THE SPLIT NOUN PHRASE IN CLASSICAL LATIN

by

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A Thesis Submitted to the Faculty of the

DEPARTMENT OF RELIGIOUS STUDIES & CLASSICS

In Partial Fulfillment of the Requirements

For the Degree of

MASTER OF ARTS

WITH A MAJOR IN CLASSICAL PHILOLOGY

In the Graduate College

THE UNIVERSITY OF ARIZONA

2021
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Acknowledgements

Many people have contributed to making this work what it is. First, I am deeply grateful to my thesis committee: Andrew Carnie, Robert Groves, and Philip Waddell. Prof. Carnie has not only taught me a tremendous amount about syntax but has encouraged me that my research is worth doing. This thesis would be far lacking in clarity and rigor without Prof. Groves’ very well-justified skepticism and his exhortations to express my ideas as simply and clearly as is appropriate. At every step, he has encouraged me to simply put words on the page and to move on, even if more could be done. Simply put, this thesis would not ever have been completed without him. I thank Prof. Waddell for introducing me to the fun of Roman epigraphy and for instilling an attitude of simultaneous awareness of the limits of one’s evidence and optimism about what one can learn from it.

I thank my teachers at UA, from both classics and linguistics, who have encouraged and helped shape my interest in language, Greek, Latin, or otherwise: Diana Archangeli, Tom Bever, Noam Chomsky, David Christenson, Courtney Friesen, Heidi Harley, Robert Henderson, Sarah McCallum, Arum Park, Massimo Piattelli-Palmarini, and Cynthia White. I especially thank Prof. Chomsky for taking my questions seriously, however naïve, and for stressing the importance of developing a really scientific methodology if one is committed to doing corpus linguistics.

I am grateful to Harm Pinkster for sending me chapters from his forthcoming second volume of the Oxford Latin Syntax, and for noting an important reference that I had missed. I thank Davide Mocci for his feedback and references. Helma Dik and the other contributors to the Perseus under Philologic project deserve much credit for developing and maintaining the best electronic corpus search tool for Latin.

Without the lore, support, practical advice, and plain fun times of my cohort-mates and second-years, I don’t think I would have made it to this point. I thank Monica Barcarolo, Elise Larres, Miranda Lovett, Mal Main, Gabe Martinez, Ian Morgan, Luke Munson, Nick Nelson, Julia Paré, Sammi Richter, Kayt Roberto, Jordan Swanson, Michael Swantek, and Caleb Speakman.

Thanks to Xiaolong Lu for the late-night movies, ping pong, debates over different theories of grammar, for introducing me to Lao Gan Ma, and for the overall good times. Finally, none of it would have been possible or worth doing without my loved ones. You know who you are.
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- C1 Nego licenses ulla
- C2 Nego licenses umquam
- C3 Nemo licenses ulla
- C4 Nemo licenses umquam

Appendix D. Quantifier scope

- D1 Omnis ... aliquis
- D2 Aliquis ... omnis

Works cited
## Abbreviations

1. **first person**
2. **second person**
2P. **second-position**
3. **third person**
A. **adjective**
ABL. **ablative**
ACC. **accusative**
ACT. **active**
ANA. **anaphor**
AP. **adjective phrase**
C1. **clause-initial**
C2. **clause-second**
Cl. **classifier**
COMP. **comparative**
Comp. **complement**
Conj. **conjunction**
CP. **complementizer phrase**
DAT. **dative**
Deix. **deixis**
DeixP. **deixis phrase**
Dem. **demonstrative**
Det. **determiner/determinative**
DIM. **diminutive**
DIST. **distal**
F. **feminine**
FUT. **future**
GEN. **genitive**
GER. **gerund**
GRDV. **gerundive**
IMPERF. **imperfect**
IND. **indicative**
INF. **infinitive**
LF. **logical form**
LOC. **locative**
M. **masculine**
MED. **medial**
N. **neuter**
NEG. **negation, negative**
NOM. **nominative**
NP. **noun phrase**
NPI. **negative polarity item**
Num. **numeral**
NumP. **numeral phrase**
O. **object**
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASS</td>
<td>passive</td>
</tr>
<tr>
<td>PATR</td>
<td>patronymic</td>
</tr>
<tr>
<td>PERF</td>
<td>perfect</td>
</tr>
<tr>
<td>PF</td>
<td>phonological form</td>
</tr>
<tr>
<td>PL</td>
<td>plural</td>
</tr>
<tr>
<td>PLUPERF</td>
<td>pluperfect</td>
</tr>
<tr>
<td>POSS</td>
<td>possessor</td>
</tr>
<tr>
<td>PP</td>
<td>prepositional phrase</td>
</tr>
<tr>
<td>PRES</td>
<td>present</td>
</tr>
<tr>
<td>PrF</td>
<td>prosodic form</td>
</tr>
<tr>
<td>PROX</td>
<td>proximal</td>
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<td>PTCP</td>
<td>participle</td>
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<tr>
<td>Q</td>
<td>quantifier</td>
</tr>
<tr>
<td>QP</td>
<td>quantifier phrase</td>
</tr>
<tr>
<td>REFL</td>
<td>reflexive</td>
</tr>
<tr>
<td>S</td>
<td>subject</td>
</tr>
<tr>
<td>SBJV</td>
<td>subjunctive</td>
</tr>
<tr>
<td>SG</td>
<td>singular</td>
</tr>
<tr>
<td>SLI</td>
<td>specific language impairment</td>
</tr>
<tr>
<td>SO</td>
<td>syntactic object</td>
</tr>
<tr>
<td>Spec</td>
<td>specifier</td>
</tr>
<tr>
<td>SUBJ</td>
<td>subject</td>
</tr>
<tr>
<td>SUP</td>
<td>supine</td>
</tr>
<tr>
<td>SUPL</td>
<td>superlative</td>
</tr>
<tr>
<td>TP</td>
<td>tense phrase</td>
</tr>
<tr>
<td>UG</td>
<td>universal grammar</td>
</tr>
<tr>
<td>V</td>
<td>verb</td>
</tr>
<tr>
<td>VOC</td>
<td>vocative</td>
</tr>
<tr>
<td>VP</td>
<td>verb phrase</td>
</tr>
</tbody>
</table>
Abstract

In this thesis I investigate the syntax and prosody of discontinuous classical Latin noun phrases. I argue that they are the result of the interaction of Universal Grammar with syntactic and phonological parameters of language variation.

Chapter 1 introduces the problems of discontinuous noun phrases for theories of grammar and surveys the history of research on the topic. Chapter 2 presents new evidence based on the distribution of syntactic punctuation in epigraphic texts, of negative polarity items, and of quantifiers that any theory of Latin syntax must involve hierarchical structure, recursion, and syntactic movement, both in the noun phrase, and in the clause. Chapter 3 argues based on the distribution of interpuncts in epigraphic and papyrus texts that second-position effects are the consequence of prosodic movement and are widespread throughout the lexicon. Chapter 4 summarizes the results of this thesis.
1. The puzzle of the split noun phrase

1.1 Introduction

Ancient writers on rhetoric recognized that noun phrases (NPs) could be split into two noncontiguous fragments. The author of the *Rhetorica ad Herennium*, for instance, identifies (1) as a good example of *transiectio* ("transposition"), useful for achieving a certain poetic rhythm (*Rhet. Her. 4.44").

(1) *Instabilis* in istum plurimum *fortuna* valuit (*Rhet. Her. 4.44*)

<table>
<thead>
<tr>
<th>In-stabilis</th>
<th>in</th>
<th>istum</th>
<th>plur-imum</th>
<th>fortuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEG-stable.FSG.NOM</td>
<td>in</td>
<td>MED.MSG.ACC</td>
<td>much-SUPL</td>
<td>fortune.FSG.NOM</td>
</tr>
</tbody>
</table>

valuit

strong.3SG.PERF.IND.ACT

‘Unstable fortune has been most powerful against this one.’

Notice that the adjective *instabilis* is interpreted as a modifier of the noun *fortuna*, and that the two words exhibit nominal concord in gender, number, and case, suggesting that they form a syntactic unit. Interestingly, however, *instabilis* is linearly separated from *fortuna* by a prepositional phrase (PP) *in istum plurimum*, which apparently does not form a constituent with either *instabilis* or *fortuna*, being instead understood as a modifier of *valuit*.

The phenomenon illustrated in (1) resembles split NP constructions that have been documented for German, Warlpiri, Japanese, and many other languages (cf. Fanselow and Féry 2006). In such constructions, a constituent of what appears to be a single noun phrase is separated from the remainder of the material of the phrase by words that are extraneous to the

---

1 “Transposition of this sort, which doesn’t render the matter obscure, will be of great use for periods [= continuationes], about which we have spoken above. In these it is fitting to build up words to a certain, so to speak, poetic rhythm, so that they [i.e., the periods] can be perfectly and most polishedly complete” (*Huiusmodi transiectio, quae rem non reddid obscuram, multum proderit ad continuationes, de quibus ante dictum est; in quibus oportet verba sicuti ad poeticum quendam extruere numerum, ut perfecte et perpolitissime possint esse absolutae*).

2 The term *transiectio* denotes a form of *transgressio*, in turn a calque of the ancient Greek *hyperbaton*, understood by writers of rhetorical and grammatical treatises as a metaphorical process of “transgression” or “boundary crossing,” with associations of violation and exceptionality. However, in this thesis I will consider prose authors, and cases in which split NPs are perfectly natural. For this reason, I will not use the term hyperbaton.

3 A complete list of abbreviations is provided on page vi. Whenever possible, examples follow the Leipzig Glossing Rules (Department of Linguistics of the Max Planck Institute for Evolutionary Anthropology, and the Department of Linguistics of the University of Leipzig, 2015). For the sake of clarity, we will generally follow a policy of minimal morphological segmentation.

Parenthetical citations in example sentences follow the convention specified in the *Oxford Classical Dictionary* (4th ed.).

4 Many names have been used in the literature for related, but sometimes quite distinct constructions, including “discontinuous noun phrase,” “split topicalization,” “partial fronting,” “incomplete category fronting,” and “left branch extraction.” I will never use the term “split NP” in the sense of Giusti (1996; 2006) and Giusti and Iovino (2016) to mean “extended noun phrase.”
phrase. For convenience, let us call the split material on the left-hand side the “left fragment” and the remainder the “right fragment.” Thus, the left fragment of (1) is *instabilis* and the right fragment is *fortuna*.

Example (1) displays a modifier–head configuration, in which the left fragment may be construed as a modifier of the right fragment. The inverse is also possible, as shown in (2), where *bonam* modifies *navem*. We will underline the modifying element when convenient.

(2) *Navem* spero nos valde *bonam* habere (Cic. *Fam.* 14.7).

\[
\begin{array}{llllllll}
\text{navem} & \text{spero} & \text{nos} & \text{valde} & \text{bonam} \\
\text{ship.FSG.ACC} & \text{hope.1SG.PRES.IND.ACT} & \text{1PL.ACC} & \text{quite} & \text{good.FSG.ACC}
\end{array}
\]

habere
have.PRES.INF.ACT

‘I hope we have a really good ship.’

The category of the modifier appears to be free, permitting demonstratives (3a), quantifiers (3b), and adnominal genitives (3c) in addition to canonically adjectival nominal elements such as *bonam* in (2). Descriptively speaking, in both (a) and (b), the modifying category exhibits nominal concord with the head noun; in (c), the NP *animorum* is a subjective genitive in construction with the head noun *assensionem*.

(3) (a) *Hunc* tu vitae *splendorem* maculis aspergis istis? (Cic. *Planc.* 30)

\[
\begin{array}{llllllll}
\text{Hunc} & \text{tu} & \text{vitae} & \text{splendorem} & \text{maculis} \\
\text{PROX.MSG.ACC} & \text{2SG.NOM} & \text{life.FSG.GEN} & \text{brightness.MSG.ACC} & \text{stain.FPL.ABL}
\end{array}
\]

aspergis
sully.2SG.PRES.IND.ACT

istis?
MED.FPL.ABL

‘You sully this brilliance of a life with those insults?’

(b) *Omnes* invidiose eripuit bene vivendi casus *facultates* (Rhet. *Her.* 4.44)

\[
\begin{array}{llllllllll}
\text{Omnes} & \text{invidiose} & \text{e-ripuit} & \text{bene} & \text{vivendi} \\
\text{all.FPL.ACC} & \text{enviously} & \text{away-take.3SG.PERF.IND.ACT} & \text{well} & \text{live.GER.GEN}
\end{array}
\]

casus
fate.MSG.NOM

facultates
ability.FPL.ACC

‘Fate has enviously stolen all means of living well.’
(c) Ad haec [...] assensionem adiungit animorum (Cic. Acad. 1.40)

\[\text{to PROX.NPL.ACC agreement.FSG.ACC to-join.3S.PRES.IND.ACT mind.MPL GEN}\]

‘To these things he adds the consent of the mind.’

Example (c) also shows that in split NPs the left fragment need not appear at either the left periphery of the sentence or of the clause.

Split NPs are frequent in poetry and in rhetorically elevated contexts but appear in apparently all registers and periods of Latin, some of which are illustrated in (4). This indicates that split noun phrases are a grammatical phenomenon of the language.

(4) (a) ea [...] validam habet naturam (Cato Agr. 157.1)

\[\text{DET.FSG.NOM strong.FSG.ACC have.3S.PRES.IND.ACT nature.FSG.ACC}\]

‘It (i.e., brassica pythagorea, a kind of cabbage) has a hardy nature.’

(b) Ideo autem hunc tenere ordinem malui ... (August. Civ. 21.1.1)

\[\text{therefore moreover PROX.MSG.ACC hold.PRES.INF.ACT}\]

‘That’s why I’ve preferred to keep to this arrangement ...’

(c) Plurimi hoc signo scholastici nascuntur et arietilli (Petr. 39.5).

\[\text{many-SUPL.MPL.NOM this.NSG.ABL sign.NSG.ABL rhetorician.MPL.NOM}\]

\[\text{born.3PL.PRES.IND.PASS and ram-DIM.MPL.NOM}\]

‘Very many rhetoricians and baby rams are born under this sign.’

(d) His ille rebus ita convaluit ut [...] (Cic. Att. 7.3.4)

\[\text{to PROX.NPL.ABL DIST.MSG.NOM thing.NPL.ABL so strong.3S.PERF.IND.ACT that}\]

‘By these things he has grown so strong that ...’
Cato the Elder’s *On Agriculture* (234-149 BCE) (a) and Augustine’s *City of God* (412-426 CE) (b) represent very early and very late periods of ancient Latin literature, respectively (Elvers and Kierdorf; Pollman and Zaminer). Petronius’ *Dinner of Trimalchio* (c) represents the language of a Roman freedman (Bodel 1984). And split NPs are common throughout the extant writings of Cicero, including his private correspondence (d), published only posthumously (Bringmann and Leonhardt).

There are many questions that one might be interested in investigating regarding the split NP phenomenon. The aim of this thesis is to provide a syntactic account.

### 1.1.1 Chapter overview

It will be useful to consider at some length the history of investigation into split NPs and other discontinuous constituents. In Section 1.2, we will be able to see the problems that split NPs have posed since the earliest formal theories of syntax, and the advances that have resulted from their study. Thereafter, in Section 1.3, I will present my solution and the structure of this thesis.

### 1.2 History of research

Discontinuous constituents first became problematic when the first formal theories of syntactic structure were developed in the structuralist program outlined in Leonard Bloomfield’s (1933) treatise. The development of a mechanical procedure of “immediate constituent analysis” which would segment a sentence into a nested hierarchy of significant strings, or “constituents” subsequently became a major objective of syntactic theory (Graffi 2001, 282ff.). For instance, (5) might be incompletely analyzed as (6), where α is the subject and β the predicate (in traditional terms), which in turn consists of a copula and a noun phrase γ, which is further analyzable.

\[
(5) \text{This is a very interesting topic}
\]

\[
(6) [\alpha \text{This}] [\beta \text{is } [\gamma \text{ a } [\delta \text{ very interesting}] \text{ topic}]]
\]

Procedures of constituent analysis relied on methods of substitution, where a constituent would be labeled by the label of a single word with which it might be replaced. So, for instance, δ would receive the label “adjective phrase,” or AP, since it might be replaced by a single adjective with minimal change in meaning—“fascinating,” for instance. But *is a very* could not be a constituent, since it fails the substitution test—there is no word with which it could be replaced to yield a minimally different meaning.

In this research program, sentences involving phrasal verbs as in (7) were clearly very problematic, where *send ... up* appears to form a single discontinuous constituent, equivalent to *send up* in (8), as noted by Pike (1943), who called them “noncontiguous” constituents.

\[
(7) \text{Let’s send all of the visitors up}
\]

\[
(8) \text{Let’s send up all of the visitors}
\]

The constituency of *send ... up* cannot be formally described by a theory of segmentation or substitution, a problem that constituted a theoretical roadblock for the structuralist program throughout its duration.
Zellig Harris recognized that discontinuous constituents, and even discontinuous morphemes were prevalent in the world’s languages. Harris offers the Latin example of *filius bonus* ‘good son’ as containing the discontinuous morpheme *us ... us* that constitutes “one broken morpheme, meaning male” (Harris 1951, 166). Importantly, Harris developed a theory of “transformations,” which map sentences onto other sentences, and which can thereby represent discontinuous constituents. For instance, in the framework of Harris (1957), sentence (7) might be derived from (8) by the transformation (9), inverting the order of particle (P) and noun phrase.

\[(9) \text{Particle shift} \quad V \ P \ NP \rightarrow V \ NP \ P\]

Noam Chomsky, Harris’s student, developed a theory of transformational, or generative, grammar in an early work (1956), central ideas of which were more widely disseminated by the end of the decade (Chomsky 1957; [1958] 1962). Throughout the explosion of research that followed, discontinuous constituents have remained central.

Among the most important insights in this framework is that a phrase can superficially appear at a certain position but be interpreted at another, distinct position, in an abstract underlying structure. For example, in (10), *the pie* is the semantic object (or theme), functioning as an obligatory argument of the predicate *drop.* The requirement of a syntactic element to combine with phrases of a certain category is known as selection. In (10), *drop* selects a noun phrase theme, here, *the pie.*

Notice, however, that *the pie* is simultaneously the grammatical subject, as can be observed from its position preceding the auxiliary and from the auxiliary’s obligatory agreement with it. To see that the latter is the case, consider that if *were* is substituted for *was,* the resulting sentence is ungrammatical, as indicated by (*).

\[(10) \quad \text{The pie was/}^*\text{were dropped (by the children)}\]

The semantic subject (or agent) *the children* is syntactically embedded in an adverbial prepositional phrase (PP), and as such its addition or omission has no effect on the grammaticality of the sentence. This optionality is indicated by the parentheses.

To formally represent this dual interpretation of *the pie*—as semantic object and syntactic subject—we say that *the pie* undergoes syntactic movement from a local position in which it satisfies the argument structure of *dropped* to the canonical subject position, as depicted in (11).

\[(11) \quad [\text{The pie}] \text{ was dropped } [\text{the pie}]\]

We now have an explanation for the fact that in (10) the verb phrase is “split” into *the pie ... dropped.* The discontinuity results from simultaneous requirements of *the pie* to satisfy the argument structure of *dropped* and the (English) constraint that subjects are obligatory. In Chapter 2, we will see that syntactic movement is operative in Latin split NPs as well.

The first transformational accounts of Latin word order may be found in John Ross’s influential dissertation ([1967] 1986). He coined the term *scrambling* to describe the apparent rearrangement of constituents in languages such as Latin and Russian (Ross 1986, 51). The

---

5 Of course, *-us* is the exponent not just of masculine gender, but singular number and nominative case.

6 For an overview of the theory of the different semantic roles for the arguments of a predicate, see Baker (1997).
general form of Ross’s scrambling rule is given in (12), where \( \beta \) and \( \gamma \) are clause-mates and subject to language-specific restrictions.

\[
\text{(12) } \text{Scrambling} \quad \alpha \beta \gamma \delta \rightarrow \alpha \gamma \beta \delta
\]

Repeated application of (12) can produce any permutation of elements in the same clause. Ross recognized its tremendous power, relegating it to a new stylistic component of universal grammar (UG), following Chomsky (1965, 126ff.), but did not develop restrictions on its application. In this thesis and in most of the literature, however, the term scrambling simply refers to the syntactic movement of constituents in free word-order languages, such as Latin, not necessarily referring to any specific rule.

In the early years of the generative research program few other accounts were given of Latin scrambling, let alone split NPs; both topics were ignored in the first monograph on transformational Latin syntax (Lakoff 1968). A decade later, in the monumental Lectures on Government and Binding, presenting the core properties of universal grammar, fewer than ten pages were spent on languages with free word order (Chomsky 1981: 127–135). In this theory, the theory Principles and Parameters, all language variation is the product of idiosyncratic properties of lexical items and of a finite set of parameters. An example of a parameter is head-complement order, determining, e.g., whether a verb precedes its object, as in English, or vice versa, as in Japanese.

Following Hale (1978), Chomsky (1981) partitioned languages into two types: “configurational,” in which grammatical functions such as “subject” and “object” correspond to structural positions, and “nonconfigurational,” in which no such correspondence exists. The work of Hale initiated a research program aimed at identifying properties shared by all nonconfigurational languages and at deriving these properties from, ideally, a single parameter of UG. In a highly influential article, Hale (1983) identified (i) free word-order, (ii) discontinuous constituency, and (iii) null anaphora (i.e., pronoun omission) as three diagnostic properties of nonconfigurational languages, on the model of Warlpiri, an indigenous language of Australia. Hale proposed a “configurationality parameter,” the details of which we will not go into here (Hale 1983, 26).

It is evident that Latin is nonconfigurational, in Hale’s sense, satisfying each of the above diagnostics (cf. Ledgeway 2012, 71ff.). Yet there were few attempts in this period to characterize and explain (ii), with which we are especially concerned. The work presented in the first major conference on Latin and theoretical linguistics, for instance, was silent on this matter (cf. Pinkster 1983).

The goal of much work over the subsequent 15 years aimed at improving on Hale’s (1983) configurationality parameter. Such attempts, which aim to derive a large cluster of language-specific properties from a single parameter are known as “macroparametric” approaches. Let us review the two most prominent among them.

Following Hale (1983), several researchers have aimed at accounting for the structure of nonconfigurational languages by divorcing “lexical structure,” from “phrase structure” (cf. Speas 1990, Austin & Bresnan 1996, Nordlinger 1998). In such “dual structure” approaches, lexical structure represents the properties of lexical items, in particular, their semantic properties and

\[\text{Note that (ii) includes split noun phrases as a special case.}\]
selectional requirements, whereas phrase structure represents the hierarchical structure of the sentence (i.e., constituency), order, and projection (i.e., the labeling of constituents; see below).

A second important macroparametric approach argues that nonconfigurational languages differ from configurational ones in having solely pronominal arguments, possibly null (i.e., phonetically empty, and unpronounced), without positing a separate tier of lexical structure (Jelinek 1984). In this approach, *validam ... naturam* in (13) would not be analyzed as a single discontinuous object, but *validam* and *naturam* would be two distinct adverbials that modify a single null pronoun object.

(13) ea [...] validam habet naturam (Cato Agr. 157.1)

<table>
<thead>
<tr>
<th>ea</th>
<th>validam</th>
<th>habet</th>
<th>naturam</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET.FSG.NOM</td>
<td>strong.FSG.ACC</td>
<td>have.3S.PRES.IND.ACT</td>
<td>nature.FSG.ACC</td>
</tr>
</tbody>
</table>

‘It (i.e., *brassica pythagorea*, a kind of cabbage) has a hardy nature.’

