

A Syntactic Analysis of Negation in Latin:
Negated Quantifier Phrases

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Abstract

This thesis will examine the constituency and distribution of negated quantifier phrases in Latin, as well as the syntactic structure of negation in Latin more generally. Relevant properties of Latin syntax such as acceptable word orders and other syntactic constraints in the language will be examined. Negation in Latin will be examined given these syntactic constraints, and I will attempt to determine the syntactic structure of negation in Latin in order to inform my subsequent syntactic analysis of negated quantifier phrases.

The first part of this thesis will therefore serve as a foundation for the syntactic analysis of the constituency of negated quantifier phrases, which will be the main topic of this thesis. I will first examine negation of the quantifier phrase *omnis* 'every' in its various case forms and then turn to an analysis of double negation which will inform the final section of this thesis concerning double negation of quantifiers in Latin. This analysis will provide evidence of a distinction between the two, contrasting the syntactic behavior of doubly negated quantifier phrases with other negated quantifier phrases in Latin.

Keywords: negation, quantifier phrase, Latin, syntax, constituency

1. Introduction

This thesis will examine the occurrence and distribution of negated quantifier phrases in Classical Latin. Relevant properties such as the word order and syntactic constraints in Latin will serve as background for this analysis. Negation in Latin generally will be examined within these syntactic constraints, and I will attempt to determine the structure of negation in order to inform the analysis of negated quantifier phrases.

1.1 Identifying Negated Quantifier Phrases

Take the following examples of negated quantifier phrases in English:

- (1) Not many people arrived.
- (2) Not every student passed the test.
- (3) Not all of the analyses were acceptable.

(Collins 2017)

This analysis will attempt to establish whether or not Classical Latin has analogous phrases to the one above, and if so, what properties constrain them. For example, the following strings are examples of negated quantifier phrases in Latin: *non omnis vir* ('not every man'), *non omnes* ('not all people/not everyone'), *non multi* ('not many people'), and *non nullus/non nemo* ('not nobody'). However, constituency tests must be used in order to establish whether these strings are indeed instances of negated quantifier phrases that are constituents in Latin. Using the Brepolis Library of Latin Texts¹ to collect data on the occurrence and distribution of such phrases in order to conduct these constituency tests will be an important aspect of my analysis.

After looking at the distribution of *non omnes* in its various case forms, I will turn to

¹ See Section 1.2 on Methodology for a detailed description of the database.

an analysis of double negation in Latin and in particular double negation of quantifiers. Examples of doubly negated quantifier phrases in Latin are the following: *non nemo* 'not nobody' *non nullus* 'not not anybody' and *non numquam* 'not never.' These examples contrast sharply with English which does not permit this kind of double negation. It will be revealing to examine how the behavior of doubly negated quantifiers in Latin contrasts with that of the other negated quantifier phrases in Latin. Specifically, the difference in their distributions with prepositions provides interesting evidence of the constituency of doubly negated quantifier phrases in Latin.

Before getting into the negated quantifier phrases and evidence of their constituency, however, it will be useful to examine the syntactic structure of negation in Latin more generally. In order to do so I will first examine the common patterns of Latin word order and then how the placement of negation interacts with these word orders. Then I will turn to my analysis of negated quantifier phrases and finally to double negation with quantifier phrases. I obtained my Latin data from various sources; glosses and translations are my own.

1.2 Methodology

Data for this thesis was collected from the Brepolis Online Database, Library of Latin Texts- Series A (and a limited amount from Series B). The Library of Latin Texts (Series A and Series B) contains more than 5500 Latin texts from various periods, primarily from Classical Latin. The Library of Latin Texts – Series A (LLT-A) is the world's leading database for Latin texts. In total, the present version of the LLT-A contains over 63 million Latin words, drawn from more than 3200 works that are attributed to approximately 950 authors. The texts which are incorporated into the database are selected by virtue of their

having been edited according to best contemporary scholarly practice. Independent research is undertaken to verify facts relating to the text, such as the veracity of the authorial attribution or the dating. In addition, errors in word-forms from the printed version are corrected.

Brepolis offers the possibility to examine the distribution of word forms through the entire database using various filters, i.e. the different periods of Latin, the individual authors and their works, and, consequently, to find out the exact number of their occurrences on each of these levels (and not only the number of contexts that contain the queried object). The database provides analysis of the vocabulary within an individual work with the help of an exhaustive concordance of every form that is part of the text under examination and has direct links to the Database of Latin Dictionaries. It also allows the possibility not only to conduct searches which lead to results corresponding exactly to the criteria introduced (the 'regular search'), but also to search for results which correspond only partially to the criteria introduced (the 'similarity search'). This type of search enables one to find the origin of quotations, paraphrases, allusions, etc. without knowing the exact terms of the reference text and/or the order of the words.

There is also an 'advanced search' option which allows the user to enter precise word forms or strings of words in a particular order. This will yield a result including the total number of occurrences of the form(s) or string in the database, as well as full listings of all these occurrences. For my searches, I used the 'advanced search' tool in which I entered the precise word form(s) I was looking for or the entire string I was looking for maintaining its precise word order. These searches yielded the data displayed in my tables in the following sections.

Additionally, Latin has the cross-linguistically rare order VOAux (Danckaert 2012):

(7) Theoxena multis petentibus aspernata (S...)VOAux
Theoxena.NOM many.ABL asking.ABL scorned.NOM
nuptias est.
marriage.ACC be.PR.3SG

‘Theoxena disdained marriage, although she had many suitors.’ (Liv. 40.4.3).

(Danckaert 2012: 142)

Overall there is much more word order variation in Classical Latin than in, for example, Germanic languages. All 6 possible combinations O, V and Aux are attested in Classical Latin (Danckaert 2012). In addition to OVAux (4), AuxOV (5) and VOAux (7), the other 4 orders are also found (all with a preverbal subject):

(8) Nec tam insolita laus esset (S)AuxVO
nor so unusual.NOM praise.NOM be.SUBJ.IMPF.3SG
prosecuta dicentem, [...].
accompanied.NOM say.PART.PR.ACC.M.SG

‘Such unusual praise would not have been of the speaker.’ (Quint. *Inst.* 8.3.4).

(Danckaert 2012: 143)

(9) Tot vadibus accusator vadatus (S)VAuxO
so.many sureties.ABL accuser.NOM accepted.sureties.from.NOM
est reum
be.PR.3SG accused.ACC

‘With so many sureties the accuser admitted the accused to bail.’ (Liv. 3.13.8).

(Danckaert 2012: 143)

(10) Baebius Phacium est adgressus. (S)OAuxV
Baebius.NOM Phacium.ACC be.PR.3SG attacked.NOM
'Babius attacked Phacium.' (Liv. 36.13.3).

(Danckaert 2012: 143)

Finally, Latin permits various word orders involving Aux-final clauses (Danckaert 2017) such as the following:

(11) quin servus [beneficium dare] possit [...]. SOVAux
that slave.NOM favor.ACC give.INF be.able.3SG.PRES.SBJ
'that a slave can give a favor.' (Sen. *De Beneficiis* 162).

(Danckaert 2017: 7)

(12) Omnia habere nemo potest. OVSAux
all.ACC.N.PL have.PRS.INF nobody.NOM be able.PRS.3SG
'Nobody can have everything.' (Sen. *Ep.* 62.3). (Danckaert 2017: 7)

This extensive word order variation will be an important factor in how the syntactic structure of negation in Latin should be analyzed, which will be examined in more detail in the following section. First, however, I will turn my attention to prior work that has been done on the syntax of negation more generally. This work will serve as an important foundation for my own syntactic analysis of negation in Latin.

2.2 Sentential Placement of Negation in Latin

The different placement of *non* be observed in the following sentences takes from Classical Latin sources:

(13) Ego illos non vidi [...]

I.NOM them.ACC not see.1SG.PERF

'I didn't see them.' (Pl. *Men* 22-3).

(Pinkster 2015: 677)

(14) Credo igitur [hunc me non amare].

believe.1SG.PRES therefore that man.ACC. me.ACC not love.INF

'Therefore I believe that man doesn't love me.'

