermann's 2011proposal distinguishes quantifiers according to their morphosyntactic complexity and their feature content.

6.3 Data reliability, limits and future directions

One of the main limits of the survey was the impossibility of providing a specific context for each individual utterance, as it would be possible in individual elicitation sessions. As a consequence, two of the tests performed (namely Left Dislocation and Post-verbal Subject) have ambiguous results. In those tests, sentences that are in principle grammatical, received mixed judgements by many of the speakers since other pragmatic and grammatical constraints interfered with their judgements.

Concerning the Italian and Spanish Left dislocation test results, the fact that this is a construction used only for specific purposes might have played a role in its perception. Therefore, the speakers' judgement might could affect the word order and not necessarily the quantifier itself. This is in clear contrast with Dutch, since the left dislocated quantifier was never accepted for a matter of overall ungrammaticality (i.e., this construction is clearly ungrammatical). As a consequence, the analysis will consider not only the categorical judgement (i.e., yes or no answers) but also the rate of acceptability of each sentence. This strategy has proven useful in showing how different quantifiers are differently perceived by the participants.

With regard to the Post-verbal subject test, postponing the subject is not frequent in Spanish colloquial speech and instead it is rather typical of highly rhetorical or very focused contexts. That is to say, Spanish has a tendency to always prefer the canonical SVO order in the judgement data. Italian, for example, is much more elastic in word order. However, once this variant has been factored in the analysis, it is still possible to observe that yet, the least acceptable item preceding the subject was the DP, whereas the quantifiers were subjected to a higher and very similar rate of acceptability. Although some constructions have been provided to still rely on quantitative data, the uncertainty that still remains is the reason why a second consultation with a designated native speaker of each language was added. This strategy was helpful to reach higher data reliability and reduce quantitative limitations.

However, given the length and scope restrictions of this thesis, there were some areas which remained uncovered. For example, an area worth further exploration is the behaviour of *alguien* before the post-verbal subject, as it was not accepted there in contrast with *algo*.

More generally, it would be interesting to incorporate voice and intonation in the surveys, as they might help a more natural perception of certain constructions. Furthermore, researching the interaction of syntax and other domains such as morphology, could be interesting for other important and known theoretical frameworks, such as Distributional Morphology. In fact, studies on specific words like quantifiers can find further evidence or counter-evidence for these wider accounts.

It would also be interesting to expand this research to different language families, as it would enrich the generalizations that have been draw on the current evidence. Testing the claims made in this thesis on new languages and wider corpora could reveal even more complex patterns. In addition, concerning the proposal advanced by Leu (2005), it would be interesting to investigate how his structure could be accommodated and adapted on a wider cross-linguistic level. One way would be to assume that the lexicalization degree of the DP layers varies in quantifiers, explaining in this way the different distributions observed in this study's data.

7 Appendices

7.1 Appendix 1

Dutch survey
Dutch report

7.2 Appendix 2

Spanish survey
Spanish report

7.3 Appendix 3

Italian survey
Italian report

7.4 Appendix 4

Italian second survey
Italian report II

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