Like adverbs in English, the fact that overt full nominal expressions in nonconfigurational languages are structurally adverbials partially accounts for their free ordering. Alternatively, the person and number marking affixes themselves may be viewed as arguments (Baker 1991, 1996). In (13), then, -t on *habet* would be the subject, with an empty -Ø affix representing the object, not overtly realized in Latin, but in other languages.

In one of the most important studies of Latin syntax operating broadly within the framework of Chomsky (1981), Ostafin (1986) argues that Latin constituents have an underlying base-generated order, and that scrambling phenomena are the result of movement. Within this framework, there is an underlying level of representation of the sentence known as D-Structure, representing semantic relations before movement. D-structures are then mapped via movement to S-structures, which approximate the external form of sentences. Ostafin argues that, for instance, the form of Latin D-Structures is SOV, but that a set of movement rules (mappings to S-Structures) produce the order variations that are observable.

Without going into the details here, historically speaking, Ostafin’s account is “microparametric,” arguing that the superficial differences between classical Latin and, say, English, can be formally described by several independent parametric differences, namely, in allowing Adjective Phrase (AP) movement, and for the specifier positions of NP, PP, and the Verb Phrase (VP) to be “landing sites” for movement, in the sense of Baltin (1978; 1982). This makes Ostafin an early critic of the work of Hale (1983) and Jelinek (1984). Let us consider the content of Ostafin’s approach, which will also be a good opportunity to review important theoretical concepts for what follows.

Consider the derivation of the adjective phrase *suo dignam scelere* (14), in which *suo ... scelere* is a split NP.
(14) adhuc poenam nullam 

su
do dignam scelere suscepit (Cic. Man. 7)

adhuc poenam nullam suo dignam

to-here punishment.FSG.ACC no.FSG.ACC 3POSS.NSG.ABL worthy.FSG.ACC

scelere

crime.NSG.ABL receive.3S.PERF.IND.ACT

‘To this point he’s received no punishment worthy of this crime.’

The D-structure is given in (15) in bracketed notation and in tree form in (16), in the “X-bar” schema of constituent structure well-developed and accepted by the time of Ostafin’s study (presented briefly below).

(15) [AP dignam [NP suo scelere]]

(16)

Briefly reviewing the notation, the labeled elements are nodes and the lines branches. Nodes on the same level are sisters and have the same mother. Thus [A dignam] and [NP suo scelere] in (16) are sisters and have the mother [A dignam suo scelere]. Nodes hosting lexical items or function words are heads, e.g. [A dignam]; their sisters are their complements. Thus, [NP suo scelere] is the complement (informally, the “object”) of [A dignam]. The head [N scelere] has no complement.

Heads label or project higher structures recursively. The highest or maximal projection of a head of any category X is labeled XP (“P” for “phrase”). For instance, [A dignam] maximally projects to [AP dignam suo scelere]. Intermediate projections are labeled X’ (pronounced as “X-bar”). The daughter of XP and sister of X’ is the subject or specifier of XP (notated Spec,XP), and a daughter of X’ and sister of X’ is an adjunct of XP. Thus, both specifiers of (16) are empty, and [AP suo] is an adjunct to [N scelere]. The structure of [AP suo] is abbreviated, as represented by the triangle.

Specifiers are often landing sites for movement and adjuncts typically host peripheral material such as adverbials. Trees are binary branching, meaning that a node can have at most one sister (or none at all).
There are two very important relations among structures. An element XP *dominates* an element Y, informally, if you can form a path of branches from Y to XP, going only up. Thus [N scelere] is dominated by [NP suo scelere] but is not dominated by [AP suo] or [A dignam]. Second, an element X *c_COMMANDS* an element Y precisely when every node dominating X also dominates Y. Thus [A dignam] c_COMMANDS [A suo], but not vice-versa. Carnie (2010) may be consulted for a far-fuller exposition on X-bar theory and other theories of constituency.

Ostafin’s theory, then, says that AP can move, and that the specifiers of NP, PP, and VP are possible landing sites. To these we may add the specifier of AP. Given only the standard condition that a moved element must c_COMMAND the position from which it has moved—it’s “trace,” marked by a t—it is then possible to derive (14) from (15)/(16), with movement of [AP1 suo] to Spec, AP2, as shown in (17).

Ostafin’s microparametric theory, then, makes concrete claims about what may move, and where elements may move to, and seems capable of accounting for many split NP phenomena, and scrambling more generally. Perhaps most importantly, it seems more restricted than the extremely powerful scrambling theory of Ross ([1968] 1986). However, without strong restrictions on movement, whether this impression is accurate is unclear (cf. Kornai and Pullum 1990). This criticism is even more applicable to less well-developed accounts of Latin scrambling such as Elerick (1992), which simply say that any word may move to either the left or right periphery of the clause. It is also left unspecified why constituents move in the first place, and in particular, what their semantic, pragmatic, or phonological effects may be.

Though the influence of Ostafin (1986) is likely indirect, by the time of Legate (2001; 2002), the microparametric view of nonconfigurationality became standard. Legate argues that the phenomena of nonconfigurational languages can be derived from the interaction of independent parameters, or what Bliss (2013) calls the “conspiracy” of microparameters interacting to create the “mask” of nonconfigurationality.

Among the virtues of Ostafin’s dissertation is being the first explicit attempt to develop descriptive claims on what forms of Latin scrambling are ungrammatical, a project taken up by Bolkestein (2001). Both authors claim that (in our terminology), no preposition may be a fragment of a split, ruling out, e.g. (18) but not (19).
(18) *quem hominem et quod tempus est in? (construct)

\[
\begin{align*}
\text{quem} & \quad \text{hominem} & \quad \text{et} & \quad \text{quod} & \quad \text{tempus} \\
\text{which.MSG.ACC} & \quad \text{person.MSG.ACC} & \quad \text{and} & \quad \text{which.NSG.ACC} & \quad \text{time.NSG.ACC}
\end{align*}
\]

be.3s.PRES.IND in?

Intended: ‘What man and what time is it about?’

(19) hoc si est in libris, in quem hominem et in quod tempus est? (Cic. Div. 2.1.10)

\[
\begin{align*}
\text{hoc} & \quad \text{si} & \quad \text{est} & \quad \text{in} & \quad \text{libris, in quem} \\
\text{this.NSG.NOM} & \quad \text{if} & \quad \text{be.3s.PRES.IND} & \quad \text{in book.MPL.ABL in which.MSG.ACC}
\end{align*}
\]

\[
\begin{align*}
\text{hominem} & \quad \text{et} & \quad \text{in} & \quad \text{quod} & \quad \text{tempus} & \quad \text{est?} \\
\text{man.MSG.ACC} & \quad \text{and} & \quad \text{in} & \quad \text{which.NSG.ACC} & \quad \text{time.NSG.time} & \quad \text{be.PRES.3s.IND}
\end{align*}
\]

‘If this is in the books, what man and what time is it about?’

In other words, P-stranding is disallowed: syntactic movement in Latin obligatorily carries along prepositions.\(^8\) Bolkestein also claims (in our terms) that one adverbial modifier of VP cannot split another, ruling out (20) but not (21).

(20) *ternis magna celeritate mensibus expeditionem confecit (construct, Bolkestein 2001)

\[
\begin{align*}
\text{ternis} & \quad \text{magna} & \quad \text{celeritate} & \quad \text{mensibus} & \quad \text{expeditionem} \\
\text{three.FPL.ABL} & \quad \text{big.FSG.ABL} & \quad \text{speed.FSG.ABL} & \quad \text{month.FPL.ABL} & \quad \text{march.FSG.ACC}
\end{align*}
\]

\[
\begin{align*}
\text{confecit} \\
\text{complete.3s.PERF.IND.ACT}
\end{align*}
\]

‘He completed the march with great speed in three months.’

(21) *ternis mensibus magna celeritate expeditionem confecit (construct)

These are important attempts to develop general descriptive restrictions on observed orderings.\(^9\)

Devine and Stephens’ (2006) monograph on Latin word-order has been very influential in Latin linguistics. Their central claim is that each lexical category X has two specifier positions (in our terms), the upper which they call TopXP, and the lower FocXP (Devine and Stephens, 2006: 25ff.). They argue:

---

\(^8\) Movement of this sort is known as “pied-piping” (Ross 1986, 121ff.).

\(^9\) Bolkestein’s constraints have proven problematic for Lexical Functional Grammar, a matter we will not investigate here (Snijders 2012).
The tree configuration is determined primarily by discourse properties like topic and focus rather than by grammatical properties like subject and object. Consequently Latin is called a discourse configurational language. (Devine and Stephens 2006: 26)

The claim that structural positions correspond to discourse properties is extremely strong, and is suspect given the apparently free variation in, say the order of N and its complement (cf. Bolkestein 2001: 256). Devine and Stephens’ work has nonetheless provided an important analysis of Ostafin’s landing-sites in terms of pragmatic functions. In recent work they describe their account of the syntax-semantics interface as descriptive, rather than predictive (Devine and Stephens 2019, 5).

Agbayani and Golston (2016) have provided an analysis of split constituents in terms of “phonological movement.” Their analysis assumes that split NPs never have empirically detectable syntactic effects. In the following chapter, we will see that this is not the case.

In recent years there has been renewed interest in the Latin noun phrase and split NP phenomena (Iovino 2012; Giusti and Iovino 2016; Vendel 2018; Giusti 2019). Vendel (2018) investigates split NPs in Cicero’s *Pro Milone* and argues that the notions of topic and focus are insufficient to predict when split NPs occur, suggesting that contrastiveness instead may be the relevant property of the left fragment (Vendel 2018, 74). This is suggestive of recent proposals, Kratzer and Selkirk (2020) and López (2009), among others.

1.3 The proposal

This thesis investigates the syntax and prosody of the split noun phrase. The central claim is that split noun phrases are the consequence of the general architecture of grammar, as stated in (22) and schematically represented in (23), showing that a syntactic object SO is mapped to a logical form LF and a prosodic form PrF, the latter in turn mapped to a phonological form PF.

\[(22)\] Structure-dependence of grammar

The sentence is a recursive, hierarchical structure with displacement that is deterministically mapped to a semantic interpretation and a morphophonological realization.

\[(23)\]  

```
  SO  
 /\  
 LF Pr(osodic) F(orm)  
  \  
   PF  
```

As a fact of language variation, Latin permits more extensive displacement than in other languages. This displacement is not free, but subject to scope transparency, as will be argued in Chapter 2.

---

10 It is a sometimes neglected fact of Romance that constituents receiving topic or focus may either move or apparently remain in situ, which López (2009) has argued to indicate that such pragmatic functions do not serve a purpose in a theory of syntax.
(24) Scope transparency
The scope of a generalized quantifier is the denotation of its c-command domain.

In Chapter 3, we will see that syntactic displacement interacts with prosodic movement according to the accumulation principle.

(25) Accumulation principle
Throughout the derivation of a sentence, prosodic words can only become larger, not smaller.

The interaction of these three principles with the intonational effects of syntactic structures yields split noun phrase phenomena, including instances where neither the left nor the right fragment appear to be constituents.
2. Structure-dependence

2.1 Introduction

The phenomenon of discontinuous constituents, such as that indicated in italics in (26), raises the question of whether syntactic structure exists above the level of the word.

(26) Ubicumque es, ut scripsi ad te ante, in eadem es navi (Cic. Fam. 2.5.1).

Ubicumque es, ut scripsi ad te ante, in eadem es navi
wherever be.2SG.PRES.IND as write.1SG.PERF.IND.ACT to 2SG.ACC
before in same.FSG.ABL be.2SG.PRES.IND boat.FSG.ABL

‘Wherever you are, as I wrote to you before, you’re in the same boat.’

The italicized expression *in eadem ... navi* behaves as a unit with respect to semantics, denoting a place.\(^\text{11}\) It also appears to be a syntactic unit: *eadem* and *navi* agree in gender, number, and case. With respect to gender, for instance, the noun *navi* is lexically-specified as feminine, but *eadem* may inflect for any gender. The fact that it is feminine indicates that it is in a syntactic relation of some sort with *navi*.

In this chapter I will argue that, despite appearances, the semantic and morphological relations between the various elements of a split noun phrase are best explained in a theory where the Latin sentence is hierarchically structured. In Sections 2.1.1–2 we will develop this idea on a conceptual level, and in Section 2.1.3 I will provide an overview of the rest of the chapter.

2.1.1 The thesis of structure-dependence

Considering (26), notice that if the sentence doesn’t have any abstract structure, then more or less robust patterns in the arrangement of words are expected on the basis of cognitive principles such as domain integrity and iconicity (cf. Pinkster 2021, 954ff.), but there would be no surprise if these are violated.\(^\text{12}\)

Undoubtedly, many factors enter into what words are spoken aloud or appear on the page. But few of these are exclusively linguistic, and we are not interested here in developing a general theory of perception, social interaction, or speech planning. The ambitious program of cognitive linguistics attempts to reduce linguistic theory to such broader human faculties (Winters and Nathan 2020). Within classics, there have been several major publications in recent years that develop such a framework (e.g., Meineck, Short, and Devereaux 2018).

---

\(^{11}\) The “boat” (*navi*) here is a metaphor for the political party of the “best men” (*optimates*) (Shackleton Bailey 1977, ad loc.).

\(^{12}\) Domain integrity is the principle that “what belongs together should be kept together” (Dik 1997, 402). Iconicity is the principle that the linear order of constituents corresponds to our perception of the world, say, in mirroring the order of events (Siewierska 1988, 79).
There are good reasons to maintain linguistics as an independent domain of inquiry, however. Most important among these are the evidence that language acquisition has the characteristics of biological maturation, following a fixed timeline, with minimal individual differences (Guasti 2017); the so-called “poverty of the stimulus,” in which the primary linguistic data to which the child is exposed vastly underdetermines the form of the target grammar (Berwick, Chomsky, and Piattelli-Palmarini 2013); the lack of any rudimentary constituent structure in the communication systems of our closest primate relatives, who do seem to rely on general intelligence when taught language (Terrace et al. 1979); the differential patterns of neuronal activation in Broca’s area for real languages and for languages violating universal principles of language (Musso et al. 2003); the existence of language-specific pathologies such as aphasia and Specific Language Impairment (SLI) (Curtiss 2013); and “mirror deficits,” where general cognition is impaired but language is spared (Smith and Tsimpli 1995). Such robust and diverse evidence points towards a “nativist” view of language as a biologically-inherent module of human cognition that matures on the basis of experience, quite separate from general intelligence, and contrary to claims by those working in cognitive linguistics and related fields.

The view that language can be studied as an independent domain of inquiry is implicit in traditional grammars, which recognize, for example, that the formal structure of language is conceptually distinct from principles of sound or meaning. For instance, the grammarian Aelius Donatus defines deponent verbs as those which end in -r and are “not Latin” (Latina non sunt) without -r (27). For what Donatus terms “not Latin,” we will use the term ungrammatical.

(27) Deponentia quae sunt? Quae in ‘r’ desinunt, ut passiva, sed ea dempta Latina non sunt, ut ‘luctor,’ ‘loquor’ (Donatus, Ars Minor).

‘What are deponent (verbs)? Those which end in “r,” like passives, but which are not Latin if you remove the “r,” such as “luctor” and “loquor.”

Donatus’ definition is morphosyntactic, involving the obligatory combination of certain verbal roots, e.g., luct-, with a functional suffix -r, not involving meaning or communication whatsoever.

The school of generative grammar assumes that traditional grammars are essentially correct but goes further in developing theories by using the formal tools of discrete mathematics and the empirical methods of the natural sciences (Chomsky 1965, 63ff.).

In the present study we are concerned with the syntactic component of grammar, which concerns the relation of form to meaning. A theory of syntax must provide a predictive account of this relation. If this relation were transparent, we would require only a trivial theory, and speech would be a perfect mirror of thought. To see why this is not the case, consider the famous line of Ennius reporting the prophecy of the oracle at Delphi to Pyrrhus (28), well-discussed in antiquity for its ambiguity between readings (29)(a) and (b).

---

13 I thank Massimo Piattelli-Palmarini for his expertise in clarifying the biological evidence for a separate language faculty.
14 Note that the investigation of this relation is conceptually distinct and prior to the study of how syntax is used.

(aio te Aeac-ida Romanos say.1SG.PRES.IND.ACT 2SG.ACC Aeacus-PATR.MSG.ACC Roman.MPL.ACC vincere posse defeat.PRES.INF.ACT able.PRES.IND)

(29) (a) I say that you, son of Aeacus, can defeat the Romans.
(b) I say that you, son of Aeacus, the Romans can defeat

In the first reading, (29)(a), te is the subject of both embedded clauses, with Romanos the object of the clause with verb vincere. In the second reading, (b), the roles are reversed, with Romanos as subject and te as object.

The ambiguity here is obviously not lexical—that is, it is not a matter of homophony. Nor is it morphological, despite Quintilian’s remark that the ambiguity arises “through cases” (per casus; Quint. Inst. 7.9.6). If it were, then our declension paradigms would be required to list both Romani and Romanos as nominative plural forms, which lacks independent motivation. The alternative, which we shall pursue here, is that the ambiguity is syntactic. That is, readings (a) and (b) really correspond to two different sentences that sound exactly the same but have different meanings.

These sentences, of course, are not “out there” as abstract Platonic objects or as conventions of a speech community, but are grounded in human cognition. In such a theory, there must exist an abstract level of representation—syntactic structure—that exists separately from the phonological (sound) and the logical (meaning). In cases such as (28), we can say that there are two syntactic objects (SOs) corresponding to a single phonological form (PF) and two distinct logical forms (LFs).

We depict this situation in (30), and the general schema in (31).\(^\text{15}\)

(30) **Syntactic ambiguity**

\[ \text{SO}_1 \quad \text{SO}_2 \]

\[ \text{LF}_1 \text{ e.g. (29a)} \quad \text{LF}_1 \text{ e.g. (29b)} \]

\[ \text{PF}_1 \text{ e.g. (28)} \]

(31) \[ \text{SO} \quad \text{LF} \quad \text{PF} \]

\(^{15}\) The argument for structure based on the existence of syntactic ambiguities dates back to Chomsky (1956), in which such ambiguities are said to be instances of “structural homonymy.” For a recent discussion of the schema (31), see Chomsky, Gallego, and Ott (2019).
Diagram (31) depicts an organization of grammar in which syntactic structures are the input to semantic interpretation and to externalization (i.e., speech, sign, or some other mode). There is only indirect interaction between logical and phonological representations. This means (among other things) that phonological properties cannot affect semantic ones. Similarly, syntax maps onto phonology, but not vice versa, meaning that, say, a phonological operation such as elision could never affect a syntactic one. The organization of grammar in this fashion may be stated as in (32), whose terms we will discuss presently.

(32) Structure-dependence of grammar
The sentence is a recursive, hierarchical structure with displacement that is deterministically mapped to a semantic interpretation and a morphophonological realization.

As one consequence of (32), linear order is never directly relevant to semantic interpretation, being a product of the realization of an underlying syntactic structure. This does not rule out linear order being an important hint to structure, however, due to the algorithm which linearizes structures. Neither can it be the case that word-order is completely free with respect to meaning. Instead, (32) predicts that, given that both LF and PF have the same input, there are regular correlations between them.

Notice that PF and LF are obviously necessary, since every utterance has both sound and meaning. The level of syntactic structure is considerably more abstract. We have seen one argument for its existence above—the need to explain ambiguities—and in this chapter we will see many more.

2.1.2 Chomsky’s “basic property”

Characterizing language biologically gives us a quite concrete object of study. Here, though, we will consider an idealized, formal notion of language. In this light, its “basic property” is that of being a system of discrete infinity with hierarchical structure and displacement (N. Chomsky, personal communication; Berwick and Chomsky, 2016).

To see what this means, notice that both readings of (28) share the fact that aio is related to the rest of the sentence in a head-complement relation. That is, the indirect statement with main verb posse can be understood as a clausal complement of the verb aio. This means that there is one clause contained within another. An alternative way to phrase this is that one clause, with main verb aio, dominates the other, with main verb posse. Then the sentence has a hierarchical structure.

To formally represent containment and dominance, we may use a bracketed notation (33) or the equivalent, tree notation (34), which represent one syntactic object XP dominating another, YP; conversely, YP is contained within XP. Ellipses indicate any syntactic material.

(33) [XP ... YP ...]

(34) XP
    /    
  /     
YP     YP
In the case of (28), we have one clause dominating another. This means that a clause CP\(_1\) can have the form (35), where CP\(_2\) is another clause.

(35) \([\text{CP}_1 \ldots \text{CP}_2 \ldots]\)

That fact that syntax can be self-embedding or recursive in such a way explains how it can be discrete and infinite—that is, out of a finite set of discrete elements (phonemes, letters, signs etc.), an infinity of possible thoughts can be expressed.

Ancient rhetorical theory recognizes that the clause is built out of syntactic units known as *cola*, a concept which has been somewhat developed by classical linguists (cf. Fraenkel 1965; Habinek 1986). Olga Spevak provides (36) as an example of a colon analysis, with colon boundaries marked with a slash (/) (Spevak 2010, 11).

(36) cuius adventu nuntiato / L. Plancus / qui legionibus praeerat / necessaria re coactus / locum capit superiorem / (Caes. Civ. 1.40.5)

<table>
<thead>
<tr>
<th>cuius</th>
<th>adventu</th>
<th>nuntiato</th>
</tr>
</thead>
<tbody>
<tr>
<td>who</td>
<td>SG.GEN</td>
<td>arrival.MSG.ABL announce.PERF.PTCP.PASS.MSG.ABL</td>
</tr>
</tbody>
</table>

L. Plancus qui legionibus

Lucius Plancus.MSG.NOM who.MSG.NOM legion.FPL.ABL

praee-rat necessaria re

before-be.3SG.IMPERF.IND necessary.FSG.ABL thing.FSG.ABL

coactus locum capit

compel.PERF.PTCP.PASS.MSG.NOM place.MSG.ACC take.3SG.PRES.IND.ACT

super-iorem

high-COMP.MSG.ACC

‘When his arrival was announced, Lucius Plancus, who was in charge of the legions, compelled by necessity, occupies the higher ground.’

The first colon in (36) is an ablative absolute construction, the second a noun phrase subject, and so on.

The notion of colon may be generalized to that of *constituent*, namely, a group of words that behave as a syntactic unit (Carnie 2010). In our semi-formal theory, a constituent will be an entire bracketed structure. For instance, if WP, YP, and ZP are constituents, then (37) states that XP is a constituent consisting of WP, YP, and ZP, pronounced in that order. WP and YP do not form a constituent, nor do YP and ZP, nor WP and ZP.\(^{16}\)

(37) \([\text{XP WP YP ZP}]\)

\(^{16}\) More often than not, our structural descriptions will be incomplete, but not necessarily incorrect. Thus (37) is a tertiary structure, but the actual structure may in fact be binary, with, say, WP and YP forming a constituent; but this is not formally represented by (37).
Analyzing the sentence into constituents to discover its phrase structure is a central objective of syntax. Recall, however, that no mechanical procedure of doing so appears feasible, for the reason that natural language has the ubiquitous property of displacement. Displacement, or movement, is the property that syntactic elements may establish non-local relations with one another. For instance, *locum ... superiorem* in (36) is a split noun phrase, seemingly impossible to characterize in a constituent analysis.

Assume, for the sake of the argument, that *superiorem* is an attributive modifier of *locum*. The semantic and morphological properties of the two words, in fact, suggest that they are directly related in the syntax, yielding gender, number, and case concord, and modification. At the same time, there are likely to be readings of (38)a not available for (b), involving, say, some notion of focus on *superiorem* in (a), to be discussed in Section 3.4.

(38)   (a) locum capit superiorem
       (b) locum superiorem capit

These facts must be formally represented in the theory. In our structural descriptions, it is proposed that some constituents occupy *more than one* position. Suppose this to be the case for the element *locum*, as in (39), where (a) and (b) are equivalent notations.