(Danckaert 2012: 151)

The structure demonstrated in (13) is the most commonly observed in Classical Latin, in which *non* precedes only the finite verb. This is a pattern which is easily observed in simple declarative sentences. Sentence (14) demonstrates that this word order is not only possible with finite verbs but with non-finite verbs in an embedded clause. In this case, the finite verb appears sentence initially, but importantly is not part of the same clause which contains *non*. In these cases, *non* appears to be an instance of sentential negation.

However, in other sentences such as (15) and (16) *non* appears sentence-initially. In example (15) *non* still immediately precedes the finite verb *est*. However, in example (16) *non* is far removed from the verb *recipio* yet still appears to be an example of sentential negation.

(15) Non est dubium quin servus
 not be.PRES.3SG doubt.NOM that slave.NOM
 [beneficium dare] possit [...].
 favor.ACC give.INF be.able.3SG.PRES.SBJ

‘There is no doubt that a slave can give a favor.’ (Sen. *De Beneficiis* 162)

(Danckaert 2012: 148)

(16) Non istaec tua dicta nunc in auris recipio.
 Not those.ACC.PL your words.ACC.PL now into ears.ABL.PL receive
 ‘I won’t receive those words of yours into my ears now.’ (Pl. *Cist.* 510–11).

(Pinkster 2015: 678)

The fact that *non* can occur in various places in the Latin sentence must be explained by any syntactic analysis that is adopted. There are two primary types of analyses that account for the various acceptable positions of *non* in the Latin sentence, which will be considered in the following sections. The first involves extensive phrasal movement around *non* which is analyzed as a negative syntactic head (Danckaert 2012, 2017) and the other analyzes *non* as an adjunct rather than a syntactic head (Zeijlstra 2004), allowing for more extensive variation in word order with a less involved process.

3. The Syntax of Negation

3.1 Background: Syntactic Analyses of Negation

3.1.1 Zeijlstra (2004) on Cross-Linguistic Variation of NegP

The first syntactic analysis of negation this thesis will examine is that of Zeijlstra (2004). This analysis assumes the following: as a syntactic category, negation is subject to cross-linguistic variation. Languages do not require a specific syntactic configuration to express sentential negation. According to Zeijlstra (2004) the presence of NegP is only one option; another option is to use a negative adverb that can be interpreted at LF as the negative operator Op_1 without further syntactic marking. (Zeijlstra 2004:176).

Zeijlstra argues that the assumption that negative adverbs originate in Spec, NegP should be subject to reconsideration. He provides evidence that negative adverbs are not base-generated in Spec, NegP but occupy a vP adjunct position (2004:169). He asserts that when negative adverbs appear to be in Spec, NegP (as in the case of French *pas*) that it is a result of movement from the vP adjunct position. In a language like Latin without a NegP, the negation remains in the vP adjunct position. This vP adjunct analysis of negative adverbs would be very useful in explaining the extensive word order variation in Latin and diverse placements of its primary negative marker *non*.

Zeijlstra claims that Zanuttini is 'essentially right in arguing that more positions should be available for negative markers' but argues that 'she does not

make clear why these positions have to be the result of a syntactic selection mechanism' (2004:178). Zanuttini (1998, 2001) proposes that postverbal negative markers in Romance varieties are allowed to occupy different positions with respect to adverbials. In a framework as developed in Cinque (1999) this would imply that NegP should be assigned different positions within the adverbial hierarchy. That is exactly why Zanuttini proposes four different NegP position within the hierarchical ordering of functional projections, together with two positions for TP.

This is illustrated in (17):

(17) [NegP₁ [TP₁ [NegP₂ [TP₂ [NegP₃ [AspP_{perf} [Asp_{gen/prog} [NegP₄]]]]]]]]]

(Zeijlstra 2004: 178)

However, as Zeijlstra pints out, the fact that the distribution of negative markers seems much more free than a series of fixed NegP position suggests, does not form a strong argument in favor of an even more fine-grained structure, but rather for a free syntactic distribution, which is constrained by some independently motivated syntactic or semantic restrictions (Zeijlstra 2004:178). The arguments Nilsen (2003) put forward against a syntactic treatment of adverbial ordering also hold here: if the ordering of negative elements with respect to other elements in the sentences can be explained by a semantic analysis, there is no need to assume a syntactic selection mechanism as well (Zeijlstra 2004:178).

Zeijlstra argues that there is a series of arguments that languages vary with respect to the position of NegP. In most languages, NegP is located on top of vP, in

other languages it dominates TP. He further argues that the position of negation is not syntactically predetermined, but that it should be the result of the semantic properties of the negative operator. Following a proposal by Ramchand (2001), he assumes that in those languages in which NegP dominates TP, the negative operator binds temporal variables, hence yielding a logical form that is interpreted as sentential negation. In languages in which NegP is below TP the negative operator binds event variables, yielding a logical form, which is also interpreted as sentential negation. A major advantage of this view on the syntactic distribution of NegP (or the negative operator) is that one does not need to presuppose multiple positions for NegP in order to account for variety of the position of the negative marker, but that every NegP in the syntactic clause introduces exactly one semantic negation.

With this assumption, the pertinent distinction becomes whether or not Latin has a NegP projection at all rather than whether or not there are multiple NegP positions. In order to answer the question of whether or not a language contains a NegP projection in its syntax, Zeijlstra offers an analysis in which there is evidence of a correlation between NegP and Negative Concord (NC).

3.1.2 Correlation of NegP and Negative Concord

Zeijlstra claims that the distribution of the syntactic category negation (or the functional projection NegP) reflects the distributional pattern of NC across languages. All languages that have a syntactic category negation (Neg-head, phonologically overt or abstract) also exhibit NC. In other words: all languages in

which NegP is present are NC languages, and all languages in which NegP is absent (like Modern Dutch and Classical Latin) cannot be NC languages. Zeijlstra hypothesizes that NC corresponds one to one to the presence of NegP in negative sentences and that NC is a form of syntactic agreement with respect to negation (Zeijlstra 2004: 176). The fact that Latin is not an NC language would in this framework be further support the analysis that Latin does not have a NegP. This will be discussed further in Section 3.4, but first this thesis will examine some alternative syntactic analyses of negation which should potentially be taken into consideration.

3.2 Other Proposals: How to Analyze Negation in Latin

3.2.1 Danckaert (2017) on EPP-driven A-Movement over NegP

According to Danckaert (2017), it may appear that there is the following restriction in Latin: in Latin finite clauses, the marker of sentential negation *non* always precedes the finite verb. However, a more accurate approximation of this restriction is the following: in Latin, the marker of sentential negation *non* always linearly precedes the hierarchically highest clause-mate verb, but it can either precede or follow all other verbs in the same clause. Danckaert formulates this ‘Negation-Verb’ Ordering Restriction (NegVOR) as the following:

(18)

- i. $\langle *V_{\text{highest}} \rangle \text{ non clausal } \langle V_{\text{highest}} \rangle$
- ii. $\langle V_{\text{dependent}} \rangle \text{ non clausal } \langle V_{\text{dependent}} \rangle$ (Danckaert 2017: 41)

Why can dependent verbs occur to the left of negation? Danckaert suggests that the linear pattern ‘V_{dependent} - non’ is derived by means of phrasal movement rather than head movement (i.e. what moves is a bigger category containing the non-finite verbal head, but as this operation does not instantiate an application of head movement and does not target a head position, it is not subject to the Head Movement Constraint.) According to Danckaert, it may be assumed that this larger phrasal category is a VP, a higher-order constituent which in terms of the X-bar format is a phrasal projection of the lexical verb. Danckaert terms the label to the landing site of this operation as ‘FP.’ Similarly, Gianollo proposes the structure illustrated in (19) as constituent structure of negation in Latin:

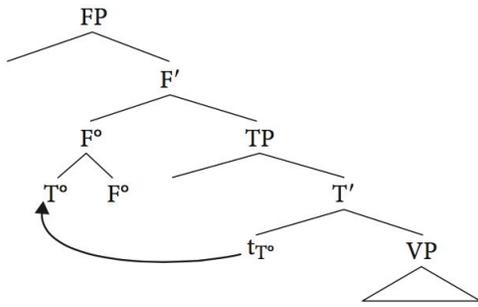
(19)

$$[_{FP[EPP]} [_{VP} S O V] [F^0 [_{TP} NegXP [T^0 t_{VP}]]]]$$

(Gianollo 2016: 129)

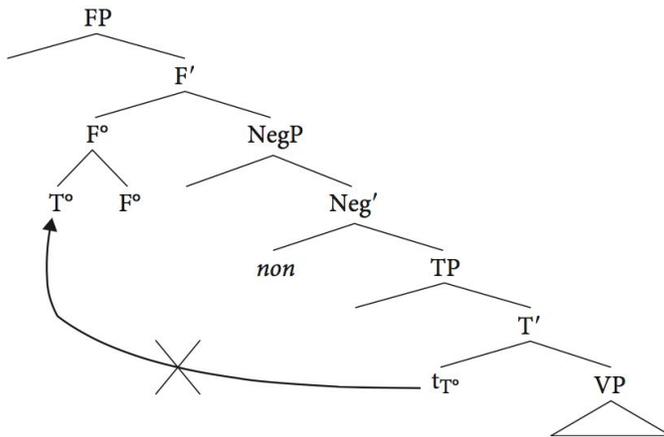
This analysis assumes that head-final sequences are never base-generated, and rather is an alternative that derives complement-head orders from underlying head-initial structures by means of syntactic movement. Dependent verb phrases move to the higher projection ‘FP’ while the finite (highest) verb in the sentence raises to T, remaining syntactically below the negation. These movement operations are illustrated in (20a)-(20c):

(20a) Verb Movement to F⁰



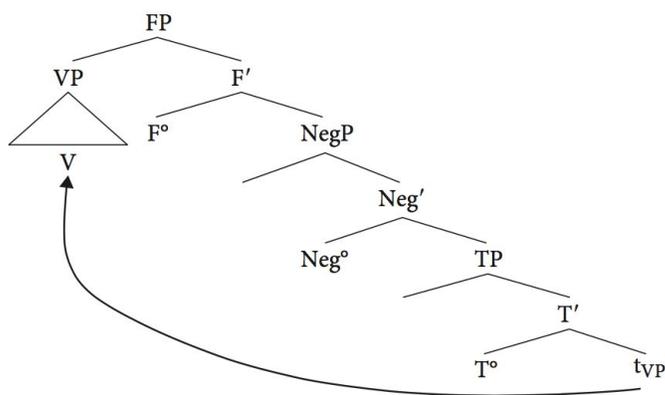
(The finite verb moves to F⁰ when no negation is present) (Danckaert 2017: 60)

(20b) Negation blocks Verb Movement



(Danckaert 2017: 61)

(20c) Dependent VPs Move Past Negation to Spec FP



(Danckaert 2017: 61)

Danckaert notes that sentential negation is often expressed by means of a functional category NegP which is located somewhere above VP and below CP. Importantly, comparative research suggests that the position of NegP is not universally fixed across languages, and that the NegP can occupy different positions in the structure (Danckaert 2017). Danckaert argues that the apparently free distribution of negative markers in the Latin clause may reflect the availability of multiple positions of NegPs. As to the exact location of these functional categories, given the limited distribution of verb forms to the left of negation, it seems that there should not be any NegP below T. However, what is not determined in this framework whether *non* lexicalizes the head position of NegP, or whether it is a phrasal specifier. Languages differ as to whether the (main) marker of sentential negation constitutes a head lexicalizing the Neg^o-node, or whether it is a phrasal category in the specifier of NegP. The important distinction in Latin is whether or not negation in Latin does indeed constitute a syntactic head. According to Danckaert, some data has been taken to suggest that Latin negation is indeed a syntactic head (Danckaert 2017), but there are many issues with this data as outlined in Zeijlstra (2004).

Another means of examining the syntactic structure of negation in Latin is through the placement of auxiliaries. In that regard, Danckaert's analysis of Latin word order becomes particularly relevant. As observed in the data, OVAux is one of the most common word orders found in Latin. Danckaert proposes this word order is derived through VP movement which is analyzed as an EPP-driven A-movement rather than as phrasal roll-up. Evidence in favor of this argument is the existence of

the VOAux word order predicted not to be available by roll-up derivation and the placement of internal arguments which seems to be more or less identical across voice distinctions. Additional evidence provided by Danckaert is the verb placement in sentences with negation and an auxiliary, namely the lack of locality constraints on the movement and the non-adjacency between V and Aux. Most commonly, in these sentences the word order is OVNegAux (i.e. *non* can, and often does, occur between a non-finite verb and an auxiliary) (Danckaert 2012).

For instance, the word order ONegVAux can be observed in example (21) while example (22) contains the word order OVNegAux in which *non* is intervening between a non-finite verb and an auxiliary:

(21) qui vicinos suos non cohortatus est [...]
 who.NOM neighbours.ACC his.ACC not encourage.PERF.DEP be.PRES.3SG
 ‘who did not encourage his neighbors.’ (Cic. Phil. 7.24).

(Danckaert 2012:150)

(22) Romanus equitatus ipsum quidem regem Elatiae
 Roman.NOM cavalry.NOM himself.ACC in.fact king.ACC Elatea.GEN
 adsecutus non est
 reached.PTCP not is.3SG
 ‘in fact the Roman cavalry didn’t reach the king of Elatea himself’ (Liv. 36.19.)

(Danckaert 2012: 150)

These sentences further demonstrate that *non* has various acceptable positions within the syntactic structure, which in certain instances can result in ambiguity in its scope and interpretation. It is particularly difficult to determine the

constituency and scope of *non* when it appears clause-initially or immediately preceding a nominal element. It is more straightforward when preceding only the finite verb as in (21) and (22). However, the rather free distribution of *non* poses would seem to favor an analysis of *non* as adjunct to vP as outlined in Zeijlstra (2004). This analysis would avoid some of the issues posed by Latin word order which are unavoidable when the negation is analyzed as originating in the negative projection NegP. In the following sections this thesis will consider the potential syntactic analyses of negation and adopt an analysis in the light of actual Latin data, putting forward some proposed syntactic structures.

3.3 Comparing Syntactic Analyses of Negation

3.3.1 The Advantage of Zeijlstra's (2004) Analysis

Zeijlstra's contention that the availability of a negative projection NegP should in fact be subject to cross-linguistic variation (2004:167) will be central to the syntactic analysis of negation in Latin presented in this thesis. As previously mentioned, Zeijlstra proposes that an alternative option is to use a negative adverb that occupies a vP adjunct position. In that case, the lexical representation of the negative marker is not involved in syntactic operations (except for Merge) and is directly interpreted at LF. Also previously mentioned, the distribution of the syntactic category negation (or the functional projection NegP) reflects the distributional pattern of NC across languages (Zeijlstra 2004:176).

According to Zeijlstra, all languages that have a syntactic category negation (Neg, phonologically overt or abstract) also exhibit NC. As stated previously, this

means that all languages in which NegP is present are NC languages, and all languages in which NegP is absent (like Classical Latin) cannot be NC languages. Zeijlstra posits that NC corresponds one to one to the presence of NegP in negative sentences and that NC is a form of syntactic agreement with respect to negation. In this framework, Classical Latin should therefore be analyzed as language without a NegP. Classical Latin does not have NC but does permit negative imperatives, so in Zeijlstra's framework Latin would not be hypothesized to have NegP. Zeijlstra argues that languages only have a functional projection NegP if there is positive evidence for it: phonological realisations of [uNEG] features or overt movement of the negative adverb to a higher position.

This would help to explain why *non* has so many possible positions in the Classical Latin sentence and it should be analyzed as an adjunct. This analysis is advantageous over the other analyses which place *non* as a syntactic head and require extensive movement in unsystematic ways in order to produce the available Latin word orders. The analysis will be expanded with respect to negated quantifier phrases in the latter half of this thesis. First, however, it will be useful to apply this analysis to some of the Latin sentences containing *non* which were presented in Section 2.2. This will be the focus of the following section.