(39)   (a) [locum capit [locum superiorem]]
       (b) [locum₁ capit [t₁ superiorem₁]]

The fact that one copy of *locum* forms a constituent with *superiorem* and that another is preverbal formally represents the complex relation of its semantics, morphology, and pronounced position. Movement is simply the term for such cases of a constituent occupying more than one structural position, not necessarily denoting an *y* process, despite the name. Typically, only one copy—the structurally highest—will be pronounced. Specifying the conditions on movement is an important objective of syntactic theory.

Recognizing movement frees us from what Andrea Moro terms the structuralist thesis of the “passive transparency of nature” (Moro 2018, 82). As in physics, where a predictive theory requires the postulation of invisible entities, so too in linguistics. Which syntactic elements are pronounced and which are not appears to be an accident of history, as does the variation between languages. But Chomsky’s “basic property” is presumably universal, in the sense that it characterizes all human languages. Other properties, such as agreement, may be universal, but this is less clear.

As noted at the outset, this entire discussion is vacuous if there really is no significant structure to the Latin sentence. A major aim of this chapter is to show that the framework sketched above is, in fact, the correct one. A second is the development of a way to “do” Latin syntax. Unlike in historical linguistics, there have been few attempts to take this problem seriously. Given that Latin has been used as a case study to argue against the idea that constituency is universal, this enterprise seems an urgent one, and one, I believe, in which little progress has been made (cf. Evans and Levinson 2009; Cecchetto and Oniga 2014). As a basic methodological principle, arguments must be based on evidence, and philosophical or aesthetic

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17 Of course, a theory must spell all this out, which we do not do here, for reasons of scope.
18 Lieven Danckaert’s (2012; 2017) publications are a happy exception to this trend.
concerns really have no place in the scientific discussion, regardless of the role they play in the motives of the researcher.\textsuperscript{19} We’ll be interested, then, in developing robust and varied diagnostics for syntactic structure based on categorical distributions in a corpus, using all possible sources of evidence. The corpus used is described in Appendix A.

2.1.3 Chapter overview

In what follows, we will see extensive evidence that, despite initial appearances, the Latin sentence is hierarchically structured in both the nominal and verbal domains. In Section 2.2 we will see several arguments that the noun phrase has an internal hierarchical structure. Then in Section 2.3 we will turn to the clause. Among other results, I will show that negative polarity items, such as \textit{ullus} ‘any,’ and quantifiers, such as \textit{omnis} ‘all,’ have a very restricted distribution, one that is best captured in terms of the structural relation of c-command.

2.2 Structure in the noun phrase

In establishing that structure dependence (32) holds of Latin grammar, we are faced with a particularly hard situation when we consider the noun phrase. The extremely free order of elements within the noun phrase gives the initial impression of being arranged arbitrarily in a linear sequence, perhaps influenced by the salience of their referents in the discourse. In this section, we will see that this is not the case.

The issue of whether the Latin noun phrase has a hierarchical structure has only recently begun to receive attention within the generative literature (Iovino 2012; Giusti and Iovino 2016; Giusti 2019). The remaining literature concentrates on the semantics and pragmatics of the noun phrase, with perhaps greater recognition of its complexity (Spevak 2010; 2014).

2.2.1 Disambiguating punctuation

2.2.1.1 Describing ambiguity

In Section 2.1.1 we considered the famously ambiguous response of the Delphic oracle to Pyrrhus and suggested that the ambiguity must be syntactic. Upon closer inspection, such ambiguities provide evidence for syntactic structure. Here we will consider one argument based on such ambiguities that there is structure internal to the noun phrase.

In general, let us propose that a given string of words is \textit{syntactically ambiguous} when it has more than one semantic interpretation, or reading, that cannot be explained through the homophony of individual morphemes or lexical items. As an example, consider (40).

\textsuperscript{19} This is Michael Strevens’ (2020) “iron rule:” scientific argumentation must be based solely on the facts. The problem with metaphysical or aesthetic argumentation is that they inhibit the collection of the evidence that is crucial for falsifying a hypothesis.
(40) terrae motu incendioque (*Mon. Anc. Ap. 4.3*)

terrae motu incendio=que
earth.FSG.GEN movement.MSG.ABL burning.NSG.ABL=and

‘By the earth’s movement and burning’

Under one reading, the genitive *terrae* modifies only *motu*; alternatively, it may modify both *motu* and *incendio*.

A basic job for any theory of syntax is to formally represent these two readings. One approach, as in Dependency Grammar, is to draw an arrow from a modifier to head (e.g., Hudson 2007). In our theory, modification is the consequence of the compositional nature of semantic interpretation, in which argument structure is satisfied by syntactic objects that form a constituent. The two readings of (40), for instance, correspond to the two structures (41)a and b.

(41) (a) [NP [NP terrae motu] incendioque]
(b) [NP terrae [NP motu incendioque]]

In (a), *terrae* and *motu* form a constituent, so that *terrae* is interpreted as modifying *motu*, but not *incendio*. In (b), *terrae* modifies the complex noun phrase *motu incendioque*.

As a preliminary defense of this analysis, consider the issue of explanatory power. In the dependency theory, modification arrows do not predict anything in addition to modification. In our theory, modification is but one epiphenomenon of the combinatory nature of syntax: agreement and nominal concord, word-order, case-licensing, and nearly all other syntactic phenomena appear to involve constituency.

One must be careful not to posit ambiguities that would not have occurred to the Roman. In the case of (40), there is epigraphic evidence that the two readings exist, and that the ambiguity should be analyzed in terms of constituency.

2.2.1.2 Epigraphic evidence for the constituency analysis

Epigraphic texts—those which have been inscribed on stone, metal, or another more or less durable material—constitute a far more direct source of evidence for Latin grammar than those preserved through the manuscript tradition. Unlike manuscripts, which have often been “corrupted” through transcription errors, whether intentional or not, epigraphic texts are most often subject only to decay. Moreover, classical epigraphic texts occasionally preserve punctuation, which had disappeared from the manuscript tradition with the increasing popularity of unpunctuated writing (*scriptura continua*) in the second century CE (Wingo 1972, 16).

One function of punctuation evident from the best-preserved inscriptions, was to indicate syntactic units. For instance, in the *Monumentum Ancyranum*, containing the best-preserved exemplar of Augustus’s account of his achievements, the *Res Gestae*, the diagonal bar (/) is regularly used to mark boundaries always above the level of the word (Wingo 1972, 29ff.). This is the case in (42), where lowercase letters represent the editor’s conjecture, and uppercase letters, spaces and interpuncts (·) are original.
oppidis terrAE·MOTV·/INCENDIOQVE CONSUMPTis (Mon. Anc. Ap. 4.3; Scheid 2007)

oppidis terrae motu incendioque consumptis

town. NPL ABL earth. FSG GEN movement. MSG ABL burning. NSG ABL = and

consumptis
waste PERF PTCP PASS NPL ABL

‘towns wasted by movement of the earth and by fire’

The most plausible reading of (42) within its context is the disjunctive one: Augustus offered aid to every town that had been destroyed either by earthquakes or by fire (cf. Cooley 2009, ad loc.) Far less plausible is that Augustus offered aid solely to the towns that had been destroyed by the earth’s movement and fire, understood together as a single entity. The position of the diagonal bar, moreover, suggests that the author felt motu and incendio to be syntactically or prosodically separate, more abstractly than by virtue of being individual words—otherwise, presumably only the interpunct would be used. 20

We may account for both of these facts by suggesting that the diagonal bar marks the right bracket of a constituent, as in (41)a. Then terrae motu forms a unit idiomatically interpretable as ‘earthquake,’ and motu does not form a constituent with incendio. If there were no constituent structure at all, then the placement of the diagonal bar would be mysterious.

2.2.2 Uneven statistical distributions and unavailable orders

Next, notice that whereas the word order of noun phrases is extremely free, the frequencies of each order are very different. For instance, each logically possible order of (Dem)onstrative, (A)jective, and (N)oun is attested, but their frequencies vary from nearly half of all cases (Dem A N) to only about 1% of cases (A N Dem). Below, examples of each order are given in (43), from Cicero’s correspondence with Atticus. The percentages listed indicate the frequency found in a random sample of 100 noun phrases from the Perseus corpus, each containing a demonstrative, a noun, and an adjective. The sample, together with a description of how it was collected, is given in Appendix B.

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20 We use the phrase “the author” vaguely here, due to the obscurity of the process by which the monuments came to be. It is known that for official inscriptions, “the very precise form of words would have been laid down by the authorities,” presumably Augustus himself, in this case (Edmonson 2015, 117). But it is unclear if this included punctuation. There is some evidence that it did, however. Otha Wingo has observed that the Greek translator of the Res Gestae misinterpreted quoque ‘each’ as quoque ‘indeed’ at 6.22–23, where the Latin inscriptions also mistakenly do not mark the medial vowel as long (Wingo 1972, 31 fn. 3). This suggests that the Greek and Latin texts were both prepared based on a master copy containing the mistake.
This complexity has been somewhat ignored in the literature; the demonstrative-final orders, for instance, have been viewed as nonexistent, with consequences for accounts of the structure of the noun phrase (cf. Giusti and Iovino 2016). The syntactic complexity, however, is likely to be partially illusory, given that demonstratives and other functional categories freely undergo prosodic displacement, as discussed in Chapter 3.

What is important here is that if there were no hierarchical structure, say, if demonstratives did not occupy a high structural position within the noun phrase, then the fact that demonstrative-final orders optimistically account for 2% of cases, rather than the null hypothesis of 33%, is unexplained. However, given such an underlying structural position, then the very low frequency of these orders might be explicable in terms of the very particular forms of prosodic or syntactic movement needed to yield them.

This appears even more strongly when we consider the attested orders of Demonstrative, Numeral, Adjective, and Noun, a traditional diagnostic within language typology (cf. Dryer 2018). Below, in (44), each of the 4! (=24) logically possible orders are presented, with unattested orders marked with a hash (#).

(44)

(a) Dem Num A N
(b) Dem Num N A
(c) #Dem N Num A
(d) #N Dem Num A
(e) Num Dem A N
(f) Num Dem N A
(g) Num N Dem A
Here we find that only eight of the possible orders are ever attested, and that no numeral- or demonstrative-final order occurs. One explanation for this fact is that numerals and demonstratives are structurally high in the noun phrase; either the movement required to yield numeral- or demonstrative-final orders has such specific pragmatic or semantic effects as to not appear in the corpus, or such movement is simply forbidden.

2.2.3 Interpretive differences

Not only are there apparently strict constraints on the order of elements within the noun phrase, but the readings available for each order are not the same. I claim that the order A Dem N (43)(e) stands out from the others in requiring a contrastive reading, evoking a set of alternative entities to the ones denoted by the noun phrase. For instance, consider (45), where Cicero is discussing the plot of Plato’s Republic.
(45)  **Context:**
quoad *primus ille sermo* haberetur, adest in disputando senex; deinde [...] dicit se velle discedere neque postea revertitur (Cic. *Att*. 4.16.3).

‘As long as the first part of that talk was held, the old man [i.e., Cephalus] is present in the debate; later, he says that he wants to leave and he doesn’t come back afterwards.’

**Sentence:**
quoad *primus ille sermo* haberetur, adest in disputando senex

quoad  as_long_as  first.MSG.NOM  DIST.MSG.NOM  talk.MSG.NOM

haberetur,  ad-est  in  disputando

have.3SG.IMPERF.SBJV.PASS  at-be.3SG.PRES.IND  in  debate.GRND.ABL

senex

old.MSG.NOM

‘As long as the first part of that talk was held, the old man is present in the debate’

The position of *primus* signals a contrast between the referent of the noun phrase, namely, the beginning of the *Republic*, with the remainder of that work. Cicero is making this point in order to provide a literary precedent for his decision for the character Scaevola to be present in only the first book of his own dialogue, *On the Orator*. The contrastive interpretation is evident from the subsequent temporal adverb *deinde* ‘after that.’

Contrastivity is most easily detected when a speaker makes a claim about a proper subset of a set of items felt to be salient in the discourse context. In (46), below, the noun phrase *breviores has litteras* is contrastive.

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21 Contrastivity is not restrictivity. Notice, for instance, that the entities contrasted in (45) are not individual *sermones* ‘discussions,’ but parts of a single discussion. This is a consequence of the partitive interpretation of adjectives that indicate relative position, such as *medius* ‘middle,’ and *summus* ‘highest’ (Pinkster 2015, 1048ff.). If *primus* were a restrictive modifier, however, the noun phrase *primus ille sermo* would have the very different reading: ‘that discussion which was first.’ This shows that contrastivity and restrictivity are distinct notions, the latter a property of noun phrases where the set of entities denoted by the noun phrase is a proper subset of the set denoted by the noun phrase without that adjective.

For instance, *primi* in (a) is restrictive, with the noun phrase understood as ‘those humans who were the first to exist.’ If *primi* were non-restrictive, it would be interpreted as a side-comment: ‘those humans, who, by the way, were the first to exist.’

(a)  [Graeci] sonis etiam quibusdam et affectibus non dubitaverunt nomina aptare, non alia libertate quam qua *illi domini homines* rebus appellaciones dederunt (Quint. 8.3.30).

‘The Greeks did not hesitate to fit words to certain sounds and feelings, with a freedom no different than that by which those first humans gave names to things.’

Although the noun phrase in (a) denotes a proper subset, it does not explicitly evoke alternative sets of entities, and is thereby not contrastive.
Here, the speaker Caelius Rufus is addressing Cicero in a letter. He is making different claims about two different letters that he has written: the present one (has litteras), which is brief (breviores), and which he had handed to a courier (tabellario), and the letter he had sent the day before (pridie), which was longer (pluribus verbis scriptas), and which he had handed to Cicero’s freedman (liberto). It is clear then, that the noun phrase breviores has litteras is contrastive in the sense that we have been discussing.

Thus far we have been uncritical about the delineation of the syntactic categories of “adjective,” “demonstrative,” and “noun.” Before considering this issue more carefully in Section 2.4.4, notice first, that, in addition to canonical adjectives such as breviores, cardinal numerals also participate in the same contrastive noun phrase construction, as shown by comparing (47) with (48).

(47) haec tria frumentariia subsidia rei publicae [...] munivit (Cic. Man. 34)

He fortified these three sources of the state’s grain supply’
Haec mihi veniebant in mentem de duabus illis commentationibus matutinis, quod tibi cottidie ad forum descendenti meditandum esse dixeram: ‘novus sum,’ ‘consulatum peto.’ Tertium restat: ‘Roma est,’ ... (Comment. Pet. 14.54)

‘These things occurred to me about those two morning meditations, which I had told you to repeat as you go down to the forum every day: “I am new,” “I seek the consulship.” There remains a third: “This is Rome.”

Sentence:
Haec mihi veniebant in mentem de duabus illis commentationibus matutinis

haec veniebant mihi in mentem
PROX.NPL.NOMcome.3PL.IMPERF.IND.ACT 1SG.DAT in mind.FSG.ACC

de duabus illis commentationibus matutinis
about two.FPL.ABL DIST.FPL.ABL meditation.FPL.ABL morning.FPL.ABL

‘These things occurred to me about those two morning mental preparations’

In example (47), there is no detectable contrastivity, but the cardinal duabus in (48) is used contrastively. The speaker is concluding his remarks on the first two items of a set, about to mention a third item in the set.

The pair (49)/(50) falls in line with the above schema. The NP of (50) unfavorably contrasts the speaker’s interlocutor’s preferred philosopher with the speaker’s favorite.

(49) neque enim ista tua negotia provincialia esse putabam (Cic. Att. 2.1.12)

neque enim ista tua negotia
nor since MED.NPL.ACC 2SGPOSS.NPL.ACC business.NPL.ACC

provincialia esse putabam
provincial.NPL.ACC be.PRES.INF think.1SG.IMPERF.IND.ACT

‘Since I didn’t think those occupations of yours to be provincial’

(50) Context:
Sint ista vera (vides enim iam me fateri aliquid esse veri), comprehendi ea tamen et percipi nego. Cum enim tuus iste Stoicus sapiens syllabatim tibi ista dixerit, veniet flumen orationis aureum fundens Aristoteles qui ... (Cic. Luc. 119.86)

‘Suppose that those things of yours are true (you do see now that I admit that there is some truth to them). I still deny that they are grasped and perceived, since when that
Stoic wise-guy of yours has spoken those things of yours one syllable at a time, there will come pouring forth a golden stream of speech Aristotle, who ...

Sentence:
Cum enim tuus iste Stoicus sapiens syllabatim tibi ista dixerit [...]

cum enim tuus iste Stoicus sapiens syllabatim tibi ista dixerit

‘Since when that Stoic wise-guy of yours has spoken those things of yours one syllable at a time...’

The tua of (49), in contrast, is not focused: it does not evoke alternatives.

So far, we have seen a variety of individual modifiers undergoing NP-internal scrambling above a demonstrative, which obligatorily receive focus. However, if more than one modifier is used contrastively, both of them will scramble. This is the case in (51), where the adjective nota and cardinal quattuor are both used contrastively.

(51) Sentence in context:
Aristoteles longe omnibus—Platonem semper excipio—praestans et ingenio et diligentia, cum quattuor nota illa genera principiorum esset complexus, e quibus omnia orerentur, quintam quandam naturam censet esse, e qua sit mens ... (Cic. Tusc. 1.22)

‘Aristotle excelling everyone—always with the exception of Plato—in both genius and hard work, after he had embraced those four known classes of elements, from which everything arises, proposed there to exist a certain fifth nature, out of which there is the mind.’

Sentence:
cum quattuor nota illa genera principiorum esset complexus

‘After he had grasped those FOUR KNOWN classes of elements...’
Here, the speaker is preparing to discuss Aristotle’s discovery of a “fifth element,” which is contrasted with the elements that are both four in number (*qua*tuor) and known (*nota*).

The contrastive construction provides evidence for constituency within the noun phrase. First, the fact that the adjective in A Dem N can be a coordination structure indicates that it is a constituent. See, for instance, (52), where A is of the form A Conj A.

(52)  

*Context:*  
si hoc modo rem moderari possemus ut pro viribus copiarum tuarum belli quoque exsisteret magnitudo et quantum gloriae triumphoque opus esset adsequeremur, periculosam et gravem illam dimicationem evitaremus, nihil tam esset optandum. Nunc, si Parthus movet aliquid, scio non mediocrem fore contentionem (Cic. *Fam.* 8.5.1).

‘If we can just control the situation in such a way that the size of the war be proportional to the strength of your forces and that we achieve as much as is needed for glory and a triumph, provided that we avoid that dangerous and serious fight, nothing more can be wished for. But now, if the Parthians do anything, I know that there will be a non-trivial conflict.

*Sentence:*  
[...]*periculosam et gravem illam dimicationem* evitaremus

periculosam  et  gravem  illam  dimicationem  
dangerous.FSG.ACC  and  heavy.FSG.ACC  DIST.FSG.ACC  fight.FSG.ACC

evitaremus  
avoid.1PL.IMPERF.SBJV.ACT

‘Provided that we avoid that dangerous and serious fight.’

The scrambled AP receives contrastive focus: the speaker Caelius Rufus subsequently tells us that another conflict is inevitable.

To see that A is internal to the noun phrase and that we are not really dealing with a covert instance of a split noun phrase, notice that A Dem N may occur as the complement of a preposition, as in (53).

(53)  

*redeo ad praeclaram illam contionem tuam* (Cic. *Pis.* 17).

redeo  
back-go.1SG.PRES.IND.ACT  to  brilliant.FSG.ACC  DIST.FSG.ACC

praeclaram  illam  contionem  tuam  
speech.FSG.ACC  2SGPOSS.FSG.ACC

‘I return to that outstanding speech of yours’
Recall next that the orders A N Dem and N A Dem are also grammatical. Crucially, they do not admit of a contrastive interpretation.

For N A Dem, consider (54), where Cicero is criticizing Gaius Aquilius’ definition of *dolus malus* ‘criminal fraud’ (cf. Cic. *Off.* 3.60).

(54)  
**Context:**

sive et simulatio et dissimulatio dolus malus est, perpaucae res sunt in quibus non dolus malus iste versetur (Cic. *Off.* 3.64)

‘If both insincerity and concealment are “criminal fraud,” there are very few things in which that “criminal fraud” of yours will not be involved.’

**Sentence:**

[...] perpaucae res sunt in quibus non dolus malus iste versetur

In this passage, *dolus malus iste* may be understood as the discourse topic, and so it would be infelicitous under a contrastive reading, and in fact, there is no evidence that it receives one.

For A N Dem, consider (55), part of a passage where Cicero is attempting to emphasize the importance of art to Greeks, giving a series of examples. One of those is Regium’s marble statue of Venus, which Cicero is highlighting as an important cultural artifact.

(55)  
**Context:**

Quid arbitramini Reginos, qui iam cives Romani sunt, merere velle ut ab iis marmorea Venus illa auferatur? (Cic. *Ver.* 2.4.135)

‘What do we think the Regini, who are now Roman citizens, would be willing to get in exchange for that marble Venus to be taken from them?’

**Sentence:**

[...] ut ab iis marmorea Venus illa auferatur?

In this passage, *dolus malus iste* may be understood as the discourse topic, and so it would be infelicitous under a contrastive reading, and in fact, there is no evidence that it receives one.
‘that marble Venus taken from them’

The statue is likely to have been well-known to the listeners, as would have been the rest of the art-works that Cicero is mentioning. They all share the property of being famous and have no other salient properties with which to evoke contrast. Here too the noun phrase is infelicitous under a contrastive reading. In fact, there appear to be no distinctive semantic properties of the two orders N A Dem and A N Dem.

The fact that A Dem N, but neither N A Dem nor A N Dem, receive contrastive interpretations shows that the relative order of individual words, A and Dem, for instance, is irrelevant. In a theory with no noun phrase-internal structure, this cannot be accounted for except by stipulation. What is important is that the noun phrase is contrastive precisely when A precedes the pair Dem N, in that order. Moreover, the contrastive reading only adds meaning: in addition to adjectival modification, there is contrastivity.

To represent these facts formally, I tentatively propose the structure (56) for noun phrases of the form A Dem N, where A denotes an unpronounced copy of A.

(56) \[ \text{[FocP } A [\text{DeixP Dem [NumP } A [\text{NP } N A]]] \]

The base-generated (right-most) copy of A establishes basic attributive modification, possibly idiomatic, as we will see in Section 2.4.5. The intermediate copy has an uncertain semantic status, but is necessary to represent A N orders, including non-contrastive ones. The highest (left-most) copy establishes contrastivity and is pronounced. Deix(is)P is the locus of demonstratives, such as ille ‘that;’ Num(eral)P of numerals, such as quattuor ‘four.’

A left-peripheral position associated with contrastive focus has been argued to exist in other languages. For instance, Rijkhoff (1998) argues that Turkish has such a position, based on alternations in the position of an adjective with the indefinite article. For Modern Greek, Ntelitheos (2004) claims that genitive possessors occurring before the definite article mark contrastive focus; for Bangla, Syed (2015) argues that pre-demonstrative adjectives have moved to the specifier of a left-peripheral focus position within the noun phrase.\(^\text{22}\)

(57) \[ \text{LAL ei boi Ta amar pochondo (Syed 2015, 335)} \]

\[ \text{red this book Cl my liking} \]

‘This red book is of my liking.’

In (57), lal has moved to the specifier of a focus projection, as in (56).

2.2.4 Nominal categories

A potential problem for the preceding account is that quantificational nominals such as multi ‘many,’ totus ‘entire,’ omnis ‘all,’ freely occur before demonstratives with no contrastive reading. This is the case, for instance, in (58), where there is no evidence for a contrastivity.

\[^{22}\text{Syed (2015) notes that the focus may be either contrastive or new information. In our analysis, Latin pre-demonstrative focus is always contrastive.}\]
omnem hanc disputationem in adventum tuum differo (Cic. Fam. 2.3.2)

omnem hanc disputationem in adventum
tuum dif-fero

‘I put off that entire dispute until your arrival.’

If such words are syntactically adjectives, such qualifications remove the teeth from our claim. In fact, Corver (1990; 1992), Trenkić (2004), and Bošković (2005) have argued that ostensibly functional nominal elements, such as demonstratives and possessives, are in fact syntactically adjectives in articleless languages. Giusti and Iovino (2016, 230ff.) suggest that the same may hold for Latin, which lacks articles.

But there is good reason to believe that Latin has several functional nominal categories, each distinct from adjectives. The argument is as follows. We conventionally assume that a syntactic category (i.e., part of speech) is a group of words that share the same syntactic behavior (Carnie 2021). According to a wide range of diagnostics for adjectivehood, omnis is not an adjective. The words multi and totus share the same syntactic distribution as omnis, and so they appear to be in the same category, distinct from adjectives. We will call these (syntactic) (Q)uantifiers. The same argument applies to Demonstratives.

2.2.4.1 Nouns

Nouns are distinguished from other nominal categories in having a fixed gender. Some have fixed number. Like all other nominal categories, they inflect for number and case. They have five declensions, with genitive plurals ending in -arum, -orum, -ium/-ium, -uum, -erum, respectively. Moreover, noun phrases are “endocentric” in having a unique head.

2.2.4.2 Adjectives

The salient property of Latin adjectives, on the other hand, is recursive combination. That is, an adjective may compositionally modify a noun phrase already modified by an adjective, yielding a new noun phrase. Consider (59), for instance, where the noun rem ‘matter’ is modified by two adjectives publicam ‘public’ and iustam ‘just.’
tum vero incipiam proponere mihi rem publicam iustam (Cic. ad Brut. 1.4a.4)

\[
\begin{array}{llll}
\text{tum} & \text{vero} & \text{incipiam} & \text{pro-ponere} \\
\text{then} & \text{truly} & \text{begin.1SG.FUT.IND.ACT} & \text{before-put.PRES.IND.ACT} \\
\text{rem} & \text{publicam} & \text{iustam} & \text{thing.FSG.ACC} \text{public.FSG.ACC} \text{lawful.FSG.ACC} \\
\end{array}
\]

‘Then, truly, I will begin to imagine for myself a law-abiding republic.’

The adjective *iustam* does not directly modify *rem*. If it did, the noun phrase would be expected to have the same interpretation as if *publicam* and *iustam* were coordinated, as in (60).

(60)  
(a) rem publicam iustamque (construct)  
(b) [NP rem [AP publicam iustamque]]

But this is clearly not the case. The noun phrase formed by modifying *rem* and *publicam* has the idiomatic interpretation of ‘republic.’ To describe this property of adjectival modification syntactically, it is necessary to posit recursive structures. The simplest analysis is given in (61).

(61)  
[NP [NP rem [AP publicam]] [AP iustam]]

In Section 2.4.4 we will continue our discussion of idioms. Let us now consider how to test for adjectivehood.

### 2.2.4.3 Morphosyntactic diagnostics for adjectivehood

Nominals that are prototypically adjectival may be considered to be either of the form *carus* ‘dear’ or *celer* ‘quick.’ The *carus* class has feminine forms in the first declension and masculine and neuter forms in the second. The *celer* class has all genders in the third declension.

Certain nominals, however, traditionally considered pronominal adjectives, share a separate declension with demonstratives and other determiner-like elements, such as *ille* ‘DIST’ (*GL*, §76). An example is *totus* ‘whole,’ and the words considered to be pronominal adjectives are listed in (62).

(62)  
(a) alter ‘one of the two’  
(b) alius ‘other’  
(c) neuter ‘neither’  
(d) nullus ‘no’  
(e) solus ‘sole’  
(f) totus ‘whole’  
(g) ullus ‘any’  
(h) unus ‘one’  
(i) uter ‘which of the two’
Let us consider whether the elements in (62) are truly syntactic adjectives, and if not, what categories of modifiers exist apart from adjectives.

First, prototypical adjectives may combine with a host of derivational suffixes. Abstract nouns are formed from the combination of an adjective stem with one of -(t)ia, -(t)ies, -tas, -tus, -tudo (AG, §146). Thus, from carus ‘dear’ we may obtain cari-tas ‘dear-ness.’ Diminutives are formed from noun or adjective stems combining with -ulus, -olus, -culus, -ellus, -illus.

In general, then, if the stem of a word can be combined with a deadjectival suffix and is not a noun, then it is an adjective; we state this in (63).23 This does not go in the other direction, however. That is, not every obvious adjective has derived forms. For instance, Romanus ‘Roman’ (65) a does not.

(63) Derivational diagnostic for adjectives
If the stem of a word can combine with one of the following suffixes, it is an adjective: -(t)ia, -(t)ies, -tas, -tus, -tudo, -ulus, -olus, -culus, -ellus, -illus.

Testing the pronominal adjectives alongside a varied selection of canonical adjectives gives the results (64) and (65), respectively.

(64) (a) alter, #alteritia, #...
    (b) alius, #alitia, #..., 
    (c) neuter, #neutri(ti)a, #...
    (d) nullus, #nullitia, #...
    (e) solus, #solitia, #solities, #solitas, #solitus, solitudo (Cic. Brut. 63.227), #solulus, #...
    (f) totus, #totitia, #...
    (g) ullus, #ullitia, #...
    (h) unus, #unitia, #unities, unitas, #unitus, #...
    (i) uter, #utritia, #...

(65) (a) Romanus ‘Roman,’ #Romanitia, #...
    (b) carus ‘dear’, #caritia, #carities, caritas (Cic. Amic. 20), #caritus, #...
    (c) primus ‘first’, #primitia, #primities, #primitas, #primitus, #primitudo, primulus (Plaut. Am. 735), #...
    (d) aureus ‘gold’, #aureitia, #aureities, #aureitas, #aureitus, aureitudo, #aureulus, aureolus (Catul. 2.10), #...

According to this test, then, only solus, unus, carus, primus, and aureus are adjectives. The test also gives mixed results against Risselada (1984, 230ff.)’s grouping of Latin determiners (cf. Spevak 2014, 43ff.). We test one of Risselada’s groups below.

(66) (a) (i) unus (see above)
    (ii) duo, #duitia, #...
It appears, then, that *unus*, *multi*, *pauci*, and *universus*, and do not belong with the others of (66).

A second characteristic property of adjectives is that they freely combine with the prefixes *-per*, *-prae*, *-sub*, and *-in* (*AG*, §267d). We state this below.

(67) **Prefix test**

If a nominal can combine with *-per*, *-prae*, *-sub*, *-in*, it is an adjective.

(68) **percarus** (*Cic. Scaur*. 39), *per/-praе/-sub/-inromanus, per/-praе/-sub/-imprimum, per/-praе/-sub/-inalter, per/-praе/-sub/-inalius, per/-praе/-sub/-inneuter, per/-praе/-sub/-ininsolus, per/-praе/-sub/-intotus, per/-praе/-sub/-innullus, per/-praе/-sub/-inunus, per/-praе/-sub/-induo, per/-praе/-sub/-inueter, per/-praе/-sub/-insinguli, per/-praе/-sub/-inaliquot, per/-praе/-sub/-implerique, per/-praе/-sub/-innonnullus, **permultus** (*Cic. Amic*. 86), **perpaucus** (*Cic. Brut*. 61.220), per/-praе/-sub/-innomnis, per/-praе/-sub/-intotus, per/-praе/-sub/-inuniversus

According to this test, only *carus*, *multi*, and *pauci* are adjectives.

A third characteristic of adjectives is their having distinct comparative and superlative forms. This leads us to (69).

(69) **Comparison test**

If a nominal can form a comparative or superlative form, it is an adjective.

---

24 The noun *singulius* ‘sobbing’ is sometimes claimed to be derived from *singulus*, but if so, it has clearly undergone considerable semantic drift, so we do not count it here.
According to the comparison test, only *carus*, *primus*, *multi*, and *pauci* are adjectives.

Fourth, adverbs are productively derived from adjectives by combining the adjective stem with -e or -ter. This gives us another diagnostic, (71).

(71) **Adverb test**
If a nominal can form an adverb in -e or -ter, it is an adjective.

(72) **Romane** (Gell. 13.22.2), *care* (Cic. *Att*. 1.16.6), *uniter* (Luc. 3. 835), *universe* (Cic. *Att*. 5.2.1), ...

Finally, the particle *tam* ‘so’ indicates the degree of a property and combines with (certain) adjectives.27

(73) **‘Tam’ test**
If a nominal can be modified by *tam*, it is an adjective.28

(74) #tam Romanus, tam *carus* (Cic. *Phil*. 1.38), #tam primus, tam *aureus* (NT *Esd*. 1.6)

(75) #tam alter, tam *alius* (Cic. *Brut*. 233.66), #tam neuter, tam *nullus* (Cic. *Div*. 2.138), tam *solus* (Juv. 1.3.5), #tam totus, #tam ullus, #tam unus, #tam duo, #tam uter, #tam singuli, #tam aliquot, #tam plerique, #tamnonnullus, tam *multi* (Cic. *Brut*. 207.57), tam *pauci* (Cic. *Att*. 1.10.1), #tam omnis, #tam totus, tam *universus* (Sen. *Tranq*. 9.11.11)

According to this test, *carus*, *aureus*, *alius*, *nullus*, *solus*, *multi*, *pauci*, and *universus* are adjectives.

The results are summarized below in (76).

---

25 *Primus* is already superlative.

26 The comparative and superlative of *multus* are suppletive and very common.

27 In this class perhaps belong also *nimis* ‘too,’ *satis* ‘sufficiently,’ and *parum* ‘too little.’

28 One must be careful to distinguish what *tam* is modifying, which is not always a nominal. For instance, in (a), *tam* is modifying the predicate expressing possession.

(a) At haec individua bona, pax et libertas, et *tam* omnium tota quam singulorum sunt. (Sen. *Ep*. 73.8)

‘But these are individual goods—peace and liberty—and are entirely the property of everybody as much as of individuals.’
(76) **Adjective diagnostics**

<table>
<thead>
<tr>
<th>Word</th>
<th>Declension Test</th>
<th>Derivation Test</th>
<th>Prefix Test</th>
<th>Comparison Test</th>
<th>Adverb Test</th>
<th>Tam Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>carus</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
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<td>✓</td>
<td>❌</td>
<td>❌</td>
<td>✓</td>
<td>❌</td>
</tr>
<tr>
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<td>✓</td>
<td>❌</td>
<td>❌</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>unus</td>
<td>❌</td>
<td>✓</td>
<td>❌</td>
<td>❌</td>
<td>✓</td>
<td>❌</td>
</tr>
<tr>
<td>multi/pauci</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>❌</td>
<td>✓</td>
</tr>
<tr>
<td>universus</td>
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<td>✓</td>
<td>❌</td>
<td>❌</td>
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<td>✓</td>
</tr>
<tr>
<td>omnis</td>
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<td>alias</td>
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<td>❌</td>
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<td>❌</td>
</tr>
<tr>
<td>ille/is/hic/iste</td>
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<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
<tr>
<td>idem</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
</tbody>
</table>

It is important to note that passing any of the above tests is neither necessary nor sufficient for adjectivehood, due both to the limitations of our corpus, and to the fact that some of the above tests likely target morphosyntactic properties that are orthogonal to adjectivehood. For instance, *tam* can combine with verbal predicates, as discussed in fn. 28. Second, what appears to be a single word may in fact have homophonous forms that belong to different syntactic categories. For example, *solus* sometimes patterns as a quantifier with *omnis* in the sense of ‘only,’ and at other times patterns as a predicative adjective with the sense of ‘alone.’

With these caveats in mind, the first three entries of the table are indisputably adjectives, but notice that *Romanus* only passes two of the tests, despite being a very common word. The demonstratives, on the opposite end, fail each of the tests. Let us consider now *multi/pauci*, on the one hand, and *omnis* on the other.

First, *omnis* is the 20th most frequent word in the *Perseus* corpus, according to *Logeion*. It therefore appears significant that it fails each of the above tests, except for the declension test, which is really just a test for being nominal. Interestingly, *multi* and *pauci* pass nearly all of the tests, the 35th and 302nd most common words in the *Perseus* corpus, respectively. These latter two words, however, likely have homophones, as with *solus*, as also in English. This is illustrated in (77), where *multae* is predicative.
Let us conclude, then, that *multi* and *pauci* have two lexical entries each, as a quantifier, patterning with *omnis*, and as an adjective, patterning with *carus*.

What this discussion shows is that not every word that looks like an adjective really is one, and the fact that *omnis, multi, totus* etc. may occur before demonstratives without a resulting contrastive interpretation is not, in fact, at odds with our theory. For these are not adjectives, they are a distinct category, of quantifiers.29

It should be clear that demonstratives form a distinct category of nominals. They are clearly not adjectives, failing all of the diagnostics. They may cooccur with quantifiers. An interesting question is whether *is*, which is traditionally considered a “determinative” pronoun, is a demonstrative. It cannot cooccur with demonstratives, but it also cannot cooccur with the class including *alter/aliius/idem*. Moreover, *is* cannot combine with the “reinforcer” morpheme -(c)e, though *hic/iste/ille* can. It appears then, that *is* is not a demonstrative in the narrow sense.

Let us take stock. This is necessarily a very incomplete discussion of the nominal parts of speech, but we have shown that the Latin noun phrase contains at least the distinct categories of (N)oun, (A)djective, (Q)uantifier, and (D)emonstrative. Each of these categories displays distinct syntactic behavior, particularly in the unmarked orders with which they may combine with the others.

### 2.2.5 Asymmetry in the distribution of nominal idioms

Continuing the discussion of adjectives from Section 2.2.4.2, notice that, although word-orders N A and A N are both frequent, there are apparently no cases of nominal idioms of that require the form A N, which I claim is evidence for an underlying structural distinction.

Olga Spevak, commenting on the work of Lisón Huguet, notes that “in juridical, administrative, military and religious formulas, adjectives are always post-nominal” (Spevak 2010, 228-9; cf. Lisón Huguet 2001, 65ff.). This is too strong, given the fact that certain nominal formulas may occur in the order A N and retain their idiomatic readings. An example is given in (78), where the noun phrase *alieni aeris* ‘debt’ (lit. ‘another’s bronze’), though far more commonly occurring in the reverse order, retains its idiomatic interpretation.

---

29 To corroborate this analysis, future work should confirm that canonical adjectives are not subject to constraints on quantifiers (Andrew Carnie, personal communication).
In fact, even split noun phrases, such as the split prepositional phrase *pro alieno ... aere* in (79), may have an obligatory idiomatic reading.

(79) *maiorum exempla persequens pro alieno se aere devovit* (Cic. *Phil*. 11.13)

maiorum exempla per-sequens
ancestor.MPL.GEN model.NPL.ACC through-follow.MSG.PRES.PTCP.ACT

pro alieno se aere devovit
for another.NSG.ABL REFL.ABL bronze.NSG.ABL devote.3SG.PERF.IND.ACT

‘Following the examples of his ancestors, he sacrificed himself for debt.’

The proper generalization appears instead to be that if a noun phrase of the form A N has an idiomatic reading, N A will also have the idiomatic reading.

(80) *Nominal idiom asymmetry*

(a) If an idiomatic reading is attested for a noun phase A N, it is attested for N A.
(b) It is *not* the case that if an idiomatic reading is attested for a noun phase N A, it must be attested for A N.

It follows from (a) that there are no nominal idioms that require the form A N.

To see (b), notice that although we have seen in (59) that *res publica* has an idiomatic reading, the reverse order *publica res*, appears never to have one.\(^{30}\) In (81), for instance, Lisón Huguet (2001, 67) agrees with Lisardo Rubio (1972, 413) that *publicae rei* has the denotation of “any public thing” (*una cosa pública*).
hi censores [...] neque quicquam publicae rei egerunt (Liv. 27.6.17)

It is also not the case that if a noun phrase of the form N A has an idiomatic reading, that it then must have that reading. For instance, the phrase res novae often has the idiomatic meaning of ‘revolution,’ but it sometimes retains its more compositional meaning of ‘news,’ as in (82).

(82) non [...] tam rebus novis quam tuis litteris delector (Cic. Att. 4.11.2)

Here, Cicero is certainly not hinting that he finds joy in revolution.

In general, then, phrases such as res novae are ambiguous between a compositional and an idiomatic reading. There is no reason to believe that the ambiguity is structural. In fact, it is lexical, as is generally the case for idioms (Schachter 1973; Vergnaud 1974; Chomsky 1980; etc.).

To see this, consider the nominal idiom pater conscriptus ‘senator’ (lit. ‘enlisted father’). The participial adjective conscriptus hardly, if ever, occurs outside of this fixed expression. If it did, it would have the reading ‘enlisted,’ or possibly another idiomatic reading, but not the reading ‘senator.’

The noun pater, on the other hand, occurs freely and is the 84th most frequent word in the Perseus corpus, not only occurring with conscriptus. These facts suggest that, synchronically, the conscriptus1 in the idiom pater conscriptus is distinct lexical item from the participial adjective conscriptus2 productively derived from the verb conscribo ‘enroll,’ regardless of the diachronic facts. The salient property of conscriptus1 is that it does not freely combine with any noun, but obligatorily selects for pater: if conscriptus1 is not syntactically generated with pater, then the noun phrase is ungrammatical. We may also add that the idiom pater conscriptus apparently always occurs in this order, just as res publica.

The point of this discussion is that there is an asymmetry between the orders A N and N A. Though the situation is complex, at least certain adjectives appear to select for nouns, yielding an idiomatic reading of the noun phrase, where the syntactic domain in which this selection occurs has the schematic form [N A], not [A N]; idiomatic noun phrases with the order A N are instead...
derived via syntactic movement, possibly with subtle semantic effects. Then there must be at least some internal hierarchical structure within the noun phrase.

2.2.6 Noun phrase-internal structure: Concluding remarks

Almost nothing is known about the Latin noun phrase. As we have seen, the permissible word-orders are extremely free, with very subtle interpretive differences. It is, in fact, difficult to even detect a neutral order of nominal elements. However, we have taken several steps towards developing a predictive theory. At any rate, we have presented several reasons why there must be structure inside the noun phrase.

In the following chapter we will see one reason why the noun phrase appears so complex: it is subject to prosodic movement, so that the linear order of words does not reflect the underlying structural hierarchy.

2.3 Structure in the clause

We have seen several arguments that there is hierarchical structure and syntactic movement within the noun phrase. Next, we will see that the same holds for clause-level structure.

We will begin in Sections 2.3.1–2 by providing novel data for two syntactic conditions on clausal word-order. Next, in Section 2.3.3, we will explain these generalizations by means of an important principle of the relation of Latin syntax and semantics: scope transparency. As a corollary of this principle, we will see that in addition to the complementizer phrase (CP) representing the clause as a whole, there must be a verb phrase (VP), where argument structure is satisfied, and a constituent intermediate between the two, which we will call a tense phrase (TP).

2.3.1 The syntax of NPI licensing

In this section we will consider the distribution of a certain class of words, known as negative polarity items (NPIs) (Klima 1964). These are words, such as indefinite quis ‘anyone’ and ullus ‘any,’ that appear to require the presence of another element, which we can call a licensor, typically a negation marker such as the particle non ‘not,’ or other n-words like the verb nego ‘deny’ or the adjective nullus ‘no.’

We will see that the distribution of NPIs is descriptively subject to a certain condition: an NPI must be preceded by its licensor within each of the same clauses in which their licensor exists. In Section 2.3.3 I will argue that this condition follows from a more general principle of grammar in which precedence itself is a side-effect of structure.

2.3.1.1 NPIs and nonveridicality

To begin, consider (83), where the NPI quis is licensed by ne, in the sense that the sentence would presumably be ungrammatical without it.
(83) Itaque ne iustitiam quidem recte quis dixerit per se ipsam optabilem (Cic. Fin. 1.53).

Itaque ne iustitiam quidem recte quis
So NEG justice.FSG.ACC indeed rightly any.MSG.NOM
dixerit per se ipsam
say.3SG.PERF.SBJV.ACT through REFL.ACC itself.FSG.ACC
optabilem.
desirable.FSG.ACC

‘So one would not correctly say that justice is desirable in of itself.’

The licensor need not carry any negative flavor at all, however. The particle si ‘if,’ which introduces conditionals, frequently licenses NPIs, as in (84).

(84) si quis requirit cur Romae non sim [...] (Cic. Att. 12.40.3)

si quis requirit cur Romae non
if any.MSG.NOM ask.3SG.PRES.IND.ACT why Rome.FSG.LOC not
sim
be.1SG.PRES.SBJV

‘If anyone asks why I’m not at Rome ...’

In other contexts, the identity of the licensor is less clear, as in (85), where quis appears to be licensed simply by virtue of appearing in a temporal clause introduced by cum.

(85) Etiam interpretatio nominis habet acumen, cum ad ridiculum convertas quam ob rem ita quis vocetur (Cic. Orat. 2.257).

Etiam interpretatio nominis habet acumen
even meaning.FSG.NOM name.NSG.GEN have.3SG.PRES.IND.ACT point.NSG.ACC
cum ad ridiculum convertas quam
when to laughter.NSG.ACC turn.2SG.PRES.SBJV.ACT which.FSG.ACC
ob rem ita quis vocetur
about thing.FSG.ACC thus any.MSG.NOM call.3SG.PRES.SBJV.PASS

‘Even the interpretation of a name has subtlety whenever you burst into laughter on account of why someone is called the way they are.’

What each of the above examples share in common is that the NPI quis occurs in a context where the speaker is not committed to the reality of the situation described. In (83) and (84) quis occurs
in a clause that describes a potential situation, not necessarily one that holds at any time. The
temporal clause in (85) is general or habitual, as indicated by the subjunctive mood of convertas,
not describing a situation that the speaker believes to presently be occurring.

I will follow Giannikidou (1998) and subsequent work, then, and argue that NPIs not only
have a definable syntactic distribution, but must occur in nonveridical contexts, that is, in
contexts where the speaker is not committed to the truth of a proposition (Giannikidou 2011,
1674ff.).

### 2.3.1.2 The precede-and-command condition on NPI licensing

Regarding the syntax of NPIs, notice first in (83) that the licensor *ne* need not be linearly
adjacent to the NPI *quis*. NPIs may also be licensed across finite clause boundaries, as shown in
(86), where *ullam* is separated by its licensor *negabant* by the complementizer (subordinating
conjunction) *ut*.

(86)  *Negabant me adduci posse ut ullam largitionem probarem* (Cic. Agr. 2.12)

```
Negabant me ad-duci posse
deny.3PL.IMPERF.IND.ACT 1SG.ACC  to-lead.PRES.INF.PASS able.PRES.INF.ACT

ut  u llam  largitionem  probarem
that  any.FSG.ACC bribery.FSG.ACC approve.1SG.IMPERF.SBJV.ACT
```

‘They said that I couldn’t be convinced to approve of any bribery’

In the examples presented so far, each NPI is preceded by its licensor, and the NPI is in all of the
same clauses as the licensor. This latter relation sometimes known as “command” (Carnie 2010,
47ff.). We will see that this dual constraint holds generally, and we give a semi-formal definition
in (87).

(87)  *Precede-and-Command*

In configuration (a), where X and Y are syntactic objects and ‘...’ represents any
string, X precedes-and-commands Y if, and only if, (a) cannot be written as (b).

(a) ... [CP ... X ... Y ... ] ...
(b) ... [CP1 ... [C2P ... X ... ] ... Y ... ] ...