3.4 Syntactic Structure of Negation in Latin

Taking Zeijlstra's proposal into account, this thesis will analyze negation in Latin as an adjunct rather than a syntactic head. This is very straightforward to

apply to the Latin data. Take the following simple sentence in (23a) which was introduced in Section 2.2 for example:

(23a) Ego illos non vidi [...]
 I.NOM them.ACC not see.1SG.PERF
 ‘I didn’t see them.’ (Pl. *Men* 22-3).

(Pinkster 2015: 677)

This example of straightforward sentential negation should be analyzed as an adjunct to the VP as follows:

(23b) *Ego illos non vidi.*

[_{TP} [_{DP}Ego] [_{VP} [_{DP}illos] [_{VP} [_{Neg}non][_{VP}vidi]]]]

The same construction is observed in the subordinate clause in (24a):

(24a) Credo igitur [hunc me non amare].
 believe.1SG.PRES therefore that man.ACC. me.ACC not love.INF
 ‘Therefore I believe that man doesn’t love me.’

(Danckaert 2012: 151)

This would similarly be analyzed as the following:

(24b) [...] *hunc me non amare.*

[_{TP} [_{DP}hunc] [_{VP} [_{DP}me][_{VP} [_{Neg}non] [_{VP}amare]]]]

Importantly, this adjunction analysis also permits the other word orders observed in which negation occurs clause-initially rather than immediately preceding the finite verb. For example, the following sentence in (25a) with clause-initial *non* preceding a nominal element rather than the finite verb:

structure of negation in Latin and the ability of to negate particular constituents. But first, it must be established that *non* is indeed negating these particular constituents.

Take the following sentence (26) for example:

- (26) Simul nuntiare iussi perfugas
At that time announce.INF order.PF.PASS deserters.ACC.PL
sibi **non omnes** redditos esse...
themselves.DAT not all.ACC.PL be returned.PF.PASS.PPL
'At the same time they were ordered to give notice that not all the Roman
deserters had been restored to them.' [Titus Livius, *Ab Urbe Condita* 31.11]

(Brepolis LLT-A)

In this sentence, *non* is immediately preceding the quantifier *omnes* and appears to be forming a constituent with *omnes perfugas*, but in order to confidently state this it must first be ruled out that *non* is an instance of sentential negation, adjoined to vP in the structure. In attempting to do so, take into consideration an additional example:

- (27). Sed ut **non omnes** vulnerati sunt,
But while not all.NOM.PL wounded.PF.PASS.PPL be.PR.3PL
ita in quorum tergis infixae steterunt pila...
still in who.GEN.PL back.ABL.PL fixed.ACC.PL remain.INF pillars.ACC.PL
'But although not all were wounded, still those in whose backs the javelins
remained well fixed.' [Titus Livius, *Ab Urbe Condita* 27.14]

(Brepolis LLT-A)

Again, there is ambiguity about whether or not *non omnes* is itself a constituent or *non* is once again an instance of sentential negation. In order to make a statement about negated quantifier phrases in Latin, it will be vital to address this ambiguity by examining their distribution and making a claim about possible constituency. This begins with a breakdown of the prevalence of negated quantifier phrases by case in the following section.

4.2 Distribution of Negated Quantifier Phrases by Case

In order to analyze the potential constituency of negated quantifier phrases in Latin, it will be useful to look at the distribution of a particular quantifier phrase by case form. This will help to give a sense of where in the syntactic structure the quantifier phrase typically occurs and where it potentially can be negated. (See Table 4.2.1.)

Table 4.2.1: Brepolis Database Search Results: Occurrences of the QP *omnis* by Case

Form and <i>non</i> + Case Form			
QP:	Case: SG/PL (Gender)	# QP	# <i>non</i> + QP
omnis	Nominative SG (M/F)/Genitive SG (M/F/N)	48823	1246
omni	Dative SG/Ablative SG (M/F/N)	41577	342
omne	Nominative SG/Accusative SG (N)	30630	652
omnem	Accusative SG (M/F)	24776	140
omnes	Nominative PL/Accusative PL (M/F)	94806	2183
omnia	Nominative PL/Accusative PL (N)	99901	1354
omnium	Genitive PL (M/F/N)	43744	293
omnibus	Dative PL/Ablative PL (M/F/N)	72736	598

(Brepolis LLT-A)

These results reveal a few possible generalizations about the occurrence and distribution of negated quantifier phrases. The forms that appear to occur most readily following *non* are the Nominative case forms (both singular/plural and masculine/feminine and neuter). This may lead to a generalization about where in the syntactic structure negated quantifier phrases are permitted to occur in Latin. Since not all instances of the case forms following *non* can be taken to be forming constituents with *non*, greater occurrences mean a higher possibility that some of the instances may indeed be forming constituents. Perhaps, like in English, negated quantifier phrases occur most readily occur in subject position (Collins 2017). However, this distribution data is not sufficient to make such a claim, and further analysis of potential constituency must be conducted. In the following section evidence will be examined that seems to suggest that there is a generalization that negated quantifier phrases do not occur in prepositional phrases.

4.3 A Test of Constituency: Prepositions

This section will examine the results of a constituency test conducted on the negated quantifier phrase *non omnis*. This is the preposition constituency test: can the negated quantifier phrase occur in the object of a preposition. The following table presents data on the occurrences of the negated quantifier phrase *non omnis* immediately following prepositions (in appropriate case forms, where it could potentially be the object of the preposition):

Table 4.3.1: Brepolis Database Search Results: Occurrences of the NQP (*non + omnis*)
with Prepositions

Preposition(Case)	QP (SG)	# Prep+ QP	NQP (SG)	# Prep + NQP
a/ab 'from' (ABL)	omni	7049	non omni	0
ad 'to' (ACC)	omne	798	non omne	0
	omnem	1175	non omnem	0
cum 'with' (ABL)	omni	2353	non omni	0
de 'about' (ABL)	omni	1516	non omni	0
e/ex 'from' (ABL)	omni	1822	non omni	0
pro 'for' (ABL)	omni	545	non omni	0
Preposition (Case)	QP (PL)	# Prep+ QP	NQP (PL)	# Prep + NQP
a/ab 'from' (ABL)	omnibus	5900	non omnibus	0
ad 'to' (ACC)	omnes	2245	non omnes	0
cum 'with' (ABL)	omnibus	2809	non omnibus	5
de 'about' (ABL)	omnibus	3785	non omnibus	0
e/ex 'from' (ABL)	omnibus	2716	non omnibus	0
pro 'from' (ABL)	omnibus	1900	non omnibus	0

(Brepolis LLT-A)

The few instances in which negated quantifier phrases occur after a word form which is identical to a preposition only occur with *cum* 'with' and these are instances in which *cum* is not acting as a preposition. For instance, sentence (28) contains one of these occurrences:

(28) At vero **non omnes** voces id habent,
 But truly not all.NOM.PL voices.NOM.PL it.ACC have.PRES.3PL
 cum non omnibus vocibus loqui possimus.
 since not all.ABL.PL voices.ABL.PL speak.INF able to.PRES.1PL
 ‘But truly not all voices possess it, because we are not able to speak with all
 voices.’ [Petrus Abaelardus, *Peri hermeneias* 2.13]

(Brepolis LLT-A)

In (28) there are two instances of *non* preceding a quantifier phrase: *non omnes voces* and *non omnibus vocibus*, the second of which is in the ablative case and follows a form identical to the preposition *cum*. It may seem notable then that *non omnibus vocibus*, in the ablative case form, occurs immediately following the prepositional form *cum* (‘with’). Since ablative is the case that would be expected in a prepositional phrase beginning with *cum*, the negated quantifier phrase might appear to be in a prepositional phrase and this may appear to be evidence against the previously stated generalization and beyond that evidence in favor of its constituency. However, *cum* also acts as a discourse connective meaning ‘when’ or ‘since,’ which it clearly is in this context. This also makes the usage of prepositional phrases beginning with *cum* as a diagnostic for constituency rather challenging.