The label CP stands for “Complementizer Phrase,” in other words a full clause. (Let us assume
that every clause is indeed headed by a possibly null complementizer C, such as *ut*, or *quod*.)
This relation holds between objects X and Y, then, whenever Y is contained within the deepest
clause in which X is, and follows it.

To see that *negabant* precedes-and-commands *ullam* in (86), it is sufficient to check that one
may substitute *negabant* for X and *ullam* for Y in (87)a to obtain (88)a, but not in (87)b to form
(88)b.

(88)  (a) [CP negabant ... [CP ut u llam ...]]
This appears to be the case. That is, whereas (88)a is an accurate, if underinformative, structural description of (86), (88)b is simply incorrect: there is no clause in (86) containing negabant but not ullam.

As an example of a case not satisfying (87), consider (89), where one might believe that there is a potential licensing relationship between si and quid.

(89)  Si omnia fato, quid mihi divinatio prodest? (Cic. Div. 2.20)

     Si  omnia  fato  quid  mihi  divinatio
     if  every.NPL.NOM  fate.NSG.ABL  quid  1SG.DAT  divination.FSG.NOM

prodest
useful.3SG.PRES.IND.ACT

OK with reading: ‘If everything is by fate, what use is divination to me?’
Unacceptable with reading: ‘If everything is by fate, divination is of some use to me.’

Although si precedes quid, it does not both precede and command it, because it occurs in the conditional clause that it heads, but quid does not. As indicated in (90), (89) satisfies both structural descriptions in (87), thereby failing to satisfy the definition of precede-and-command.

(90)  (a) [CP si ... quid ...]
(b) [CP [CP si ...] quid ...]

2.3.1.3 Testing the hypothesis

To test that precede-and-command accurately captures the relation between the licensor and its NPI, it is necessary to examine sentences where the licensor could, in principle, fail to satisfy (87). This is not really the case for the licensor si, which we may assume to be C, because in typical cases it appears at the left edge of the clause, trivially satisfying the precedence requirement of (87).

Instead, let’s consider cases where the licensor is a verb, nego ‘deny,’ or a noun nemo ‘no one.’ The position of verbs in the clause is generally very free, with initial, medial, and final positions occurring frequently. The verb nego is no exception, reported to precede its clausal complement in only three out of four cases (Spevak 2010, 159). The position of nouns and noun phrases is at least as free as verbs.

To test that nego and nemo must precede-and-command the NPIs which they license, I searched the Perseus corpus for every sentence containing a form of nego or nemo and a form of the NPI ullus ‘any’ or umquam ‘ever.’ If one of nego or nemo were the linearly closest potential licensor of ullus or umquam, I marked it as the licensor.
The prediction that *nego* and *nemo* must precede-and-command *ullus* and *umquam* when they license them is borne out, as shown in Table (91).  

<table>
<thead>
<tr>
<th>Potential licensor</th>
<th>NPI</th>
<th># Sentences</th>
<th># Licensor precedes NPI</th>
<th># Licenses NPI</th>
<th># Licenses and precedes-and-commands NPI</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>nego</em></td>
<td><em>ullus</em></td>
<td>120</td>
<td>96</td>
<td>77</td>
<td>77</td>
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<tr>
<td><em>nego</em></td>
<td><em>umquam</em></td>
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<td>31</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td><em>nemo</em></td>
<td><em>ullus</em></td>
<td>121</td>
<td>87</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td><em>nemo</em></td>
<td><em>umquam</em></td>
<td>198</td>
<td>171</td>
<td>139</td>
<td>139</td>
</tr>
</tbody>
</table>

(91)

What is important here is that in each case where *nego* or *nemo* licenses *ullus* or *umquam*, it also precedes-and-commands it. We therefore have considerable evidence that (87) is the correct syntactic relation for NPI licensing, which we can state as (92).

(92) **NPI generalization**  
An NPI must be preceded-and-commanded by its licensor.

An upshot of this discussion is that the informal notion of “clause” must be formally represented somehow in the theory, and the natural place is within the syntactic component, where we have represented “clause” as CP. Precedence must also be represented, an issue which we will return to in Section 2.3.3.

Two important questions face us at this point. First, we may ask, following Giannikidou (2011), what common property of NPIs requires them to be embedded in nonveridical contexts. Second, what is the relation between precede-and-command, which is purely syntactic, and nonveridicality, which is purely semantic? We will answer this latter question in Section 2.3.3.

Regarding the former, Giannikidou (2011) proposes that NPIs have the semantic property of *referential deficiency*: NPIs are characterized by the inability to refer. This appears to be the case, once we understand it to mean that NPIs are lexical items that involve no ontological commitment on the part of a speaker. For instance, let’s consider (93), where *ullam* is an NPI modifying *legem* and is licensed by *negarunt*.

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31 The list of texts searched is listed in Appendix A, with data given in Appendix C.

32 Note that, whereas syntactic constraints on the distribution of NPIs are quite strong, this does not seem to be the case for so-called “Free Choice Items” (FCIs), which have an “it doesn’t matter what” reading (Giannikidou 2017, 8). An example is *quicquam* ‘anything at all’ in (a).

(a) de re publica iam *novi quicquam* exspectare desieramus (Cic. *Fam*. 8.4.4; Devine and Stephens 2013, 370)  
‘I have long stopped awaiting any news at all about the republic.’

33 The reason is that the traditional notion of reference, understood as being some relation between a signifier and a mind-external entity, is misguided, involving aporetic issues of definition (“what is the just,” etc.), not to mention the nature of the relation in question (N. Chomsky, personal communication, 11/7/19). Without going into the details, let us instead take an approach where reference is to mind-internal entities—essentially, concepts.
(93) Caninius et Cato negarunt se legem ulla ante comitia esse latus (Cic. Fam. 1.4.1)

Caninius. MSG. NOM et Cato. MSG. NOM negarunt

Caninius. MSG. NOM and Cato. MSG. NOM deny. 3PL. PERF. IND. ACT

se legem ulla ante comitia esse

REFL law. FSG. ACC any. FSG. ACC before assembly. NPL. ACC be. PRES. INF

latus

carry. MPL. ACC. FUT. PTCP. ACT

‘Caninius and Cato denied that they would bring any law before the assembly.’

Here, assume that negation is expressed through the ne- in negarunt, where nemo P means “I assert not P,” for a proposition P (OLD, s.v. “nego” 1). Then the embedded clause with main verb esse latus is nonveridical, enabling the use of ulla. The speakers are indirectly Caninius and Cato, who are certainly not committed to the existence of a law such that they will bring it before the assembly. In fact, they explicitly deny the existence of any such law.

I will argue that there is, in fact, a more precise semantic relation between ne and ulla. First we will need to develop an understanding of how the manipulation of individual entities is achieved through syntax.

2.3.2 The syntax of quantification

We have begun to see that there are very precise constraints on the relation of the syntax and semantics of certain words. Here will see an indication that these constraints hold more generally, considering words such as omnis ‘all’ and aliquis ‘some,’ which represent specific relations between two sets of entities.

2.3.2.1 Quantification

Let us first define a quantifier as a relation between two sets (Westerståhl 2016, 108ff.). If A is one set and B is another, one can think of a quantifier as asserting B as a property on some subset of A. Very informally, if A represents a “topic,” then B corresponds to the “comment” (Krifka 2016).

For instance, omnis ‘all’ in (94) is a quantifier and is interpreted as asserting the predicate in me contulisset x of all x in the set denoted by sua studia et officia.

---

34 The notion of quantifier is more generally formulated as an n-ary relation, but we will consider only binary quantifiers here.

35 We use variables (x, y, etc.) in order to represent individual members of sets. In general, the function of quantifiers is to enable to the “pointwise manipulation of individuals” (Robert Henderson, personal communication). The individuals x in the set denoted by sua studia et officia, for instance, are each studium and officium that is ‘he’ has.
(94) is *omnia* sua studia et officia in me contulisset (Cic. *Att.* 1.1.4).

is *omnia* sua studia et officia in me contulisset
DET.MSG.NOM all.NPL.ACC REFL.POSS.NPL.ACC zeal.NPL.ACC and duty.NPL.ACC in me.MSG.ACC together-carry.3SG.PLUPERF.SBJV.ACT

‘He had gathered together all his support and duties for me’

The parts of the sentence corresponding to sets A and B are known as the *restrictor* and the *scope* of the quantifier, respectively, as shown in (95) (Szabolsci 2010, 85).

(95) is omnia sua studia et officia in me contulisset

quantifier restrictor scope

A reliable heuristic to determine the restrictor is to consider what set it would be sufficient for one to check in order to determine the truth or falsity of the assertion.\(^{36}\) To determine if (94) is true, for instance, it suffices to check all of “his support and duties.” But it would be insufficient to check all of “what he had gathered together for me:” in doing so one might conceivably miss something.

Given the derivational complexity of Latin words, a quantifier may be realized as a bound morpheme of a word, as is perhaps the case of *ali-* in (96).

(96) ego tibi *aliquid* de meis scriptis mittam (Cic. *Att.* 1.16.18).

ego tibi *aliquid* de meis scriptis mittam
1SG.NOM 2SG.DAT something.NSG.ACC from 1SG.POSS.NPL.ABL

scriptis mittam
writing.NPL.ABL send.1SG.FUT.IND.ACT

‘I’ll send you some of my writings.’

Given such cases we will follow the literature in calling the quantifier and restrictor together a *generalized quantifier* (Montague 1974). Next let us consider syntactic constraints on quantification.

2.3.2.2 The *c-command condition* on quantification

Proceeding to analyze (96), notice that there is an ambiguity, wherein *de meis scriptis* can be understood either as (a) modifying *aliquid* or (b) modifying *mittam*. The former reading is partitive, where *aliquid* denotes one member out of the set of all of the speaker’s writings. In the

\(^{36}\) This is the *conservativity* property of quantifiers, a human language universal (Keenan and Stavi 1986).
other reading, *de meis scriptis* denotes the source of the sending. To represent these two possibilities, we may adopt our bracket notation as in (97).

(97) (a) [CP ego tibi [NP aliquid [PP de meis scriptis]] [VP mittam]]
     (b) [CP ego tibi [NP aliquid] [VP [PP de meis scriptis] mittam]]

Here, I am using NP as an abbreviation for “Noun Phrase,” PP for “Preposition Phrase,” and VP for “Verb Phrase.” Though little hinges on the decision, let us assume (97)a is the correct structural description, where *de meis scriptis* forms a noun phrase constituent with *aliquid.*

To check whether this sentence is true, it suffices to check whether (98) is true.

(98) There is some *x*, *x* “from my writings,” such that I will send you *x*

Then the noun phrase *aliquid de meis scriptis* can be analyzed as a generalized quantifier with scope *mittam.*

As a descriptive fact, it appears that a generalized quantifier precedes-and-commands its scope quite generally, as stated in (99). In Section 2.3.3 we will explain this, along with the NPI generalization (92).

(99) *Scope generalization*
     A generalized quantifier must precede-and-command its scope.

2.3.2.3 Testing the hypothesis

To test (99), consider the readings available for sentences containing both the quantifiers *omnis* ‘all’ and *aliquis* ‘some.’ In English, “inverse scope”—scope contrary to precedence—is permitted, but not obligatory, as illustrated in (100), with two possible readings given in (101).

(100) Every dog likes a treat

(101) (a) For all dogs *x*, there is a treat *y*, such that *x* likes *y*
     (b) There is a treat *y*, such that for all dogs *x*, *x* likes *y*

In the first reading, the universal quantifier *every* includes the existential quantifier *a* in its scope, which we can notate as ∀ > ∃. There is a potentially different treat that each dog likes, which could be clarified as in (102)a. The second, inverse scope reading, is also available, however, which says that there’s some treat that every dog likes, the same treat for each dog, which we can notate as ∃ > ∀. The identity of such a treat could be specified as in (102)b.

(102) (a) Charlie likes peanut butter cookies, Annie likes beef jerky, ...
     (b) Namely, mango chunks.

In (100), the object is indefinite. If the subject is indefinite, as in (103), two readings remain available, which may be clarified as (104)a and b, respectively.

(103) A student read every book in the library. ∃ > ∀, ∀ > ∃
(104) (a) Namely, Jimmy.
(b) Billy read *Percy Jackson*, Mary read *Wonder*, ...

I claim that in Latin, the situation is different: inverse scope readings are simply not available. This follows from the scope generalization (99).

In (105)a, for instance, the quantifier *omnes* precedes-and-commands *aliquo* and also includes it in its scope, as is evident from the following question (105)b. Pliny is saying that every man has some fault, as in translation (c), not necessarily the same fault for each man, contrary to what translation (d) would suggest.


\[
\text{Non} \quad \text{omnes} \quad \text{homeness} \quad \text{aliquo} \quad \text{error}
\]
\[
\text{not} \quad \text{all.MPL.NOM} \quad \text{person.MPL.NOM} \quad \text{some.MSG.ABL} \quad \text{mistake.MSG.ABL}
\]
\[
\text{ducuntur}
\]
\[
\text{lead.3PL.PRES.IND.PASS}
\]

‘Aren’t all people led by some mistake?’

(b) Non hic in illo sibi, in hoc alius indulget? (Plin. *Ep.* 9.12.1)

\[
\text{Non} \quad \text{hic} \quad \text{in illo} \quad \text{sibi}, \quad \text{in hoc}
\]
\[
\text{not} \quad \text{PROX.MSG.NOM} \quad \text{in DIST.MSG.ABL} \quad \text{REFL.DAT} \quad \text{in PROX.MSG.ABL}
\]
\[
\text{alius} \quad \text{indulget?}
\]
\[
\text{other.MSG.NOM} \quad \text{indulge.3SG.PRES.IND.ACT}
\]

‘Doesn’t this man indulge in that mistake, and another in this mistake?’

(c) ✓ ‘Isn’t it the case that for every person, there is some mistake that they are led by?’

(d) ✗ ‘Isn’t there some mistake that all people are led by?’

This follows from the syntactic structure of (105), given in (106). Since NP precedes-and-commands the generalized quantifier *aliquo errore*, NP includes it in its scope, yielding reading (c) but not (d), which would require a structure such as (107).

(106) [CP non [NP omnes homines] [\(\_P\) aliquo errore ducuntur]]

(107) [CP non [NP aliquo errore] [\(\_P\) omnes homines ducuntur]]

Conversely, consider (108), in which *aliquid* precedes *omni*, where Quintilian is discussing the introductions (*prohoemii*) of speeches in the craft of oratory.
(108) quia est *aliiquid* in *omni* materia naturaliter primum (Quint. 3.8.6)

Because there is something in every occasion that is naturally first.

Quintilian proceeds to make clear that what is common all good introductions is the winning of the good-will (*benevolentiae; favor*) of the audience, both before the senate, the assembly, and in the law courts. We may assume then, that *aliiquid* includes *omni* in its scope.

Determining the readings available for sentences with multiple quantifiers is challenging enough for native speakers of their own languages (Szabolcsi 2010, 87ff.). The difficulty is compounded when there aren’t even any native speakers to consult. The path that I have maintained is to consider carefully the context of each sentence and the rhetorical objective of the author.

To test the hypothesis (99), I searched the **Perseus** corpus for every sentence in which *omnis* and *aliquis* are separated by up to three words and then examined the scopes of the quantifiers for the cases where one preceded-and-commanded the other. The results are shown in Table (109), and complete data is given in Appendix D.

(109)

<table>
<thead>
<tr>
<th>Precedence</th>
<th># Sentences</th>
<th># Clause mates</th>
<th># ∀ &gt; ∃</th>
<th># ∃ &gt; ∀</th>
<th># Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>omnis</em> ... <em>aliquis</em></td>
<td>96</td>
<td>62</td>
<td>58 (94%)</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><em>aliquis</em> ... <em>omnis</em></td>
<td>77</td>
<td>31</td>
<td>1</td>
<td>29 (94%)</td>
<td>1</td>
</tr>
</tbody>
</table>

The second column shows the total number of sentences in the data; the third shows the number of sentences where one of *omnis* or *aliquis* precedes-and-commands the other; the fourth shows cases where *omnis* has scope over *aliquis*; the fifth the converse; and the final column shows the number of cases where it is very difficult to judge.

The data in the fourth and fifth columns suggest that there is an overwhelming preference for scope to respect linear order.

2.3.2.4 Tough cases

2.3.2.4.1 Genuine counterexamples: Elliptical sentences

It appears that the situation is rather complex, due to interaction with ellipsis. Consider the clear counterexample (110), discussed by Devine and Stephens (2013, 248ff.).
AURES. [...] animalium, aliis maiores, aliis minores; cervis tantum scissae ac velut divisae; sorici pilosae; sed aliquae omnibus animal dumtaxat generantibus (Plin. Nat. 11.136).

‘EARS. Concerning animals, some have bigger ones, others have smaller ones. Only deer have ears that are cut and almost separated; shrews have ears with holes; but all animals, provided that they are viviparous, have some ears.’

The passage as a whole, from which this sentence was taken, can be understood as an encyclopedia entry with the heading EARS, as I indicate in my editing of (110). Nonetheless, we find that aliquae precedes omnibus. This is a clear case of inverse scope, noted by Devine and Stephens: Pliny is saying that all animals have some ears, not that there are some ears that are common to all animals. Devine and Stephens claim that notions of topic and focus play a role, where omnibus has focus.37 Setting aside the tricky notion of topic, let us say that a constituent with focus signals a contrast with an alternative in the discourse context (Rooth 1992). It is clear that focus interacts with scope in English, at any rate, given the existence of pairs such as (111) and (112) (Krifka 2017).

(111)  (a) All dogs go to heaven
       (b) “For every $x$, $x$ a dog, $x$ goes to heaven.”

(112)  (a) All DOGS go to heaven.
       (b) “For all $x$, if $x$ goes to heaven, $x$ is a dog.”

To me, the alternatives to the set of dogs evoked by focus in (112) are other living creatures, the set of cats, horses, and other animals.

If there were focus on omnibus in (110), as Devine and Stephens claim, however, one would expect the alternatives to be the denotations of other quantifiers, quibusdam ‘certain,’ nullis ‘no,’ etc. There is no indication that that is the intended reading. In fact, what follows is quite a long series of qualifications to the claim that all animals have ears: only those which are viviparous (animal ... generantibus), not seals, not dolphins, etc.

It may be the case that there is interference from topic and focus, then, but the situation is not at all clear. Given that there is no data for stress or accent, there is very little evidence for any such analysis. It is important to keep in mind, however, that any sufficiently interesting data will have complex and often unknown interfering factors. These do not, of course, falsify the theory, but suggest that one’s background assumptions are unsatisfactory.

It is relevant in this regard that another alleged counterexample to (99) discussed by Devine and Stephens is highly elliptical (Devine and Stephens 2013, 248).

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37 These issues have been little investigated in Latin syntax, but considerably more so in other languages. For the interaction of focus and scope in Hungarian, for instance, cf. Kiss (2002, 113ff.).
(113) Tum Piso: “Quoniam igitur aliquid omnes, quid Lucius noster?” (Cic. Fin. 5.5)

\[
\begin{align*}
\text{quoniam} & \quad \text{igitur} & \quad \text{aliquid} & \quad \text{omnes,} & \quad \text{quid} \\
\text{since} & \quad \text{therefore} & \quad \text{something.NSG.ACC} & \quad \text{all.MPL.NOM} & \quad \text{what.NSG.ACC}
\end{align*}
\]

\[
\begin{align*}
\text{Lucius} & \quad \text{noster?} \\
\text{Lucius.MSG.NOM} & \quad \text{1PLPOSS.MSG.NOM}
\end{align*}
\]

In particular, there is no verb in the sentence. The language appears colloquial, and the context of the sentence is a dialogue where various elite Romans are discussing their Greek philosophical and rhetorical heroes. Raphael Woolf translates (113) as (114).

(114) ‘Well’, said Piso, ‘since we each have our own special place, what about our friend Lucius?’ (Annas 2004).

Let’s assume that (114) is roughly correct. As an indication that it is, consider that the two clauses of (113) are likely parallel. Then we know that aliquid is the accusative object and that omnes is the nominative subject (without the parallelism, their respective cases would be ambiguous). This configuration can otherwise only exist if there is a transitive verb, such as habent ‘have’; here, it must have undergone ellipsis.

Likewise, there is no verb in (110). It appears, then, that ellipsis somehow licenses the violation of the scope generalization.

2.3.2.4.2 False counterexamples: Non-elliptical sentences

Leaving the interaction of scope and ellipsis as a topic for future research, let us now turn to the analysis of non-elliptical sentences that have been interpreted at some point as counterexamples to (99).\textsuperscript{38} We will see that, far from being counterexamples, they give weight to the robustness of the generalization.

In (115), from Cicero’s early De inventione, we see aliqua preceding omnem, which Devine and Stephens understand to mean that “different groups of arguments apply to different cases, not that there is a group of arguments that applies to all cases” (Devine and Stephens 2013, 249).

\textsuperscript{38} For the interaction of scope and ellipsis, cf. Merchant (2001, 148ff.).
(115) Nunc exponemus locos, quorum pars aliqua in omnem coniecturalem incidit controversiam (Cic. Inv. 2.16.1).

Nunc  ex-ponemus locos, quorum
now  out-put.1PL.PRES.SBJV.ACT place.MPL.ACC which.MPL.GEN
pars  aliqua in omnem coniecturalem
part.FSG.NOM some.FSG.NOM in every.FSG.ACC conjectural.FSG.ACC
in-cidit controversiam
on-fall.3SG.PRES.IND.ACT dispute.FSG.ACC

‘We will now set out the themes, some of which are relevant to every dispute based on conjecture.’

This is a misunderstanding. Cicero is not discussing arguments (argumenta), but themes (loci), upon which arguments are constructed (OLD, s.v. ‘locus’). He makes it clear at the end of the section that all arguments are based on the themes of ex causa ‘from cause’, ex persona ‘from character,’ and ex facto ipso ‘from the thing done itself.’

Nunc exponemus locos, quorum pars aliqua in omnem coniecturalem incidit controversiam. (Hoc autem et in horum locorum expositione et in ceterorum oportebit attendere non omnes in omnem causam convenire. Nam ut omne nomen ex aliquibus, non ex omnibus litteris, scribitur, sic omnem in causam non omnis argumentorum copia, sed eorum necessario pars aliqua conveniet.) Omnis igitur ex causa, ex persona, ex facto ipso coniectura capienda est.

Causa tribuitur in impulsionem et in ratiocinationem... (Cic. Inv. 2.16.1–17.1)

‘We will now set out the themes, some of which are relevant to every dispute based on conjecture. (Here, however, and in the exposition of these themes and of the rest it will be fitting to notice that not all of them pertain to every case. For just as every name is written from some—not all—letters, in the same way, to every case it’s not the whole supply of arguments, but necessarily some part of them that will pertain.) Every inference, then, must be taken from cause, from character, and from the thing done itself.’

‘Cause is distributed into impulse and premeditation...’

The confusion results from the aside that Cicero makes following controversiam, indicated here by parentheses. What he means is that, although these three loci of ex causa, ex persona, and ex facto are definitely relevant to every case, the entire ‘supply of arguments’ (argumentorum copia) should not be used in every case. For instance, the discussion of causa ‘cause’ in 2.17–24 makes it clear that arguments based on impulsio ‘impulse’ and arguments based on ratiocinatio ‘premeditation’ should not be used in the same cases, although every case should treat causa in some way or other.

Lastly, let’s consider (116), where aliqua precedes omnis, also from the De inventione.
Here, there is a non ... sed construction, where Cicero is denying a particular reason that the reader may suspect he has for organizing his work in a certain way. The suspected reason is represented by the clause quo...versetur. The situation described by the quo clause is nonveridical due to negation element non ‘not,’ and so it doesn’t matter that the scope relations are “incorrect.” Cicero would agree with Devine and Stephens (2013, 248) that every case turns on its own issue, but Cicero is not making that claim here. He is only making a claim about a reason that he has.