Looking at the data on the distribution of negated quantifier phrases with prepositions in Table 4.3.1, there is clearly evidence of a strong generalization that at least the *non omnis* type NQPs do not occur in prepositional phrases. (This

generalization will be labeled *Prep + NQP)². Therefore, other tests of constituency will be necessary in order to determine whether or not Latin does employ negated quantifier phrases as constituents. Looking only at this data, there is not evidence that Latin has constituent NQPs; and in fact, this data could easily be used to argue that Latin does not have constituent NQPs. In order to establish the constituency of negated quantifier phrases, other tests will need to be run on the Latin data.

However, it proves very challenging to run further constituency tests on Latin due to a lack of native speaker judgments and extensive variation in word order.

4.5 Summary of this Section

This analysis suggests that determining whether or not Latin employs Negated Quantifier Phrases in a manner similar to English may be challenging due to the variability of word order and Latin and difficulty in running various tests of constituency. Further evidence of these structures and additional constituency tests will be necessary in order to provide more insight into the constituency of negation in Latin and whether or not Latin does indeed employ *non* to negate particular constituents such as quantifier phrases.

In order to delve further into this question, I will next turn to doubly negated quantifiers, examining how they contrast with the other negated quantifier phrases in Latin and the evidence in favor of their constituency. Before delving into this analysis I will first provide some background on double negation and quantifiers,

² There is one instance of *a non multis* 'from not many [...]' in Brepolis LLT-B. It is unclear what this one counter-example means for the generalization. It may be an alternate usage of *a/ab*, as there is a lack of any other counter-examples or any *non omnis* forms at all in prepositional phrases.

examining the topic more generally before getting into the discussion of double negation with quantifiers in Latin.

5. Double Negation and Quantifiers

This thesis will now turn to analysis of double negation and quantifiers. How do quantifiers interact differently with negation and double negation, and how is it evident in the syntactic contexts in which they occur? In the next section, some background on the syntax of double negation with quantifiers in English will be examined. This will provide a foundation which will inform the discussion of double negation and quantifiers in Latin.

5.1 Background on Double Negation and Quantifiers

5.1.1 Collins (2016) on *NEG NEG

Collins (2016) proposes that there is a grammatical (non-semantic) constraint in English that prohibits double negation, dubbed *NEG NEG.

In English, it is possible to negate a subject quantifier DP:

- (29) a. Everybody was there.
b. Not everybody was there.

(Collins 2016)

- (30) a. Many people were there.
b. Not many people were there.

(Collins 2016)

However, the negation cannot be iterated:

- (31) a. *Not not everybody was there.
b. *Not not many people were there.

(Collins 2016)

Collins (2016) proposes that this fact results from a syntactic constraint in English (that he also proposes may exist universally) that a given element X cannot be modified by negation twice:

- (32) * [NEG1 [NEG2 X]]

(Collins 2016)

This generalization also holds in Latin. So, for instance the construction *non non omnes* 'not not everybody' is impossible. As will be discussed, however, Latin diverges from English when it comes to the negation of negative quantifiers.

Under the framework of Collins and Postal (2014) in the case of quantificational DPs, NEG could either modify the whole DP or the D:

- (33) a. [[NEG D] NP]
b. [NEG [D NP]]

(Collins and Postal 2014)

In this framework, there is no notion of sentential negation versus constituent negation. All negation is constituent negation, in that all negation modifies some constituent X: [NEG X]. In some cases, the negated constituent has clausal scope.

5.2 Restrictions on Double Negation and Quantifiers:

The previous analysis leads to the following question: why are the examples in (31) unacceptable?

Collins (2016) proposes that a reasonable explanation is that the semantic value of [not not everybody] is the same as the semantic value of [everybody]:

- (34) a. [[not not everybody]] = [[everybody]]
b. [[not not many people]] = [[many people]]

Collins (2016) argues that the examples in (11) are therefore not unacceptable for semantic reasons. Rather, there is a syntactic constraint of the following kind:

- (35) If X is any syntactic constituent, then *[NEG1 [NEG2 X]]
(Collins 2016)

This constraint blocks the following structures in (43a) and (43b). In (43a), there is double negation of the DP. In (43b), there is double negation of the D.

- (36) a. *[not [not [everybody]]]
b. *[[[not [not every]]] body]

This constraint also applies to the negative quantifier *nobody*, as illustrated by the unacceptability of the sentence in (44b):

- (37) a. Nobody was there.
b. *Not nobody was there.

This is where Latin diverges from English. The forms *non nemo* ‘not nobody’ and *non nullus-a-um* ‘not not any person/thing’ are perfectly acceptable. This detail about Latin appears to provide an exception to the generalization suggested in Collins (2016). In Latin, certain quantifiers can indeed be modified by negation twice (which will be addressed in following sections), but importantly it is only *certain* negative quantifiers which can be modified by an additional negation in Latin.

6. Double Negation and Quantifiers in Latin

6.1 Doubly Negated Quantifiers Permitted in Latin

In Latin the double negation of a quantifier is possible in the case of the negative quantifier *nullus-a-um* ‘not any people; not anything.’ (The negative quantifier *nullus-a-um* is a syncopated form of *ne* ‘not’ + *ullus-a-um* ‘any people; anything.’ The three forms correspond to the nominative singular for masculine, feminine, and neuter.

The following entries are from Oxford Latin Dictionary:

- i. *non nemo*: ‘some persons, a few’
- ii. *non nullus*: ‘a certain amount of, not a little; a number of, not a few; some men’
- iii. *non numquam*: ‘on various occasions, sometimes’

It is permitted in Latin to use *non + nullus-a-um* ‘not not any people; not not anything’ to mean ‘someone; something.’ See the examples in (38)-(44):

- (38) **Nonnulli** pudore adducti, ut timoris
 Some.NOM.PL modesty.ABL strict.ABL in order to fear.GEN.SG
- suspicionem vitarent, remanebant.
 suspicion.ACC.SG avoid.IMPF.SBJV.3PL remain.IMPF.3PL

“Some people remain in strict modesty in order to avoid the fear of suspicion.” [*Caes. In Commentarii belli Gallici* 1.26.]

(Brepolis LLT- A)

- (39) Itaque annos **nonnulli** vicens in
 Therefore years.ACC.PL some people.NOM.PL twenty.ACC.PL in
- disciplina permanent.
 discipline.ABL.SG continue/endure.PRS.IND.3PL

“Therefore some people continue in a discipline for twenty years.” [*Caesar In Commentarii belli Gallici* 6.14.]

(Brepolis LLT- A)

- (40) Inventis **nonnullis** civitatibus iure
 find.PRF.PASS.PTCP.ABL some.ABL citizenship.ABL.PL justly
- iurando inter se confirmant
 swear.FUT.PASS.PTCP.ABL between themselves support.PRS.ACT.IND.3PL
- obsidibus que de pecunia cavent.
 security.ABL.PL and about money.ABL.SG avoid.PRS.ACT.IND.3PL

“Having found citizenship, justly swearing amongst themselves they will support the security of one another and avoid issues of money.” [*Caes. In Commentarii belli Gallici* 6.2.]

(Brepolis LLT- A)

(41) **Nonnulla** etiam ab his qui diligentiores
 things.NOM.PL. however by these.ABL.PL who industrious.NOM.3PL.

videri volebant fingebantur.
 seem.PRS.PASS.INF want.IMPF.IND.ACT.3PL imagine.IMPF.PASS.3PL

“Many things, however, were imagined by these people who wanted to seem rather industrious. [Caes. In *Commentarii belli Gallici* 2.29.]

(Brepolis LLT- A)

(42) Etiam hercule est in non accipiendo
 However by Hercules be.PRS.IND.3SG in not accept.FUT.PASS.PTCP

non nulla gloria.
 not not any.NOM.SG.F glory.NOM.SG.F

“However, indeed, some glory ought not be accepted.” [Cic. In *Epistulae ad Atticum* 2.5]

(Brepolis LLT- A)

(43) Quamquam **non nulli** sunt in hoc ordine,
 Although not no people.NOM.PL are in this.ABL order.ABL

qui aut ea, quae imminent non
 who.NOM.PL either those.ACC.PL.N which.PL.N impending.PRS.SBJV.3PL not

videant aut ea, quae vident, dissimulent;
 see. PRS.SBJV.3PL or those.ACC.PL.N which.PL see.PRS.3PL lie.PRS.SBJV.3PL

“Although there are some in this order who either do not see those things which are impending or lie about those things which they do see [...]” [Cic. In

L. Sergium Catilinam 30.11.]

(Brepolis LLT- A)

(44) Putant enim ad me **non nulli**
 think.PRS.3PL however to me.ACC not no people.NOM.PL

pertinere magmentarium Telluris aperire.
 concern.PRS.INF sanctuary.ACC.SG Earth.GEN.SG reveal.PRS.INF

“However some people think the sanctuary of Earth has been revealed to me.

[Cic. *De domo sua ad pontifices oratio* 8.37.]

(Brepolis LLT- A)

Note how in the examples (38)-(41) the forms of *non nullus-a-um* are written as one word whereas the forms in (42)-(44) are written as two words.. In fact, all of the forms of *non nullus-a-um* vary between one and two word forms, which will be discussed in more detail later in this thesis.

The following examples illustrate usages of *non nemo* and *non numquam*:

- (45) Sed desisse quidam ante triennium,
 But cease.PRF.ACT.INF certain before three years.ACC.SG
- quidam ante plures annos, **non**
 certain before many.ACC.PL years.ACC.PL not
- nemo** etiam ante viginti.
 nobody however before twenty

“But certain people cease before three years, certain people before many years, and yet still more people, however, before twenty. [*C. Plinius Caecilius Secundus- Epistulae* 10.96.] (Brepolis LLT- A)

- (46) **Non numquam** dabit ipsa aetas,
 Not never give.FUT.ACT.IND.3SG this age,NOM.SG
- quod possit, habendo.
 which able to.PRS.ACT.SBJV have.FUT.PASS.PPL

“Often this age itself will give that thing which it ought to be able to have. [*C. Lucilius Saturarum fragmenta: versus* 1054.] (Brepolis LLT- A)

- (47) Tu tamen amisso **non numquam**
 You however lose.PERF.PASS.PPL not never
- flebis amico [...].
 cry.FUT.ACT.IND friend.ABL.SG

“You, however, will cry over a lost friend.” [*S. Propertius- Elegiae* 2.13b: 51.]

(Brepolis LLT-A)

6.2 How to Analyze Doubly Negated Quantifiers in Latin

Note that in the previous section some of my translations seem to indicate that there is a meaning shift when double negation occurs with a quantifier (see examples (41) and (46)). There are several reasons to believe, however, that all of the instances of double negation with quantifiers should not be analyzed as *litotes*.³ Take for example the following argument from Bertocchi (2010): “*Non nemo* (‘not nobody’) is considered a *negatio contrarii* expression, equivalent to ‘some people’. The negative particle has only the constituent *nemo* in its scope. Other similar expressions are: *non nihil*, *non nulli* (more often *nonnulli*), *non numquam*, although in most cases they are to be considered fossilized or “frozen” expressions. That they have a fixed meaning relates to their use, which is not as a *litotes* but is equivalent to a positive expression. This is mainly true for *nonnulli*, which invariably has the meaning ‘several’, ‘not a few’, with only a few exceptions, such as *Verg. Aen. 11,725–726*: at *non haec nullis hominum sator atque deorum / obseruans oculis summo sedet altus Olympo*. ‘but not with unseeing eyes the Sire of gods and men sits throned on high Olympus’ “(Bertocchi 2010: 74 note 86). So while there are indeed instances of meaning shift, often the double negative can simply be interpreted as the positive expression without any negation.

Additionally, Szabolcsi (2004) cites the following example as demonstrating that *non nemo* is indeed comparable to *someone*:

³ ironic understatement in which an affirmative is expressed by the negative of its contrary.

(48) video de istis qui se popularis
 see.PRS.1SG of those.ABL.PL who themselves people.GEN.SG

haberi volunt adesse **non neminem** [...]
consider.INF.PASS wish.PRS.3PL be present.INF.ACT not nobody.ACC.SG

is et nudius tertius in custodiam civis
he and days.GEN.SG three.GEN.SG into custody.ACC.SG citizens.ACC.PL

Romanos dedit.
Roman.ACC.PL gave.PERF.3SG

“I see that of those men who wish to be considered attached to the people **one man** is absent. [...] **He** only three days ago gave Roman citizens into custody. [Cicero, *In Catilinam* 4.10].

(Szabolcsi 2004: 431-432)

In this example, *non nemo* is able to antecede a non c-commanded pronoun.

Szabolcsi points out that this is surprising given what is expected of double negation in Dynamic Semantics. However, referring to Krahmer and Muskens (1994: 181) she concludes that the truth conditions of double negation (and therefore possibility of anaphora) behave here like they do in standard English with respect to indefinites and existential quantifiers- as if no negation is present (Szabolcsi 2004:432).

So, how does negation interact with quantifiers to produce meaning in Latin? Horn (2001) puts forward the following translations of negation and quantifiers in Latin:

Table 6.2.1 Logical Operators and Equivalence Rules

- i. $\sim A = B$ (not all = some, something; not always = sometimes; not necessary = possible)
- ii. $\sim C = B$ (not for nothing = 'to good purpose'; Latin *non nemo, non-nulli, non numquam* [lit., 'not nobody/none/ never'] = 'somebody, some, sometimes'; not impossible = possible)
- iii. $A \dots \sim = C$ (everybody was unkind = 'nobody was kind'; necessarily not = impossible) [the all ... not construction is discussed in Horn (2001)]
- iv. $C \dots \sim = A$ (nobody was unkind = 'everybody was kind'; Latin *nemo non vidit* [lit., 'nobody doesn't see'] = 'everybody sees'; impossible not = necessary; cannot but = 'must'; Latin *non potest non amare* [lit., 'can't not love'] = 'must love')

(Horn 2001:217)

As evident from the preceding table, two negations often interact with one another in Latin to produce a positive meaning- and sometimes a more strongly or forcefully positive meaning. In terms of logical equivalence, the doubly negated quantifier appears to behave as the positive form. (Those relevant for my analysis are in (ii).)

Next, this thesis will examine the distribution of such doubly negated quantifier phrases in Latin in order to determine just how common they are, what cases (and therefore syntactic positions) they tend to occur in, and what differences can be distinguished between them and the other NQPs in Latin. First, I will examine *nullus-a-um*⁴ 'not not anybody; not not anything' in its various case forms.

⁴ *nullus-a-um* corresponds to the three nominative singular forms (masculine, feminine, neuter) and is written in this manner as a convention of Latin.

6.3 Data on Double Negation of Quantifiers in Latin

The data that is presented in this section is that of the most commonly found and most versatile doubly negated quantifier phrase in Latin: *non nullus-a-um*.

There are two characteristics of *non nullus-a-um* that should be noted before getting to the data. First, as mentioned briefly earlier, it can occur as either one or two word; and as can be seen in the data that follows, for all case forms the one word form is more common. Second, *nullus-a-um* is a quantifier that can modify either an overt or null DP, and so is versatile in its usage and consequently quite common throughout Latin (much more so than *nemo, nemini* ‘nobody’ which will be discussed later). The data on *non nullus-a-um* are presented in the following table:

Table 6.3.1: Distribution of *non + nullus-a-um* by Case

Form	Occurrences	Case (Gender)
<i>non nullus</i>	19	NOM SG (M)
<i>nonnullus</i>	38	
<i>non nulla</i>	87	NOM/ABL SG (F), NOM/ACC PL (N)
<i>nonnulla</i>	1113	
<i>non nullae</i>	6	NOM PL (F)
<i>nonnullae</i>	147	
<i>non nullum</i>	12	NOM (N), ACC SG (M/N)
<i>nonnullum</i>	42	
<i>non nullius</i>	8	GEN SG (M/F/N)
<i>nonnullius</i>	26	
<i>non nullorum</i>	19	GEN PL (M/N)
<i>nonnullorum</i>	108	
<i>non nullarum</i>	1	GEN PL (F)
<i>nonnullarum</i>	14	

non nulli	145	NOM PL (M), DAT SG (M/F/N)
nonnulli	3110	
non nullam	18	ACC SG (F)
nonnullam	140	
non nullos	31	ACC PL (M/N)
nonnullos	647	
non nullas	8	ACC PL (F)
nonnullas	165	
non nullo	5	ABL SG (M/N)
nonnullo	19	
non nullis	56	DAT/ ABL PL (M/F/N)
nonnullis	964	

(Brepolis LLT- A)

6.2.2 Discussion of the distribution:

The most common forms are *non nulli/nonnulli* and *non nulla/nonnulla*, which have in common that they represent multiple case forms, including the nominative plural. This may support a generalization the nominative plural is the most common form of the doubly negated quantifiers in Latin.