To clarify this, consider the English example (117)c, which could be uttered in either context (a) or (b).

(a) Context: The speaker is the boss of the addressee, who are very good friends, and have never had any personal issues with each other.

(b) Context: The speaker is the boss of the addressee, and secretly hates the addressee, believing them to be lazy.

(c) I’m firing you not because I dislike you, but because you repeatedly miss your quota.

It is clear that the speaker is not committed to the truth or falsehood of the first because clause, only to its not being the reason for the firing.

2.3.2.5 Evaluation

Although the situation is more complex than in our discussion of NPI licensing, it is clear that (99) is a robust generalization about the interpretation of sentences with multiple quantifiers. If it did not hold, there would be no explanation for the results that we have seen, in which inverse scope is available only in sentences involving ellipsis of the predicate.

2.3.3 Explaining the generalizations

We have presented two restrictions on the relation of syntax and semantics, both involving precede-and-command. On first glance these generalizations seem to suggest that precedence is an important factor in Latin grammar, at odds with the thesis of structure-dependence (32). Here we will argue that the opposite is the case: precede-and-command is a side-effect of the
structure-dependent operation of c-command, which elegantly relates syntactic constituents to semantic denotations.

2.3.3.1 The principle of scope transparency

I claim that the NPI generalization and the scope generalization are side-effects of (118), an important condition on the relation of syntax and semantics.

(118) Scope transparency
The scope of a generalized quantifier is the denotation of its c-command domain.

Let us consider evidence that (118) is true.

2.3.3.2 Precedence is a side-effect of asymmetric c-command

Notice that, unlike the generalizations discussed so far, (118) makes no reference to precedence, in line with structure-dependence (32). There is good reason to believe that precedence is not a syntactic relation, but a side-effect of asymmetric c-command.

In every case where it is clear, a head precedes its complement. Since a head asymmetrically c-commands whatever is dominated by its complement, it follows that it precedes that material as well. Then precedence need not be represented in syntax, only structural relations involving head, complement, and specifier.

For instance, consider example (120)(a), below. The ablative case of eadem and navi is licensed by the prepositional head in. This fact and others can be formally captured if eadem navi is an NP complement of in, as in (119).

(119) [PP [P' in [NP eadem navi]]]

Recall that c-command is the generalized “aunt” relation, so that X c-commands Y when X is sister to Y, or aunt to Y, or great-aunt to Y, etc. Then in c-commands both eadem and navi, but not vice versa. In other words, in asymmetrically c-commands eadem and navi. The precedence relation of in to navi, then, is not a syntactic one, but a consequence of the head in being pronounced before its complement.

Ostafin (1986) argued that in prepositional phrases, P precedes N quite generally. The descriptive facts are illustrated in (120): out of all six logically possible orders of P, M, and N, where M is some category (here, eadem) modifying N, only three are well-attested.

(120) (a) ✓  in eadem navi
      in eadem
      in same.FSG.ABL ship.FSG.ABL
      ‘in the same ship’

(b) ✓  in navi eadem

(c) ✓  eadem in navi
(d) navi in eadem
(e) # eadem navi in
(f) # navi eadem in

Potentially problematic is order (d), the so-called *rebus in arduis* construction (cf. Devine and Stephens 2006, 572). In prose authors it appears to be attested only a few times in Livy and in an example from the *Rhetorica ad Herennium* (virtute pro vestra ‘on behalf of your virtue;’ Rhet. Her. 4.44). In the latter text, the author terms it an instance of *perversio*, literally meaning “inversion.” But forms in *pervers*- often have the sense of “error,” “wrong,” or “distorted” (*OLD*, s.v. ‘pervers’ 2; ‘perversus’ 2, 3; ‘perverto’). This is an indication that the construction is at least felt to be strange.

The fact that (d) is marginal but that (e) and (f) are unattested, moreover, suggests that (d) is really a second-position effect, to be treated in Chapter 3. That is, in cases of order (d), the preposition has a phonological feature ensuring that it is final in a prosodic word. In Ciceronian prose, prepositions never have this feature. The fact that it is sometimes present in Livy’s writing may dialectical: Asinius Pollio famously claimed that Livy had a certain “Paduaness” (*Patavinitatem*; Quint. 1.5.56; 8.1.3).

Prepositions are not unique in preceding their complements. This is also empirically detectable from the positions in which complementizers are attested to appear, such as *ut* ‘that.’ This is discussed somewhat in Section 2.3.4.2.

2.3.3.3 C-command represents scope

Next, in both the NPI generalization and the scope generalization, precedence is necessary, but not sufficient. The structural relation of command is also required in both cases. In fact, there is no evidence that precedence alone is ever a relation with semantic consequences, casting doubt on whether precedence is a syntactic relation at all.

Consider (121), where the quantifier *nullam* with restrictor *rem* licenses the NPI *um quam*, with interpretation as in (122), where *y* is some object of comparison that we can leave unspecified.

(121) *nullam rem um quam* difficiliorem cogitavi (Cic. Att. 9.8.2).

(122) There is no thing *x*, such that I ever considered *x* more difficult than *y*.

The fact that *nullam rem* forms a generalized quantifier is evidence that it is a noun phrase constituent, an independently motivated assumption, given the two words’ gender, number, and case connectivity.
The interpretation in (122) indicates that its scope corresponds to *umquam difficiliorem cogitavi*. As initial evidence that this latter phrase is a constituent, notice that *umquam* modifies *cogitavi*. At the moment we leave this constituent unlabeled. The structure we are left with is shown in (123).

(123) \[ \text{[CP [NP nullam rem] [?P umquam difficiliorem cogitavi]]} \]

For convenience, let's represent (123) in tree notation as in (124), where triangles simply indicate that there is structure that we are not representing. Here, NP c-commands ?P and its children, including *umquam*.

(124)

```
                   CP
                  /   \  \\
                 NP   ?P
     nullam rem  umquam difficiliorem cogitavi
```

Crucially, the scope of NP corresponds to its c-command domain. The fact that *nullam* precedes-and-commands everything except itself appears syntactically insignificant: there is no sense in which *rem umquam difficiliorem cogitavi* forms a constituent to the exclusion of *nullam*. It also appears semantically insignificant, not denoting anything. Consider that *nullam* not only precedes-and-commands ?P, but also *rem*. But in other cases, a quantifier will follow the noun that restricts it, as in (125).

(125) *vis nulla umquam adferebatur* (Cic. *Nat. D.* 2.159)

```
   vis nulla umquam ad-ferebatur
   force.FSG.NOM no.FSG.NOM ever toward-carry.3SG.IMPERF.IND.PASS
```

‘No force was ever brought forth.’

When it comes to the order of a generalized quantifier and its scope, however, the former will precede the latter quite generally.

In general, then, precede-and-command is only a distant approximation to scope, but c-command represents it exactly. We conclude that the NPI and quantifier generalizations are robust but weak, being corollaries of the far more general principle of scope transparency (118).

2.3.4 The verb and tense phrases

One consequence of the above discussion is that every Latin sentence with a verb contains a verb phrase, namely, the constituent containing the verb and its arguments. The syntactic relation of a verb to its arguments may be specified as in (126).

(126) *VP generalization*

A verb V precedes one of its arguments XP, if, and only if, VP dominates XP.
We will consider two arguments for these claims.
First, recall from the NPI generalization (92) that an NPI must be preceded-and-commanded by its licensor. As a special case, when an argument of the verb is an NPI and the verb is its licensor, the verb must precede its argument. It follows from scope transparency that this is a c-command relation. Hence *nego* and its arguments form a constituent.

Let us next consider a quite different line of reasoning, based on the cross-Romance distribution of verbs, adverbs, and verbal inflection.

### 2.3.4.1 Evidence from Romance

Consider that manner adverbs typically precede the verb, even when the verb precedes its arguments, so that we are left with VSO order (or rarely VOS), as in (127).

(127) *facile* indicabat ipsa natura vim suam (Cic. *Lael*. 24)

<table>
<thead>
<tr>
<th>facile</th>
<th>indicabat</th>
<th>ipsa</th>
<th>natura</th>
<th>vim</th>
</tr>
</thead>
<tbody>
<tr>
<td>easily</td>
<td>reveal.3SG.IMPERF.IND.ACT</td>
<td>self.FSG.NOM</td>
<td>nature.FSG.NOM</td>
<td>force.FSG.ACC</td>
</tr>
</tbody>
</table>

suam

REFL.FSG.ACC

‘Nature itself easily revealed its power.’

In this example, *facile* is a manner adverb, modifying the action or event described by the verb phrase, so that (127) roughly means “nature’s revealing its power was easy.” In the simplest compositional semantics, then, the adverb is as close to the verb as possible. Then *facile* marks the left-edge of VP, and there is no scrambling.

This analysis is corroborated by the fact that, cross-linguistically, adverbs occur in a fairly rigid hierarchy, with manner adverbs being the lowest (for an overview, see Rizzi and Cinque 2016). In Romance, for instance, languages differ by position of the verb with respect to various classes of adverbs, which variation is usually analyzed as movement of the verb to different positions, according to the language. In French, for instance, the verb is very high, as shown by the fact that it must occur before epistemic adverbs like “probably.” The Spanish verb must follow these, suggesting that it is in a lower position. This is shown below in (128), with data from Ian Roberts (2019, 349ff.).

(128) (a) Antoine confond *probablement* (*confond*) le poème [French]
(b) Sergio (*confunde*) *probablemente* confunde este poema [Spanish]

‘Anthony/Sergio is probably confusing the poem’

Though Spanish is in the class of Romance languages in which the verb is lowest, the verb still must precede manner adverbs, as shown in (129), suggesting that it moves to a very low position outside of the verb phrase.
Sergio contesta bien (*contesta) a las preguntas [Spanish]  
‘Sergio answers the questions well’

In Latin however, manner adverbs occur before the verb in the neutral case, as in (127).

Moreover, as argued by Norma Schifano (2015; cf. Roberts 2019), the position of the verb in Romance may be predicted by morphological exponence. Roughly, the more the verb is inflected, the lower the position to which it moves. The French verb, for instance, has morphological exponence of mood, but not of tense or aspect, and moves to a high very position, as we have just seen. The Spanish verb, on the other hand, expresses mood, tense, and aspect, and moves to a very low position. The other Romance varieties are somewhere between these two.

In addition to mood, tense, and aspect, the Latin verb additionally inflects for voice, with contrasting synthetic (i.e., non-periphrastic) forms for active and passive. Extending Schifano’s theory, then, would predict that the Latin verb is slightly lower than the Spanish one.  

Hence, based on the semantics of manner adverbs, the cross-Romance distribution of adverbs and verbs, and the relation between verbal inflection and verb movement, we conclude that facile in (127) marks the left-hand bound of the verb phrase, where neither argument has undergone scrambling. This indicates that (126) holds generally.

2.3.4.2 The tense phrase: Evidence from epigraphic punctuation

There is epigraphic evidence from syntactic punctuation that the verb and its preverbal arguments form a unit dominating VP but dominated by CP. We will call this unit the tense phrase (TP).

Consider the following extract from the Laudatio Murdiae, where ut introduces what appear to be coordinated finite clauses in the subjunctive mood, each set off by apices (').

---

39 Consider additionally the historical development of the Romanian clause from late Latin. On this issue we find that “the passage from late Latin ... to Romanian consisted in a blend of two distinct processes: a relaxed V2 grammar, specific mostly to main clauses, but also a gradual process of V-raising to the left along the clausal spine (Nicolae 2019, 106).” This is consistent with the classical Latin verb not moving outside of the extended verbal projection.

40 For reasons of scope, we pass over the issue of the internal structure of the verb phrase. For the morphosyntax of the Latin verb, see Embick (2000), Acedo-Matellán (2016), Zyman and Kalivoda (2020), and references cited there.

41 Line breaks and tabs indicate line breaks and spaces, respectively, in the inscription. Ellipses have been added by me and represent any material besides line breaks.
constitit [...] ut [...] matrimonia [...] retineret, nupta meritis gratior fieret, fide carior haberetur, iudicio ornatior relinqueretur

constitit ut matrimonia retineret, nupta meritis gratior fieret, fide carior haberetur, iudicio ornatior relinqueretur

Following that principle that punctuation is significant of syntactic boundaries, each coordinated “clause” of (130) must be some constituent including the verb and its arguments but not the subordinating conjunction ut, which we understand in our theory to be a complementizer C, the head of CP. Then the constituents in question are in fact smaller than the clause but contained within it. They cannot be VP, because, by the argument presented in Section 2.3.4.1, preverbal arguments have scrambled outside of VP. Let us call these constituents tense phrases (TP), as in (131), where Conj indicates a null conjunction, essentially the same as et ‘and.’

(131) [CP ut [TP [TP1 ... [VP retineret]] Conj [TP2 ... [VP fieret]] Conj [TP3 ... [VP haberetur]] Conj [TP4 ... [VP relinqueretur]]]]

2.4 Conclusion

In this chapter we began by presenting the thesis of structure-dependence (32), reprinted as (132) below, which specifies the relation between the major components of grammar: syntax, semantics, and phonology.

(132) Structure-dependence of grammar
The sentence is a recursive, hierarchical structure with displacement that is deterministically mapped to a semantic interpretation and a morphophonological realization.

In particular, the surface appearance of a sentence as a linear sequence of words is a side-effect of the mapping of syntax to morphophonology, but is only a distorted reflection of the underlying syntactic structure and not directly related to meaning.

We began in Section 2.2 by probing for such structure in the noun phrase. Though admittedly still something of a dark forest for Latin linguistics, we have seen several arguments that the noun phrase has a hierarchical structure.

First, in Section 2.2.1 we considered epigraphic evidence that syntactic ambiguities have their source in alternative constituent structures. Next, in Section 2.2.2 we saw that complex noun phrases are sharply restricted in their permissible orders. Then, in Section 2.2.3 it was shown that the different orders of nominal elements have subtle semantic differences, with contrastivity not predictable by the linear relations of individual words. We confirmed the distinctness of the categories of adjective, demonstrative, and quantifier in Section 2.2.4, based on a host of morphosyntactic diagnostics. Lastly, in Section 2.2.5, we saw, based on the distribution of nominal idioms, that idiomatic adjective–noun orders are derived from an underlying noun–adjective order.

In the following chapter we will see one reason why the noun phrase appears so complex: it is subject to prosodic movement, so that the linear order of words does not reflect the underlying c-command relations.

Next, we considered the structure of the clause. In Section 2.3.1 we showed that negative polarity items are subject to generalization (92)/(133).

\[(133) \text{ NPI generalization} \]
\[\text{An NPI must be preceded-and-commanded by its licensor.}\]

Next, we showed in Section 2.3.2 that quantifiers are subject to a similar generalization, (99)/(134).

\[(134) \text{ Scope generalization} \]
\[\text{A generalized quantifier must precede-and-command its scope.}\]

We accounted for these generalizations in Section 2.3.3 by a more general principle of Latin grammar, (118)/(135).

\[(135) \text{ Scope transparency} \]
\[\text{The scope of a generalized quantifier is the denotation of its c-command domain.}\]

As a consequence of this principle, we saw in Section 2.3.4 that the Latin sentence must contain a verb phrase and a tense phrase, the former consisting of the verb and its postverbal arguments, the latter dominating the VP, consisting of the verb and its preverbal arguments. We corroborated this based on cross-Romance data on the position of adverbs and verbs and from epigraphic punctuation.
The extreme position that the Latin sentence contains no syntactic structure above the level of the word is untenable. The distribution of NPIs, the description of which depends on the notion of “clause,” would be left unexplained. Describing the distribution of quantifiers, which relate a restrictor to a scope, is not possible without postulating a syntactic constituent corresponding to the scope in each case. Additionally, the placement of punctuation in classical epigraphic texts makes sense if one supposes that they mark syntactic boundaries, hence, constituents, and is mysterious otherwise. We have made many such arguments. In short, precedence alone is never a relation with semantic effects; but a hierarchical syntactic structure is a theoretical necessity. In it, the structural relation of c-command is central.

We have presented considerable evidence, then, for the position that the Latin sentence is a discrete, hierarchical structure with displacement—satisfying Chomsky’s “basic property.” In the following chapter we will show ways in which this structure is distorted in the surface word-order, due to very general prosodic displacement.
3. Deriving split noun phrases

3.1 Introduction

Of particular interest in the study of split noun phrases are cases where the left or right fragment of the split appears to be a nonconstituent, such as (136).

(136) in nullius umquam suorum necem duravit (Tac. Ann. 1.6)

\[
\begin{align*}
\text{in } & \text{nullius} & \text{umquam} & \text{suorum} & \text{necem} \\
\text{in } & \text{no.MSG.GEN} & \text{ever} & \text{REFL.POSS.MPL.GEN} & \text{death.FSG.ACC} \\
\text{duravit} \\
\text{hard.3SG.PERF.IND.ACT}
\end{align*}
\]

‘He never became inured toward the death of one of his relatives.’

The left fragment, in nullius, consists of a preposition followed by a quantifier; the temporal adverb umquam separates this from the right fragment, suorum necem. Syntactically, the accusative case of necem is licensed by in, the genitive case of suorum is licensed by nullius selecting a noun phrase with a partitive interpretation, a so-called “partitive genitive,” and the genitive case of nullius itself is licensed by necem selecting a noun phrase with the theta role of theme, an “objective genitive.”

Such examples, where selectional relations are distributed across the split noun phrase, and where neither the left nor the right fragment are constituents, are not uncommon. What makes them interesting is that they appear to involve both syntactic movement and clitic effects, which we will analyze as a form of prosodic movement.

Recall that umquam is an NPI, and as such, the precedence of the negative licensor nullius in (136) is critical. The NPI requires a nonveridical context in order to be interpreted, where “context” is represented syntactically as the scope of a quantifier. Scope transparency (118) requires that scope be represented as the c-command domain of a lexical item, here, of nullius. Because split noun phrases have such interpretive consequences, they must involve a nontrivial syntactic component, and cannot have a purely phonological basis (pace Agyabani and Golston 2016).

The preposition in plays no part in these scope relations. Rather, I claim that its position is due to its forming a prosodic word with nullius at an earlier stage in the derivation. This is shown in (137), which represents the minimal amount of structure to capture both the selectional relations and the licensing of umquam (where the labels CP and TP are not critical to the analysis).

(137) \([\text{CP} \text{nullius} [\text{TP} \text{umquam} [\text{PP} \text{in} [\text{NP} \text{nullius} \text{suorum} \text{necem}]] \text{duravit}]])\]

As we will see, prepositions have the property of being prosodically “weak,” making them unpronounceable as independent words. The adjacency of in and nullius in the above PP is a

---

42 “Selection” is introduced briefly in Section 1.2.
sufficient environment to form the prosodic constituent \textit{in=nullius}. The quantifier \textit{nullius} subsequently undergoes syntactic movement, and its highest copy is pronounced as \textit{in=nullius}.

In this chapter I argue that split noun phrases, such as \textit{in nullius ... suorum necem}, are the result of the derivational nature of grammar, which interleaves the construction of syntactic and prosodic constituents. The notion of constituency discussed in the previous chapter is, paradoxically, central to the analysis of split noun phrases. It is through local constituent structures that certain syntactic relations, involving selection, case licensing, concord, etc., are established; prosodic constituency is also established locally. But other relations, semantic scope in particular, often require the syntactic movement of constituents; prosodic requirements, such as the weakness of prepositions and the second-position property of certain lexical items such as \textit{autem} ‘but,’ further distort the mapping from syntactic structure to linear order.

\subsection*{3.1.1 Chapter overview}

In Section 3.2 I argue that a wider variety of syntactic categories exhibit clitic phenomena than are commonly assumed. Beginning with classic second-position clitics such as \textit{autem} ‘but,’ I show that nearly every functional category can have similar properties, building off the insight of Adams (1995; 1996) that clitics can be detected by examining punctuation in epigraphic and papyrus texts.

To explain these phenomena, I propose in Section 3.2.1 that clitics are lexical items that have the prosodic feature [WEAK], barring them from hosting word-level stress, and that second-position clitics are those which additionally have the prosodic feature [FOLLOW], which ensures that they are final a prosodic word.\footnote{We are then taking a “prosodic inversion” approach to these clitics (e.g., Sadock 1985; Halpern 1995). For a review, see the discussion in Halpern (2001, 109ff.).} The formation of prosodic words is licensed by adjacency at any point in the derivation of a sentence, and is subject to what I call the accumulation principle (138), discussed in Section 3.3.

\begin{quote}
(138) \textit{Accumulation principle} \\
Throughout the derivation of a sentence, prosodic words can only become larger, not smaller.
\end{quote}

In (137), for instance, \textit{in} has the feature [WEAK], compelling it to fuse with the lower copy of \textit{nullius}, with which it is adjacent, to form the complex prosodic word \textit{in=nullius}. The syntactic object \([Q \textit{nullius}]\) is pronounced at the position of its highest copy, which is not adjacent to \textit{in}, but by (138), the entire prosodic word \textit{in=nullius} is pronounced.

In Section 3.4 I briefly consider the question of “why” split noun phrases exist—in other words, their pragmatic and intonational effects. Using Quintilian’s discussion of word-order as a guide to sentence-level prosody, I show that the effect of splitting the noun phrase is either to isolate the left fragment in the left periphery, or to isolate the right fragment in the verb phrase, either of which may be used to bring the listeners’ attention to a particular constituent.

In Section 3.5, we conclude.
3.2 Prosody and displacement

3.2.1 The grammar of clause-second particles

The best-understood split noun phrases are those which involve what we may call *clause-second* (C2) particles.44 These are particles that typically occur as the linearly second word in the clause, among which are *enim* ‘indeed,’ *autem* ‘but,’ and *vero* ‘however’ (Spevak 2010, 16). Momentarily passing over the issue of what a word is, consider the near-minimal pair (139)a-b, for instance, where we find the noun phrase *gratiam ... nostram* in (a) split by *autem*, but not *humanitatem tuam* in (b) by *sed*.

(139)  (a) *gratiam autem nostram* exstinguit hominum suspicio (Cic. *Fam.* 1.1.4)

<table>
<thead>
<tr>
<th>gratiam</th>
<th>autem</th>
<th>nostram</th>
<th>exstinguit</th>
</tr>
</thead>
<tbody>
<tr>
<td>favor.FSG.ACC</td>
<td>but</td>
<td>1PLPOSS.FSG.ACC</td>
<td>destroy.3SG.PERF.IND.ACT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>hominum</th>
<th>suspicio</th>
</tr>
</thead>
<tbody>
<tr>
<td>person.MPL.GEN</td>
<td>suspicion.FSG.NOM</td>
</tr>
</tbody>
</table>

‘But suspicion of the people destroyed our good-will.’

(b) *sed humanitatem tuam* [...] celeritas declarabit (Cic. *Att.* 4.15.2)

<table>
<thead>
<tr>
<th>sed</th>
<th>humanitatem</th>
<th>tuam</th>
<th>celeritas</th>
</tr>
</thead>
<tbody>
<tr>
<td>but</td>
<td>kindness.FSG.ACC</td>
<td>2SGPOSS.FSG.ACC</td>
<td>swiftness.FSG.NOM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>declarabit</th>
</tr>
</thead>
<tbody>
<tr>
<td>reveal.3SG.FUT.IND.ACT</td>
</tr>
</tbody>
</table>

‘But your swiftness will reveal your kindness.’

Despite its elements being noncontiguous, *gratiam ... nostram* otherwise behaves as a syntactic constituent, much as *humanitatem tuam*. It rather seems to be a lexical property of *autem* and other C2 particles, but not of *sed* ‘but,’ to “swap” positions with the following word, regardless of constituency.