Interestingly, all forms occur as both one word and two separate words in the orthography, and all forms occur more commonly as one word (This may be a convention of the orthography or indicative of something present in the syntax). Other negated quantifier phrases cannot occur as one word in the orthography (e.g. *non omnes* ‘not everybody’). This could be evidence of some type of distinction in structure of the doubly negated quantifier phrases.

The issue of the constituency of the doubly negated quantifier phrase, however, is another question. To answer this question, it is useful to look at their distribution in prepositional phrases (a good test of constituency). Some forms of the doubly negated quantifier phrases do occur with prepositions, providing evidence of constituency. Notably, plural forms are more common, particularly with prepositions; almost all occurrences with prepositions are written in the orthography as one word.

6.4 Doubly Negated Quantifiers and Prepositions

The following examples in (49)-(51) illustrate the occurrences of the doubly negated quantifier *nullus-a-um* with prepositions in Latin:

(49)	Sed	saevissime	a	nonnullis	optimatibus
	But	fiercely	from	some.ABL.PL	nobles.ABL.PL
	reprehendebatur,		quod	parum	odisse
	seize.IMPF.PASS.IND.3SG		because	too little	hate.PRF.ACT.INF
	malos	cives		videretur.	
	evil.ACC.PL	citizens.ACC.PL		seem.IMPF.PASS.SBJV.3SG	

“But fiercely (it) was seized from some nobles because it seems the citizens hated evil too little.” [*Corn. Nep. In De viris illustribus, Atticus 9.*]

(Brepolis LLT- A)

(50) Sed consuetudo est quod aliquando
 But custom.NOM.SG be.PRS.ACT.IND.3SG because ever

scriptura loquitur **de** **nonnullis**
 write.FUT.ACT.PTCP speak.PRS.IND.3SG about some people.ABL.3PL

sicut de omnibus.
 as if about all people.ABL.3PL

“But the custom ought to be written because whatever is spoken about some people is spoken as if about all people.” [*Thomas de Aquino, Super ad Philippenses reportatio 2.4.*]

(Brepolis LLT- A)

(51) Unde **cum** **nonnullis** contribulibus suis
 From where with some.ABL.PL tribe members.ABL.PL his.ABL.PL

Ierosolimam et Ioachim ascendit.
 Jerusalem.ACC.SG and Joachem.ACC.SG climb.PRS.ACT.IND.3SG

“From this place he climbs Mount Jerusalem and Joachem with some of his tribe members.” [*Prot. Iacobi secundum in MS Paris Sainte-Genevieve 1.2.*]

(Brepolis LLT- A)

These examples are demonstrative of the contrast between the negated quantifier phrases previously examined i.e. *non omnes* and the doubly negated quantifier phrases: the doubly negated quantifier phrases can occur in prepositional phrases while the other negated quantifier phrases cannot.

The following is the distribution of the doubly negated quantifier phrase *nullus-a-um* with select prepositions in Latin:

Table 6.4.1: Distribution of *non + nullus-a-um* with prepositions

Prep + NQP	Occurrences (LLT-A)	Occurrences (LLT-B)
cum 'with' + non nullis	0	0
cum 'with' + nonnullis	25	42
de 'about' + non nullis	2	0
de 'about' + nonnullis	30	17
a ⁵ (ab) 'from' + non nullis	8	12
a (ab) 'from' + nonnullis	189	125
ex 'from' + non nullis	1	0
ex 'from' + nonnullis	5	6

(Brepolis LLT-A & LLT-B)

6.4.2 Discussion of the distribution:

The forms *non nullis* and *nonnullis* are the ablative plural forms of all genders, which would be expected in prepositional phrases with *cum*, *de*, and *ab*. There are no occurrences with the ablative singular forms, and very few occurrences with other prepositions. However, as shown in the table, there are a significant number of occurrences of the plural forms with *a/ab*, a smaller number with *cum* and *de*, and a few with *ex*. The one-word forms occur much more frequently with the prepositions, but there are some instances of the two-word forms with prepositions as well. This data shows that doubly negated quantifiers in Latin are behave differently than other NQPs and do not follow the *Prep+NQP generalization.

⁵ *a* occurs before a word beginning with a consonant, while *ab* occurs before a vowel.

6.4.3 *Non Nemo* and *Non Numquam*

What about *non nemo* ‘not nobody’ i.e. ‘somebody’ and *non numquam* ‘not never’ i.e. ‘ever; sometimes’? These forms only occur as two separate words in the orthography, in contrast to the *non nullus-a-um* forms.

Table 6.4.4: Distribution of *non nemo* ‘not nobody’ i.e. ‘someone’

Form	Occurrences	Case
<i>non nemo</i>	18	Nominative
<i>non neminis</i>	0	Genitive
<i>non nemini</i>	2	Dative
<i>non neminem</i>	6	Accusative
<i>non nemine</i>	0	Ablative

(Brepolis LLT- A)

The following is the distribution of *non numquam* ‘not never’ i.e. ‘ever; sometimes’:

Table 6.4.5: Distribution of *non numquam* ‘not never’ i.e. ‘sometimes; often’

<i>non numquam</i>	308	N/A
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(Brepolis LLT- A)

Like the forms of *non nullus-a-um*, the forms of *non nemo* also show a tendency to occur most preferably in the nominative case (subject position). However, overall there are far fewer occurrences of any of its forms.

6.5 Summary of this Section

This section has shown that Latin indeed has doubly negated quantifier phrases and that these doubly negated quantifier phrases seem to differ syntactically from other NQPs in Latin. It has also shows that the most common doubly negated quantifier phrase in Latin *non nullus-a-um* occurs as both one and two words in the orthography, and there is a difference in distribution between the two forms. The one-word forms are more common overall, and more interestingly, show a much stronger tendency to occur in prepositional phrases. This will have implications for how the structures of the different types of NQPs in Latin are analyzed, which will be the focus of the following section.

7. Syntactic Structure of Double Negation

7.1 Background from Collins and Postal (2014) and Collins (2017)

In this section, I will consider three different syntactic analyses of negation and quantifier phrases: inner negation, outer negation, and accidental adjacency. Collins and Postal (2014) presents a detailed analysis of inner negation and a theoretical framework that allows for outer negation as well. The two different syntactic structures for analyzing the double negation of quantifier phrases will look like the following:

(52) Inner Negation:

[[NEG [NEG SOME]] NP]

(53) Outer Negation:

[NEG [NEG SOME] NP]]

Next, this thesis will address the possible syntactic structure of these double negated quantifier phrases in Latin, attempting to determine why there is an exception to Collins' (2017) *NEG NEG constraint for these particular forms in Latin. There are a few possible ways to draw the constituent structure of the doubly negated quantifiers in Latin. These are presented in the following section.

7.2 Syntactic Structure of NQPs in Latin

7.2.1 Inner and Outer Negation on NQPs

As indicated in the previous section, in Latin the doubly negated quantifier *non + nullus-a-um* in all of its case forms can be written as either a single word or two separate words. There are differences in the distribution between the two sets. First, the single word forms are much more common throughout the data; and second, the single word forms occur much more commonly as the object of a preposition. This could be attributable to a convention of Latin orthography, or it could indicate that there is a meaningful syntactic distinction between the types of forms. One way to explain the difference between the two sets of forms syntactically is by adopting an analysis of inner and outer negation.