The behavior of these particles is not stylistic, but in fact grammatical. David Mark Ostafin argues this upon consideration of the Latin Vulgate, in which Jerome translates certain Koine Greek particles, δέ, for instance, into C2 particles, such as *vero* in (140) (Ostafin 1986, 81ff.).

---

44 This is a species of second-position clitic, to be discussed in Section 3.2.2. The term Wackernagel’s Law clitic is also used. There is a vast literature on these clitics. For a good but somewhat outdated review, cf. Halpern (2001).
Here, the translation of ἡ δὲ ἡγάπη as caritas vero inverts the order of particle and noun. Ostafin argues this to be an indication of the ungrammaticality of the noninverted order in Latin, given Jerome’s belief in the sanctity of scriptural word order (Ostafin 1986, 74–5).

Additional evidence comes from the testimony of Quintilian, who explicitly judges initial position of C2 particles to be a “transposition” error (transmutatio), one of four kinds of “solecism,” or grammatical error.

But it is not sufficiently agreed how many and what kinds (of Solecism) there are. Those who have most fully considered the matter want there to be a fourfold account, not otherwise than for Barbarism, so that Solecism occurs by addition, e.g., ‘nam enim,’ ‘de susum,’ ‘in Alexandriam;’ by subtraction, e.g., ‘ambulo viam,’ ‘Aegypto venio,’ ‘ne hoc fecit;’ by transposition, e.g., ‘quoque ego,’ ‘enim hoc voluit,’ ‘autem non habuit.’ ...

Each of the examples of “transposition,” which I have presented as grammaticality judgements in (141), are bad precisely because they contain second-position particles, quoque, enim, and autem, respectively, which are not in second position.46

---

45 Jerome had a complex understanding of translation. He professed that the “order of words is a mystery” in scripture (Jer. Ep. 57.5; verborum ordo mysterium est) but recognized also that ‘as much as is spoken well among the Greeks, if we translate by the word, does not echo in Latin’ (Jer. Ep. 57.11; Quanta enim apud Graecos bene dicuntur, quae si ad verbum transferamus, in Latino non resonant). We may take this to indicate that Jerome’s deviations from the word-order of the Greek in his translation were for reasons of “not resonating” to himself as a Latin speaker, which we may thereby take as a diagnostic of ungrammaticality.

46 The particle quoque is second-position, but not C2; we return to this later.
(141) (a) *quoque ego

    quoque   ego
too       1SG.NOM

    ‘I too’

(b) *enim hoc voluit

    enim   hoc       voluit
since    PROX.NSG.ACC wish.3S.PERC.IND.ACT

    ‘Since he wanted this.’

(c) *autem non habuit

    autem   non      habuit
but     not      have.3SG.PERC.IND.ACT

    ‘but he didn’t have (it).’

Let us assume, then, that the behavior of C2 particles is grammatical, rather than stylistic. As we
will see, the second-position property is best-characterized as a formal feature of particular
lexical items, with partial generalization to the category of connectives.

The module of grammar in which C2 effects belong is not syntax, but morphophonology. To
see this, consider (142), where autem occurs as the third word in the clause. This occurs often
(but not always—see below) when the clause begins with a prepositional phrase.

(142) de tuo autem negotio saepe ad me scribis (Cic. Att. 1.19.9)

    de       tuo    autem    negotio    saepe    ad    me
about 2SGPOSS.NSG.ABL but   business.NSG.ABL often   to 1SG.ACC

    scribis
write.2SG.PRES.IND.ACT

    ‘But you write to me often about your business.’

What distinguishes prepositions is that they may be prosodically “weak,” in the sense of being
unable to bear word-level stress (Allen 1973, 24–5). The relevant notion of “word” here is the
prosodic word, that is, the minimal metrical unit with a single prominent syllable above the level
of the foot (Kager 2007). Let us follow tradition and call such “weak” lexical items clitics
generally, proclitics when they form a phonological word with the following lexical item, and
enclitics in the opposite case.

The view that prepositions are weak has Quintilian as a witness, who observes himself
pronouncing the expression circum litora as a single word.
cum dico “circum litora,” tamquam unum enuntio dissimulata distinctione, itaque tamquam in una voce, una est acuta (Quint. 1.5.27)

When I say “circum litora,” I hide the separation and pronounce it as one, so that, just as in one word, there’s one acute accent.

Let us interpret Quintilian’s “acute” accent (acuta) phonologically to mean a word-level prominence. We can notate this with the IPA primary stress mark (ˈ), and syllable boundaries with a period. Then the expression circum litora can be minimally analyzed as in (143), with Quintilian’s analysis of his own speech represented in (a) as opposed to many alternatives, such as (b).

(143)  (a) cir.cum.ˈliː.to.ra
       (b) ˈcir.cum.ˈliː.to.ra

Notice that circum is weak despite its metrical heaviness, having two long syllables. This is true also for autem in (139).

When not relevant, let us eschew syllabification and represent prosodic word constituency with parentheses, so that (143)a corresponds to (144), where whitespace is orthographically convenient but not part of the formal description.

(144)  (circum litora)

Independent motivation for the proclitic characterization of prepositions comes from the absence of interpuncts (·) following prepositions in otherwise well-punctuated epigraphic and papyrus texts (Adams 1995). When prepositions are not followed by an interpunct in such texts, this is a reasonable indicator that they are not independent (prosodic) words. We may state this generally as (145).

(145)  *Interpunct test for prosodic wordhood

In documents with regular use of interpuncts, a maximal sequence of letters not separated by punctuation represents an individual prosodic word.

This diagnostic is clearly not applicable to all documents, as for example where there is only irregular use of interpuncts, or where they are used to separate clauses or other syntactic units, but not words, as in the Rustius Barbarus (Guéraud 1942). With this caveat in mind, let us consider (146)a, from the Lex de Gallia Cisalpina (CIL I.5.592 = 11.1146), a well-punctuated bronze tablet (Kantor 2018). The prepositional phrase in ea verba ‘in those words,’ is written as two words, which, according to the above diagnostic, suggests the prosodic constituency (146)b.

---

47 When convenient, let us follow the Leipzig glossing rules in notating complex prosodic words with the equals sign (=) whenever we have evidence for such an analysis, e.g., in=ea.
48 Photographs of the Lex de Gallia Cisalpina have been clipped from Gordon (2016).
This prosodic analysis is consistent with Quintilian’s observation. Notice, however, that there is a mismatch between the prosodic (b) and syntactic (c) constituency. Both levels of representation consist of two units, but these units are different. Prosodically, in and ea form one constituent, and verba another; syntactically, there is no unit consisting solely of in and ea. On the contrary, ea and verba form a constituent that is the complement of in, as is evident from their gender, number, and case connectivity, their denotation as a single set of entities, the fact that prepositions select for a single complement, and their accusative case, licensed by in.

Returning to (142), then, the evidence points towards an analysis of C2 particles in which they immediately follow the first prosodic word. The issue of whether they actually form part of the first prosodic word is difficult to determine, but little hinges on this, so let us take it under hypothesis.

The fact that the surface position of C2 particles, such as autem, is sensitive to prosody is related to their general invisibility to syntax: they never affect agreement, case licensing, selection, or the denotation of the constituents in which they appear on the surface.

Without developing a formal account, their semantics predict a sentence-initial position, given that they are all connectives that function to integrate the sentence into a cohesive discourse, and that they are otherwise non-distinct from connectives that are initial, as shown by the pair (139). The phonological, syntactic, and semantic facts, then, are consistent with C2 particles occupying the highest position in the syntactic representation, as in (147)a, but undergoing displacement of some sort during the linearization of syntactic structure, yielding (b) and the split noun phrase tuo ... negotio.

Not every connective particle is C2, as we have already seen with sed in (139)b. Others, such as nam ‘since’ and itaque ‘so,’ obligatorily occur clause-initially (C1), never internally, unlike sed, nor in second-position (Spevak 2010, 13). That C1 and C2 particles merely differ in their phonological effects but not in their syntax is confirmed by Quintilian’s judgement of the cooccurrence of C1 nam and C2 enim as an error of “addition” (adiectio).

---

49 A third descriptive class, including igitur ‘therefore,’ displays both first and second-position effects. This is presumably a competition between (mental) grammars.
If C1 and C2 particles occupied distinct syntactic positions, it would be predicted that both could cooccur, provided that prosodic conditions are satisfied, which is the case in (148). But they cannot.

We see, therefore, that the high position of C2 particles in the clause is a consequence of the syntax and semantics of connectives in general, but that their second-position effects are phonological. The fact that the category of connectives includes both C1 and C2 particles indicates that the second-position property is individually specified for or absent from (mental) lexical entries. Let us represent this as a formal feature [FOLLOW] which is present on C2 particles, such as enim, but absent from C1 particles, such as nam. To formally specify a lexical item as a clitic, let us posit the feature [WEAK]. Thus, enim is [WEAK, FOLLOW] but in is [WEAK].

As a proof-of-concept, let us assume that the syntactic input is converted to a prosodic representation that is “optimal” in the sense of Optimality Theory (Prince and Smolensky 2004): a form F1 is optimal with respect to other potential forms (“candidates”) if, according to a fixed set of ordered constraints, there is no other form F2 such that the highest-ranked constraint that F2 violates is lower-ranked than the highest-ranked constraint that F1 violates, or is of the same rank, but has fewer violations.

Let us say that the features we have proposed are evaluated according to the constraints (149), (150), and MAX, which assigns a violation for each deviation from the input, say, by moving a word.

(149) RESPECT-[WEAK]
Assign a violation to a prosodic structure for each instance of a prosodic word consisting solely of lexical items that are [WEAK].

(150) RESPECT-[FOLLOW]
Assign a violation to a prosodic structure for each instance of a lexical item marked as [FOLLOW] that is non-final in a prosodic word.

To see that (147)b is generated from (147)a, consider the tableau (151), where six plausible prosodic forms, listed as the left-most cells (a-b), are evaluated in each row for the input [autem [de tuo negotio] ...]. The constraints are ordered left-to-right, in order of decreasing strength. Each violation is marked by an asterisk (*). The left-most violation for each suboptimal candidate is considered “fatal,” and marked with an exclamation mark (!).

The first two candidates, (a) and (b), do not deviate from the linear order of the input, incurring no MAX violations. But (a) assigns autem to its own prosodic word, in violation of (149); (b) respects autem’s being a clitic, but not its second-position property, incurring a violation of (150). Candidate (c) respects the second-position property of autem but forms the prosodic word (de autem) out of two clitics, in violation of (149). Candidate (d) is optimal.

---

50 A more developed account might require features to specify proclisis or enclisis, but we do not pursue this here.
51 We do not show that RESPECT-[WEAK] should be ranked higher than RESPECT-[FOLLOW], but this is irrelevant for the purposes of the present illustration.
features [Weak] and [Follow] are respected. Notice however, that it incurs two Max violations, due to shifting autem two places to the right of where it occurs in the input. However, Max is ranked lower than both the other constraints, so these violations do not disbar (d) from optimality. Finally, candidate (e) shows that Max is necessary in order to prevent “long-distance” prosodic movement: by moving three places instead of two, it incurs one more violation than (d) and is thereby suboptimal.

(151)

<table>
<thead>
<tr>
<th>candidates</th>
<th>Respect-[Weak]</th>
<th>Respect-[Follow]</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. (autem) (de tuo) (negotio)</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. (autem de tuo) (negotio)</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>c. (de autem) (tuo) (negotio)</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. (de tuo autem) (negotio)</td>
<td></td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>e. (de tuo) (negotio autem)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The features [Weak] and [Follow] are presumably emergent in language acquisition. In Theresa Biberauer’s (2018) theory, the loci of language variation are a finite set of discrete parameters that are postulated by the child upon encountering non-transparent form-meaning mappings (cf. Roberts 2019).

Notice that the existence of these features is further evidence that grammars are not reducible to communicative exigency. There is no sense in which second-position effects aid communication. In contrast, they render the mapping between form and meaning less transparent, and require more computational effort for the listener to parse the input.

The architecture of grammar from Chapter 2 is better specified, then, as (152), where syntactic objects are only indirectly the input to phonological output (narrowly construed), instead being mediated by prosodic representations.

3.2.2 Generalized second-position effects

3.2.2.1 2P particles

The above analysis of C2 particles as clausal connectives with the lexically-specified phonological feature [Follow] suggests the possibility that additional syntactic categories may bear the same feature. This appears to be the case. The particles que ‘and,’ ve ‘or,’ quidem ‘indeed,’ and quoque ‘too,’ for instance, are well-known for their second-position effects, and do not solely function as clausal connectives. Let us call this more general class that of 2P particles.

In (153), for instance, the conjunction que coordinates the two noun phrases vos and rem publicam but appears as an intervener in the latter.
(153) meum studium erga vos remque publicam (Cic. *Fam.* 6.1.1)

<table>
<thead>
<tr>
<th>meum</th>
<th>studium</th>
<th>erga</th>
<th>vos</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG.POSS.NSG.NOM</td>
<td>eagerness.NSG.NOM</td>
<td>towards</td>
<td>2PL.ACC</td>
</tr>
</tbody>
</table>

rem=que    publicam
thing.FSG.ACC=and public.FSG.ACC

‘My eagerness for you and the republic.’

This particle, then, syntactically behaves as other Latin coordinators *et, ac,* and *atque,* but with the phonological property of appearing as a suffix on the following prosodic word, rather than as a medial element (cf. Sadock 1985; 1987; Lapointe 1987; Marantz 1989; Embick and Noyer 2001). That is, the syntactic constituency is as in (154)a, with the prosodic constituency in (b).

(154) (a) \[ NP [ NP vos] que [ NP rem publicam]]  
(b) (vos) (remque) (publicam)

The particles *que* and *ve* are apparently never preceded by an interpunct, always passing (145). This is illustrated in (155), from the *Lex de imperio Vespasiani* (*CIL* 6.930).52

(155) (a)  
. IVS·POTESTASQVE·  
[...] ius potestasque [...]  
ius     potestas=que  
law.NSG.NOM   authority.FSG.NOM=and

‘... the right and authority ...’

---

52 Photographs of the *Lex de imperio Vespasiani* have been clipped from Kershaw (2014).

53 The notation [...] simply represents that I am omitting part of the sentence for purposes of presentation. In other respects, I follow the Leiden system for the notation of epigraphic texts.
When the following word is a preposition, however, *que* may attach to either the preposition (156)a or the following word (b), regardless of the latter’s syntactic category.

(156)  (a) *inque* ea urbe (Cic. *Tusc.* 3.27)

\[
\begin{align*}
in &= \textit{que} \\
e &= \textit{a} \\
urbe &= \textit{city.} \\
\end{align*}
\]

‘and in that city’

(b) *in* *eaque* expletione naturae (Cic. *Fin.* 5.40)

\[
\begin{align*}
in &\quad \textit{ea}=\textit{que} \\
expletione &\quad \textit{fulfillment.} \\
naturae &\quad \textit{nature.} \\
\end{align*}
\]

‘and in that fulfillment of nature’

It appears, then, that prepositions have both strong and weak forms. This is corroborated by the fact that one can find minimal pairs of the form P N differing only by the existence or absence of punctuation following P. One such pair is shown in (157), from the *Lex de Gallia Cisalpina*, with no detectable semantic difference.

(157)  (a) *ex-decreto* (Cic. *Lex de Gallia Cisalpina* 5.4)

\[
\begin{align*}
ex &\quad \textit{decreto} \\
\end{align*}
\]

‘... by decree ...’
Likewise, the 2P quoque ‘too’ and quidem ‘even’ appear to have both strong and weak forms. There is a well-preserved papyrus (Brown 1970; P.Oxy.44.3208) containing a letter with regular use of interpuncts, in which quidem is not preceded by an interpunct, shown in (158).

![Image](158)

\[ [...] qui quidem mecum [...] \]

qui \quad quidem \quad me=cum
who.MSG.NOM \quad indeed \quad 1SG.ABL=with

‘... who with me ...’

In the Lyon tablet (CIL 13.1668), on the other hand, one can find instances of quidem preceded by punctuation, and others not.

![Image](159)

\[ [...] miserabili quidem [...] \]

miserabili \quad quidem
pitiable.MSG.DAT \quad indeed

‘... pitiable ...’

---

54 Photographs of this papyrus have been clipped from Oxyrhynchus Online.
55 Photographs of the Lyon tablet have been clipped from Rama (2011).
That the 2P property of these particles is grammatical has as evidence Quintilian’s judgement of (160) as a “transposition” error.

(160) *quoque ego (Quint. 1.5.39)

quoque   ego
too     1SG.NOM

‘I too’

These particles often seem to appear directly after a single word which they compose semantically. In (161), for instance, quoque splits the noun phrase mearam litterarum. That it composes with mearam is evident from the preceding passage, where Cicero has already mentioned that he has sent Atticus a copy of Antony’s letter.

(161) itaque mearam quoque litterarum misi tibi exemplum (Cic. Att. 14.13.6)

itaque  mearam   quoque   litterarum   misi
so  1SG.POSS.FPL.GEN too letter.FPL.GEN send.1SG.PERF.IND.ACT

exemplum
copy.NSG.ACC

‘So I’ve sent you a copy of MY letter, too.’

More interesting are cases where there is no reading where quoque targets a single word. Consider the compound sentence (162), which, in context, immediately follows an example of a syllogism in which both premises are uncontroversial.
(162) **Context:**

Hic et propositio et assumptio perspicua est; quare neutra *quoque* indiget approbatione (Cic. *Inv.* 1.37).

‘Here both the major and minor premise are clear; therefore, neither needs proof either’

**Sentence:**

quare neutra *quoque* indiget approbatione

quare neutra *quoque* indiget approbatione

therefore neither.FSG.NOM too need.3S.PRES.IND.ACT proof.FSG.ABL

‘Therefore, neither needs proof either.’

What *quoque* does here is introduce the presupposition that the proposition of the second clause holds in addition to that of the first clause (the one that precedes the semicolon). Crucially, there is no sense in which *neutra* alone is the target of *quoque*. It seems rather that *quoque* targets the entire part of the clause following *quare*, perhaps TP (cf. Section 2.3.4.2). Let us assume, then, that *quoque* targets syntactic constituents, rather than individual words. This is additional evidence for the thesis of structure dependence (32).

3.2.2.2 Second-position failures

What makes *quoque* and *quidem* interesting from the perspective of split noun phrases, is that they often appear clustered with other clitics, thereby appearing more distant from the syntactic constituent with which they compose. We may call these cases *second-position failures*. In (163), for instance, Cicero is recalling how Antony sought his advice on founding a colony, with the qualification that the advice was about a different site, Capua, than the subject of the present discussion, Casilinum.
Context:
deducisti coloniam Casilinum, quo Caesar ante deduxerat. Consuluiisti me per litteras de Capua tu quidem, sed idem de Casilino respondissem, possesne, ubi colonia esset, eo coloniam novam iure deducere (Cic. Phil. 2.102)

‘You founded a colony, Casilinum, where Caesar had previously founded one. You sought my counsel by letter—about Capua, but I would have made the same response about Casilinum—about whether you could legally found a new colony where there was one already.’

Sentence:
consuluiisti me per litteras de Capua tu quidem, sed idem de Casilinum

consulue.2SG.PERF.IND.ACT me.1SG.ACC through.letter.FPL.ACC about

Capua tu quidem, sed idem de
Capua.FSG.ABL 2SG.NOM indeed but same.NSG.ACC about

Casilino respondissem
Casilinum.NSG.ABL respond.1SG.PLUPERF.SBJV.ACT

‘You sought my counsel by letter—about Capua, but I would have made the same response about Casilinum—...’

This qualification is expressed through *quidem*, which nonetheless does not appear immediately after the PP *de Capua*, but after the following personal pronoun *tu*, which does not form a constituent with the PP nor is it itself composed with *quidem* in the interpretation of the clause.

Likewise, in (164), the character Lucullus introduces the doctrine of his friend (and Cicero’s real-life teacher) Antiochus. The particle *quidem* clearly composes with the adjective *copiosa*, not the demonstrative *illa*, despite directly following the latter. This is evident from the following phrase *sed paulo abstrusior*, which qualifies the speaker’s evaluation.

(164) Sequitur disputatio copiosa illa quidem sed paulo abstrusior (Cic. Luc. 30)

Sequitur disputation copiosa illa
follow.3SG.PRES.IND.DEP discussion.FSG.NOM substantial.FSG.NOM DIST.FSG.NOM

quidem sed paulo abstrusior
indeed but little.NSG.ABL recondite-COMP.FSG.NOM

‘There follows that substantial, but somewhat more recondite, discussion.’

In both of the above examples, *quidem* appears at one remove from the constituent with which it composes, but there is no obvious limit to the number of intervening elements. In (165), for instance, *quidem* targets *misera*, but is separated from it by a copula *est* and a demonstrative *illa*. 
misera est illa quidem consolatio, tali praesertim civi et vиро, sed tamen necessaria
(Cic. Fam. 6.2.2)

misera est illa quidem consolatio,
sad.FSG.NOM be.3SG.PRES.IND DIST.FSG.NOM indeed consolation.FSG.NOM

tali praesertim civi et vиро,
such.MSG.DAT especially citizen.MSG.DAT and man.MSG.DAT

sed tamen necessaria
but still necessary.FSG.NOM

‘That consolation is sad indeed, especially for such a citizen and man, but nonetheless necessary.’

It is clear, then, that *quidem* does not generally immediately follow the constituent with which it semantically composes, but that other elements may intervene. Our hypothesis that 2P particles are unified by bearing the prosodic feature [FOLLOW] predicts that in cases such as (165), the prosodic constituency is as in (166)a.

(166) (misera est illa quidem) (consolatio) ...

It is perhaps surprising that phonological words can be as complex as (misera est illa quidem), especially since forms of *esse* ‘to be,’ and demonstratives are not traditionally considered to be clitics. There is, however, considerable evidence that 2P and clitic phenomena occur far more generally than is currently believed.

3.2.2.3 Functional categories and second-position

J. N. Adams has made an epigraphic argument that personal pronouns have both strong and weak forms: in the *Rustius Barbarus* (Guéraud 1942) and the Vindolanda tablets (in particular, Tab. Vind. 2.345), which are regularly punctuated, interpuncts are often absent between verbs and their personal pronoun complements (Adams 1996).

Consideration of additional texts lends support to this view. For example, in the *Plotius defixio* (Fox 1912), a lead curse tablet, use of interpuncts is regular. But the two occurrences of *do tibi X* ‘I give you X’ have only one interpunct, after *tibi*. One of these instances is presented in (167).
do tibi frontem Ploti. Proserpina Salvia [...] 

do tibi frontem Ploti.
give.1SG.PRES.IND.ACT 2SG.DAT forehead.1SG.ACC Plotius.1SG.GEN

Proserpina Salvia
Proserpina.1SG.VOC Salvia.1SG.VOC

‘I give you the forehead of Plotius. Proserpina Salvia, ...’

In the related Vesonia defixio (Fox 1912, 22ff.), four occurrences of do tibi X have one interpunct, after tibi (as above); one occurrence has one interpunct, after do; and one occurrence has two interpuncts, one after do and one after tibi. Assuming that neither do nor X are weak, these occurrences exhaust the possibilities: i) tibi as a weak enclitic; ii) tibi as a weak proclitic; and iii) tibi as strong.

There is another kind of indirect phonological evidence that the same particle may be either strong or weak, or sometimes proclitic and at other times enclitic: namely, the spelling of stem vowels in certain prefixed verbs alternates with the presence of punctuation between the prefix and the stem.

To see this, consider the class of directional particles, including per ‘through,’ that are not used solely as prepositions. They are productively used as derivational prefixes on adjectives to indicate a high degree, as in per-magnus ‘very great.’ They may also be used as preverbs (Heslin 1987; Acedo-Matellán 2016). In both cases they may be separated from the stem by a clitic, a phenomenon known as tmesis. In (168) a enim ‘indeed’ has “incorporated” into the adjective permagni, and in (b) que occurs between the preverb dis ‘apart’ and the verb stem tulissent ‘carry.’