The following examples demonstrate the syntactic analyses of inner and outer negation of the Latin doubly negated quantifier phrase *non + nullus-a-um*:

(54) *nullus*

[[NEG SOME] NP]
n- ullus ∅ (Inner Negation)

(55) *nonnullus*

[[NEG [NEG SOME]] NP]
non- n- ullus ∅ (Inner Negation)

(56) *non nullus*

[NEG [[NEG SOME] NP]]
non n- ullus ∅ (Outer Negation)

Adopting an analysis of inner negation for the one-word forms and outer negation for the two-word types allows for the constituency of both types while also indicating that there is a syntactic distinction between the two types of forms.

So then, how should simple negated quantifier phrases such as *non omnis* be analyzed? The lack of *non omnis* forms as objects of prepositions is in sharp contrast with the *non nullus-a-um* forms. This seems to indicate there is a meaningful syntactic distinction between negated quantifier phrases and doubly negated quantifier phrases. Should *non omnis* forms be analyzed as outer negation like the two-word *non nullus-a-um* forms, or simply as instances of accidental adjacency and not as constituents at all?

7.2.2 Internal Structure of *Non Omnis*

If the *non omnis* forms were to be analyzed as constituents with outer negation this would the structure would be the following:

(57) *non omnis*

[NEG [[SOME] NP]]

non ∅ omnis ∅ (Outer Negation)

However, it must also be taken into consideration that the *non omnis* forms might be instances of accidental adjacency and not DP constituents at all. If this is the case, then *non* in these instances would be analyzed as sentential negation adjoined to the VP rather than forming a constituent with the quantifier phrase. This would also be a reasonable explanation for their difference in distribution from the *non + nullus-a-um* forms. Again, the issue of the constituency of these (not doubly) negated quantifier phrases is the primary question which is still unanswered.

An examination of the Latin data reasonably leads to the conclusion that the (not doubly) negated quantifier phrases are often constituents which are instances of outer negation and in certain instances are just examples of accidental adjacency. Therefore I will adopt the above analysis of inner and outer negation which provides an important distinction between the two types of negated quantifier phrases and assumes there are different syntactic behaviors among the two types but also allows for the constituency of the two-word types.

7.3 Further Syntactic Analysis of NQPs in Latin

This section will provide a more detailed analysis of the internal structure of the negated quantifier phrases in Latin, which will ultimately also fit into the adjunction framework adopted earlier regarding the syntax of negation in Latin more generally. The following illustrates the structure of inner negation:

(58) $[_{DP} [_D [NEG] [_D SOME]] [NP]]$

(Inner Negation)

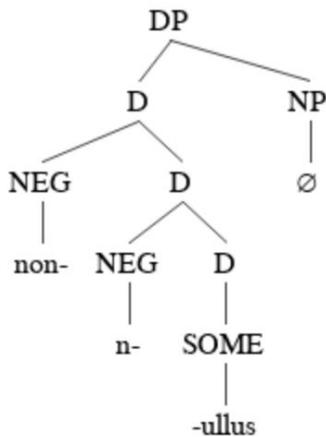
Which can then be used to generate the structure of double inner negation, which is the proposed structure of the one-word *nonnullus* forms:

(59) $[_{DP} [_D NEG [[_D [NEG] [_D SOME]]]] [NP]]$

non- n- ullus \emptyset

(Double Inner Negation)

(60) Diagram of *nonnullus*:



(Double Inner Negation)

The following illustrate the structure of outer negation:

(61) $[_{DP} [NEG] [_{DP} [_D \text{ SOME}] NP]]]$

(Outer Negation)

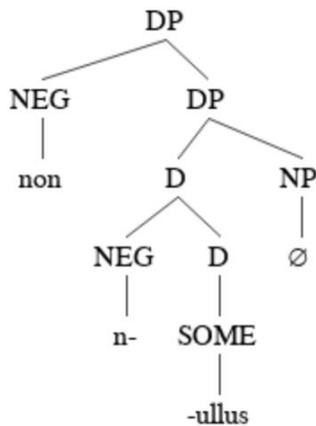
Which can be used to generate the structure of double outer negation, the proposed structure of the two-word *non nullus* forms.

(62) $[_{DP} [NEG] [_{DP} [[NEG] [_D \text{ SOME}]] NP]]]$

non n- ullus \emptyset

(Double Outer Negation)

(63) Diagram of *non nullus*:



(Double Outer Negation)

In these structures the negation joins to the determiner as an adjunct, in line with the framework of negation previously adopted for Latin. The adjunction framework is therefore compatible with both this analysis of negated quantifier phrases and that of Latin syntax more generally.

7.4 Summary of this Section

In the case of Latin's permitted doubly negated quantifiers, the constituency of the negated quantifier (e.g. *nullus*, *nemo*, *numquam*) seems clear. The syncopated form of negation combines with the quantifier to form one word, resulting in these negated quantifier forms which can then combine with another negation element to also form a constituent. This is different from non-negative quantifiers such as *omnis*, which cannot combine with two negation elements. Based on the data in the first half of this thesis, it is also still unclear whether or not a negated quantifier phrase such as *non omnis* is a constituent, whereas there is much clearer evidence that doubly negated quantifiers are constituents. This evidence comes in primarily two forms: the ability of doubly negated quantifiers to occur in prepositional phrases and their behavior as existential quantifiers for discourse anaphora.

The precise meaning of the doubly negated quantifiers in Latin can sometimes be difficult to state and is dependent upon the context of the sentence, but there is evidence that they behave as if no negation is present. To further demonstrate this, it would be useful to examine the distribution of doubly negated quantifiers and NPIs and determine whether or not the doubly negated quantifiers can license any NPIs. Given the previous analysis, the prediction would be that these quantifiers cannot license NPIs. Additionally, Klima tests could also be run on the doubly negated quantifier phrases in order to provide further evidence of their syntactic behavior as positive quantifiers. Finally, if further constituency tests could be established to work on the Latin data, these should be run on both the negated

quantifier phrases and doubly negated quantifier phrases in order to solidify these findings and provide further distinctions between the two categories.

8. Summary and Further Questions

This thesis has examined the syntactic structure of negation in Latin generally as well as with respect to negated quantifier phrases and doubly negated quantifier phrases. The theoretical framework adopted analyzes negation in Latin as an adjunct rather than a syntactic head in NegP. This analysis is compatible with the Latin data in several ways: the ability to generate acceptable Latin word orders, the correlation with negative concord and presence of NegP (both absent in Latin), and the ability to generate the internal structures of NQPs for both inner and outer negation. While not entirely ruling out an analysis with NegP, there are many favorable aspects of the adjunction analysis.

Further questions remain regarding the constituency of negated quantifier phrases in Latin as well as the distinction between the single word and double word forms. I have put forward proposed internal structures of the different sets of NQPs in line with the syntactic framework of negation that was adopted. This does not entirely rule out alternative analyses; however, the evidence in favor of this analysis is convincing. As previously mentioned, further syntactic analysis in the form of constituency tests would be very helpful in advancing this analysis; additional semantic analysis of the types of NQPs employed by Latin might also be beneficial. Regarding the doubly negated quantifiers, examining their distribution with NPIs, as

well as running Klima tests, would be useful in expanding upon the current analysis and providing further evidence of a distinction between the types of negated quantifier phrases in Latin.

Appendix: Abbreviations

ABL: ablative case

ACC: accusative case

Aux: auxiliary

D: determiner

F: feminine

LLT-A: Library of Latin Texts- Series A

LLT-B: Library of Latin Texts- Series B

M: masculine

N: neuter

Neg: negation

NegP: negation phrase

NP: noun phrase

NQP: negated Quantifier Phrase

O: object

PL: plural

Prep: preposition

QP: quantifier phrase

S: subject

SG: singular

V: verb

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