(168) (a) per enim magni aestimo tibi firmitudinem (Cic. Att. 4.10.1)

per enim magni aestimo tibi
through since great.1SG.ACC value.1SG.PRES.IND.ACT 2SG.DAT

firmitudinem
steadfastness.1SG.ACC

‘For I value your steadfastness quite highly.’
(b) distraxissent disque tulissent satellites tui me (Plaut. Trinumm. 833)

\[
\begin{align*}
\text{dis-traxissent} & \quad \text{dis=que} & \quad \text{tulissent} \\
\text{apart-drag.3PL.PLUPERF.SBJV.ACT} & \quad \text{apart=and} & \quad \text{carry.3PL.PLUPERF.SBJV.ACT} \\
\text{satellites} & \quad \text{tui} & \quad \text{me} \\
\text{follower.MPL.NOM} & \quad 2SGPOSS.MPL.NOM & \quad 1SG.ACC
\end{align*}
\]

‘Your followers would have pulled and dragged me apart.’

In epigraphic and papyrus texts, preverbs are sometimes separated from their verb stems by punctuation. This is the case for the Monumentum Ancyranum (Wingo 1972). In this text, the spelling of the verb perficio, and in particular of its stem vowel as either E or I, is dependent on the presence of punctuation between per- and the stem -facio. We see this in (169).

(169) ET SI VIVVS NON PER FECISSEM PERFICI AB HEREDIBus (Mon. Anc. 4.14; Scheid 2007)

\[
\begin{align*}
\text{et si vivus non perfecissem, perfeci ab heredibus} \\
\text{et si vivus non=per fecissem,} & \quad \text{and if alive.MSG.NOM not=through do.1SG.PLUPERF.SBJV.ACT} \\
\text{per=feci} & \quad \text{ab heredibus} \\
\text{through=do.1SG.PERF.IND.ACT} & \quad \text{by heir.MPL.ABL}
\end{align*}
\]

‘And if I had not completed them while alive, I completed them by my heirs’

If these orthographic symbols correspond to [e] and [i], respectively, as is standardly assumed (Allen 1978), then we are seeing allomorphs differing by vowel height. Based on independent evidence, Thomas Heslin has argued for such a rule in Latin, whereby a stem vowel becomes [+high, +front] when a verb is prefixed or compounded (Heslin 1987, 153). For example, the stem vowel /a/ of ago ‘I drive’ is realized as [i] when a prefix is present, as in abigo ‘I drive away.’ If such a rule exists, then it is evidently not applicable to perfecissem in (169), for we do not instead find perficissem. This would follow if perfecissem is not an input to the phonological module in which raising applies, say, if the input consists of prosodic words. In the present case, there is no interpunct preceding PER, so per appears to function as an enclitic, rather than a proclitic.56

56 As pointed out by Robert Groves (personal communication), enclisis may be a reflex of an underlying syntactic difference, as revealed by the two readings (a) and (b).

(a) If I had not COMPLETELY done them while alive.
(b) If I had not completed them while alive.

Reading (a) is constituent negation of the preverb per, whereas (b) is clausal negation.
Punctuated preverbs are evident in other texts with regular punctuation. Adams mentions the following example (170) from a papyrus letter (Adams 2016, 205; Brown 1970; P.Oxy.44.3208).

(170) ·DE·MOSTRABIT

[...] demonstrabit [...] 

de monstrabit from show.3SG.FUT.IND.ACT 

‘he will show’

In addition to pronouns and directional particles such as *per* ‘through’ and *de* ‘from,’ there are instances of many, if not all, *qu*- words passing (145), suggesting that these items have both strong and weak forms. This is illustrated in (171), again using the *Lex Gallia* as an example, for the nonconstituents *qua tum* and *is qui*.

(171) (a) QVATVM

[...] *qua* tum [...] 

qua tum which.FSG.ABL then 

‘... which, at that time ...

(b) QUAM·IS QVEI·ROMAE

[...] quam is *qui* Romae [...] 

quam is qui Rome.3SG.ACC DET.MSG.NOM who.MSG.NOM Rome.FSG.LOC 

‘... which he who is at Rome ...’

---

57 Photograph clipped from *Oxyrhynchus Online*. 
In (171)a, the relative pronoun *qua* and the deictic temporal adverb *tum* are written as a single word, suggesting proclisis of *qua*; in (b), we have the determinative *is* and the relative pronoun *qui*, suggesting enclisis of the latter.

Likewise, it appears that at least some conjugations of *esse* ‘be’ have both strong and weak forms, sometimes behaving proclitically and sometimes enclitically. Thus, in the *lex de imperio Vespasiani* we see *fuit* in (172)a written as a single word, but *sint* in (b) passing the interpunct test for prosodic wordhood (it is not preceded by an interpunct due to being initial in its line).

(172)  

(a)  
·FVIT·

[...] *fuit* [...]  

*fuit*  

*be.3SG.PERF.IND*  

‘has been’  

(b)  

SINTACSI·

[...] *sint* ac *si* [...]  

*sint*  

*be.3PL.PRES.SBJV*  

and  

*si*  

*be.3SG.PRES.INF*  

‘..., even if ...’

There is well-known orthographic evidence from the manuscript tradition that forms of *esse* may participate in prodelision, their initial vowel undergoing aphaeresis. In (173), for instance, the form *nullast* is the product of *nulla* ‘no’ + *est* ‘be,’ with the initial *e*- deleted.

(173)  

*nullast* a me umquam sententia dicta in fratrem tuum (Cic. *Fam*. 5.2.9)  

nulla=st  

*no.FSG.NOM=be.3SG.PRES.IND*  

by  

*1SG.ABL*  

ever  

*opinion.FSG.NOM*  

dicta  

*say.FSG.NOM.PTCP.PASS*  

against  

*brother.MSG.ACC*  

2SGPOSS.MSG.ACC  

‘No opinion has ever been stated by me against your brother.’
In other cases, such as (174)a-b, prodelision is not evident, though this may be a consequence of orthographic convention, rather than phonology.\textsuperscript{58} In such cases it is possible to find near-minimal pairs by the placement of 2P particles, with no detectable difference in meaning, suggesting free variation. Thus, we see that enim follows est in (174)(a) but precedes it in (b), in either case yielding a split noun phrase.

(174)  
(a) Nulla est enim altercatio clamoribus umquam habita maioribus (Cic. Brut. 44.164).  
(b) Nulla enim est natio quam pertimescamus (Cic. Catil. 2.11)

In light of phenomena such as prodelision, it is plausible that est is a weak enclitic in (a) but strong in (b). Applying this line of reasoning broadly, at least the conjugations sum (175)a, es (b), erat (c), sunt (d), essem (e), have weak forms.

(175)  
(a) Petiturus sum enim ut rursus […] (Plin. Ep. 1.8.2).  
(b) tu es enim is qui me tuis sententiis saepissime ornasti (Cic. Fam. 15.4.11)  
(c) opus erat enim auctoritate (Cic. Dom. 117)  
(d) omnia sunt enim illa dona naturae (Cic. de Orat. 1.114)  
(e) non essem quidem tam diu in desiderio rerum mihi carissimarum (Cic. Fam. 2.12.3)

The above examples provide evidence not only for the existence of weak forms of the copula, but for the general possibility of individual phonological words to contain clitic clusters. This too has epigraphic evidence. In (176) we see clear cases of this from the lex de imperio Vespasiani, where a preposition together with both the preceding and the following word are written as a single word, in neither case representing a syntactic constituent.

(176)  
(a) CVMEXREPVBLICA

[...] cum ex re publica [...]  

cum ex re publica  
when from thing.FSG.ABL public.FSG.ABL  

‘... when, from the republic ...’

\textsuperscript{58} For the sake of readability, we do not gloss (174) and (175). What is important is the position of the copula esse.
In some cases, it appears that elements other than classical 2P particles display second-position effects. Below we show a complex example.

(177) **Context:**
ergo illam Ἀκαδημικήν, in qua homines nobiles **illi quidem** sed nullo modo philologi
nimis acute loquuntur, ad Varronem transferamus. *(Cic. *Att*. 13.12.2)*

‘Therefore, let us transfer that “Academic” work, in which those famous, but in no way erudite, people speak too sharply, to Varro.

**Sentence:**
homines nobiles **illi quidem** sed nullo modo philologi
nimis acute loquuntur

It is evident that *quidem* is semantically composing with the adjective *nobiles*, given the subsequent qualification introduced by *sed nullo philologi*. But following our above analysis, the noun phrase *homines nobiles illi quidem* has the prosodic constituency given in (178).

(178) *(homines) (nobiles illi quidem)*

Even disregarding the position of *quidem*, however, it is unlikely that this transparently represents the syntactic structure of the noun phrase. First, *nobiles* and *nullo modo philologi* are coordinated by *sed* ‘but,’ and the null hypothesis is that coordination structures are constituents. But in the surface order, the coordination has *illi* as an intervener. Second, as we have seen in Section 2.2.2, the order N A Dem is very rare, optimistically accounting for only 1% of noun phrases composed of a noun, adjective, and demonstrative.

Given these facts, then, the noun phrase appears to minimally have the syntactic structure (179).

(179) *[NP homines illi [AP [AP quidem nobiles] sed [AP nullo modo philologi]]]
To generate the prosodic representation (178), the demonstrative *illi* appears to have cliticized onto *quidem*, which together have undergone phonological displacement to make up the tail-end of the phonological word containing *nobiles*, as in (180).

(180)  (*illi* *quidem* *nobiles* = *illi* *quidem*)

There is additional evidence for prosodic movement within the noun phrase. Consider “conjunct hyperbaton” phenomena (Devine and Stephens 2006), where a coordination structure appears not to form a surface constituent. Such phenomena may occur within the noun phrase. In (181), for instance, the noun *vitiis* is coordinated with *sceleribus*, but they have *omnibus* as intervener.

(181)  *tum* *vitiis omnibus et sceleribus* *legis* Cn. Pompei praesidium opponendum putetis.

(Cic. Agr. 2.25)

\[
\begin{align*}
\text{tum} & \quad \text{fault.NPL.ABL} \\
\text{vitiis} & \quad \text{every.NPL.ABL} \\
\text{omnibus} & \quad \text{and} \\
\text{et} & \quad \text{crime.NPL.ABL} \\
\text{sceleribus} & \quad \text{law.FSG.GEN} \\
\text{legis} & \quad \text{Gnaei} \\
\text{Pompei} & \quad \text{Pompey.MSG.GEN} \\
\text{praesidium} & \quad \text{defense.NSG.ACC} \\
\text{opponendum} & \quad \text{oppose.NSG.ACC.GRDV} \\
\text{putetis.} & \quad \text{think.2PL.FUT.IND.ACT} \\
\end{align*}
\]

‘Then you will think that the defense of Pompey must be opposed by all the faults and crimes of the law.’

There are no detectable semantic effects of the displacement in such examples, though the initial position of *vitiis* have other effects, indicating, say, that the speaker is in a heightened emotional state. These facts are explained if the *omnibus* is here specified for the feature [FOLLOW], with the underlying syntactic structure given in (182).

(182)  [*QP omnibus [NP vitiis et sceleribus]]

This is a not unreasonable proposal since we have seen in Section 2.2.4.3 that *omnibus* belongs to the closed-class of syntactic quantifiers.

3.2.3 A taxonomy of clitic effects

To summarize this discussion, we may organize lexical items into a taxonomy by prosodic “strength” (183). In the strong class are lexical items that are capable of forming independent prosodic words. This includes nearly all open-class categories (those which readily admit of new entries) and lexical words (involving encyclopedic content). Examples are finite verbs besides forms of the copula *esse* and nominals besides pronouns and demonstratives.

In the weak class belong closed-class categories and functional words such as prepositions, demonstratives, personal pronouns, the verb *esse* ‘to be,’ and various particles. Certain of these are typically proclitic, most notably prepositions, others typically enclitic, such as forms of *esse*. 
Enclitics often are “forward-inverting,” in the sense of being 2P particles. It is unclear if “backward-inverting” forms exist, which would be required to proclitically attach to the head of the preceding word.

A given lexical item may have various forms that occupy different positions in the taxonomy. Prepositions, for instance, appear to rarely have strong forms, e.g. (157)a, more often proclitic forms, e.g. (157)b, and possibly enclitic forms (cf. (169)).

(183) Taxonomy of lexical items by prosodic strength

3.3 The accumulation principle

In the course of our analysis, we have seen that many facts about Latin word-order can be explained by appealing to two formal phonological features of certain lexical items: [WEAK] and [FOLLOW]. Ensuring that these features are respected yields prosodic constituencies that do not clearly reflect the syntactic structure.

Let us again consider (136) and (137), reprinted below as (184)a and b, respectively.

(a) *in nullius* umquam *suorum necem* duravit (Tac. *Ann.* 1.6)

```
in nullius       umquam       suorum       necem
in no.MSG.GEN    ever          3SPOSS.MPL.GEN death.FSG.ACC
```

duravit
hard.3SG.PERF.IND.ACT

‘He never became inured toward the death of one of his relatives.’

(b) *[CP nullius [TP umquam [PP in [NP nullius suorum necem]] duravit]]*
We know that the position of *nullius* is semantically motivated by the need to license the NPI *umquam*, and so the discontinuity cannot have an entirely phonological basis.

Formally, we are claiming, then, that split noun phrases exhibit *subextraction*, namely, syntactic movement to a landing site external “to the extended projection [...] of the head [...] with which it stands in a certain base relationship” (Corver 2017, 2). This is illustrated in (185), where β has been subextracted out of YP to position α, within XP.

\[(185) \ [XP \ldots \alpha \ldots [YP \ldots \beta \ldots]]\]

In (184), α and β are copies of *nullius*, XP is CP and YP is NP.

The position of *in*, on the other hand, tells us that each copy of *nullius* is phonologically significant: the lower copy of *nullius* is used to generate the prosodic word (in *nullius*), but the higher copy specifies the position at which this prosodic word is pronounced. If the grammar were different, this could be otherwise, with the lower copy of *nullius* phonologically invisible, *in* cliticizing onto *suorum* instead. But this is not the case, suggesting the operation of an independent principle, which we state simply in (186).\(^{59}\)

\[(186) \text{Accumulation Principle}\]
\[
\text{Throughout the derivation of a sentence, prosodic words can only become larger, not smaller.}
\]

Evidence for this principle comes from split noun phrases in which the left fragment appears to be a nonconstituent, extending beyond cases that involve prepositions.

Consider, for instance, (187), where the nonconstituent *haec Crassi* appears to have undergone movement to the left-periphery of the subordinate temporal clause introduced by *cum*. This is known as “left-edge fronting” (Danckaert 2012).

\[(187) \text{sed } haec Crassi cum edita oratio est [...] quattuor et triginta tum habebat annos (Cic. Brut. 161; Pinkster 2021, 1103)}\]

```
sed  haec  Crassi  cum  edita
but  PROX.FSG.NOM  Crassus.MSG.GEN  when  publish.FSG.NOM.PTCP.PASS

oratio  est  quattuor et triginta tum
speech.FSG.NOM  be.3SG.PRES.IND  four  and  thirty  then

habebat  annos
have.3SG.IMPERF.IND.ACT  year.MPL.ACC
```

‘But when this speech of Crassus was published, he was then 34 years old.’

---

\(^{59}\) The notion of “derivation” has been left undeveloped here as an important topic for future work. An important question arises: why can’t *in* cliticize for the first time at a later stage of the derivation; why must it form a prosodic word when the PP is first built, and not later? Due to limitations of scope and evidence, we do not develop a full-fledged theory of syntax-to-prosody mapping for Latin. One might fruitfully proceed along the lines of Match Theory (Selkirk 2009; 2011; et seq.).
As a consequence of this movement, the noun phrase *haec Crassi ... oratio* is split. This discontinuous constituent passes the usual surface diagnostics for constituency: gender, number, case connectivity, denotation of a single entity, and realization of a single argument (namely, of the predicate *edita*). Moreover, the pragmatics point towards *Crassi* being a topic, denoting the referent that the speaker wishes to bring to the listeners’ attention (Roberts 2011). The expression *haec Crassi*, on the other hand, fails every constituency test. These facts point towards a syntactic structure of the form (188).

\[
\text{(188) } [\text{CP1 sed } [\text{C2P Crassi } [\text{C2' cum } [\text{TP edita } [\text{NP (haec Crassi) oratio} \text{ est}]]]]] ]...
\]

The underlying noun phrase is where various syntactic relations are satisfied. Notice that *haec* and *Crassi* are adjacent here. Assuming that the demonstrative *haec* is weak, the phonological word (*haec Crassi*) is formed. Subsequently *Crassi* undergoes left-edge fronting due to its being a topic; when pronounced, the entire phonological word is pronounced, yielding the illusion of *haec* undergoing syntactic movement.

There are many such cases of the accumulation principle yielding apparent nonconstituent movement. A general explanation of such cases is that syntactically a constituent moves, but its highest copy is pronounced as the entire prosodic word consisting of each element that it has “accumulated” in the course of the derivation.

### 3.4 Intonational effects of split noun phrases

#### 3.4.1 Evidence for prosody above the word

What we have not generally addressed is why split noun phrases exist in the first place. We know from the discussion in Chapter 2 that scrambling is often driven by the need to satisfy Scope Transparency. But not all cases clearly fit into this mold. Notice first, however, that the question of why split noun phrases exist is a syntactic or perhaps phonological one—not semantic or pragmatic. This is because the conceptual and pragmatic resources available to the speaker of Latin were presumably the same for speakers of any other language. What are demonstrably different between languages, are syntactic and phonological parameters of variation, certain of which we have somewhat treated, as for the features [*WEAK*] and [*FOLLOW*], but which we mostly have left undisussed.

Though we are largely concerned here with the syntax of noun phrases, we may say a few words about their pragmatics, though one should consult Spevak (2014) and Devine and Stephens (2019) for a fuller treatment.

In general, the interpretive consequences of split noun phrases are semantic or prosodic, the latter generally appropriate to the discourse context. As evidence for clause-level prosody, we again have the testimony of Quintilian (9.4.26–32). We are told that to “end the sentence with a verb ... is best” (*verbo sensum cludere ... optimum est*) because “in verbs is the force of speech” (*in verbis enim sermonis est*); that ending a sentence with anything else is a form of

---

60 Scrambling in other languages has been claimed to be driven by specificity. In German, for instance, “specific NPs obligatorily move across the negative marker while nonspecific indefinite NPs [...] remain below the negative marker” (Hinterhölzl 2006, 54). In Latin, however, nonspecific indefinites freely occur before *non* ‘not,’ the marker of sentential negation.
“hyperbaton,” which may be fitting when the rhythm is appropriate (*numerus oportune cadens*). Quintilian gives two examples (189) of this kind of hyperbaton, from Domitius Afer, with words placed at the end of a sentence “for the sake of making the composition harsh” (*asperandae compositionis gratia*).61

(189) (a) gratias agam **continuo** (Quint. 9.4.31)

```
gratias agam continuo
favor.FPL.ACC drive.1SG.FUT.IND.ACT straightaway
```

‘I’ll give thanks straightaway.’

(b) eis utrisque apud te, iudicem, periclitatur **Laelia** (Quint. 9.4.31)

```
eis utrisque apud te, iudicem,
DET.NPL.ABL both.NPL.ABL at 2SG.ACC judge.MSG.ACC
periclitatur Laelia
in_danger.3SG.PRES.IND.PASS Laelia.FSG.NOM
```

‘With both of those facts before you, judge, the one in danger is Laelia.’

What is “harsh” about (a) and (b) is that the category occupying final position is unusual. In (a) it is a temporal adverb; in (b) it is a noun phrase subject.

In general, final position is emphatic, and a word placed there is “impressed and imprinted upon the listener” (*adsignatur auditori et infigitur*), like a seal. Quintilian provides (190) as an example from Cicero, with the remark that moving *postridie*—the sharp “point” (*mucro*) of the sentence—would reduce its force (*transfer hoc ultimum: minus valebit*).

(190) ut tibi necesse esset in conspectu populi Romani vomere **postridie** (Quint. 9.4.29; Cic. Phil. 2.63)

```
ut tibi necesse esset in conspectu
that 2SG.DAT necessary be.3SG.IMPERF.SBJV in view.MSG.ABL
populi Romani vomere postridie
community.MSG.GEN Roman.MSG.GEN vomit.PRES.IND.ACT next_day
```

‘So that you would need to vomit in view of the Roman people the next day.’

In contrast, a word may “hide in the middle of the sentence” (*in media parte sententiae latet*). Quintilian is discussing the rules of rhetorical composition, but we may interpret his remarks linguistically. Let us take as a leading assumption Quintilian’s remarks to mean that the “end of the clause” (*clausula*) is the site of sentence-level stress, or “nuclear focus,” as appears to be

---

61 Domitius Afer was an orator of the Claudian period (Schmidt).
cross-linguistically valid.\(^{62}\) Let us also assume that the verb and subsequent material form a verb phrase constituent, for which there is considerable evidence, as discussed Section 2.3.4.

Though not discussed by Quintilian, it is evident that part of a noun phrase may be scrambled to the left periphery of the clause due to its topicality (bringing a discourse referent to the notice of the speaker). In (187) we have already seen such an example, where the fact that the topical noun phrase *Crassi* precedes the subordinating *wh*--word *cum* ‘when’ makes it clear that it occupies the left edge of CP.

The left-periphery is generally available for topicalization, and movement to this position may occur, for instance, when the speaker wishes to change the topic of the discourse. In (191), for instance, we find the split noun phrase *navem ... valde bonam*.

\[(191) \textit{navem} \text{spero} \text{ nos} \text{ valde} \text{ bonam} \text{ habere} \text{ (Cic. Fam. 14.7)} \]

\[
\begin{align*}
\text{navem} & \text{ spero} \text{ nos} \text{ valde} \text{ bonam} \\
\text{ship.FSG.ACC} & \text{ hope.1SG.PRES.IND.ACT} \text{ IPL.ACC} \text{ quite} \text{ good.FSG.ACC} \\
\text{habere} & \text{ have.PRES.INF.ACT} \\
\end{align*}
\]

‘I hope we have a really good ship.’

This sentence, from a personal letter, introduces a new discourse topic, namely, the fact that the speaker Cicero will soon be sailing. This sentence does not follow from the preceding context.

The prosodic and pragmatic effect of splitting the noun phrase, then, may be either to isolate the left fragment in the left periphery, or to isolate the right fragment in the verb phrase.\(^{63}\) The salient fragment in each case involves a topic; the material between the left periphery and the verb phrase, for which we may adopt the term *Mittelfeld*, from German linguistics, is intonationally insignificant.

This outline is mostly in line with previous research. Jong (1986) and Bolkestein (2001) claim that the first fragment is almost always emphatic, that interveners are not focal, and that emphasis is varied in nature (Bolkestein 2001). As we have seen, however, the first fragment in Latin split NPs may be, but need not be emphatic. More accurately, in line with so-called “cartographic” work on the cross-linguistic structure of the clause, the left-periphery has a topic position, and right-peripheral focus is located in the verb phrase (Rizzi and Cinque 2016).\(^{64}\)

3.4.2 Case study from Cicero’s second Catilinarian

As a more fully worked out example, let us consider (192), from Cicero’s second Catilinarian, which was given at a public meeting (*contio*) to “isolate Catiline’s followers from the community and consolidate all others behind his own leadership” (Dyck 2008, 124).

---

\(^{62}\) Across typologically-distinct languages, sentential stress lies on the object in simple transitive sentences, or on the verb, in the case of Hungarian (Kahnemuyipour 2009, 15–16).

\(^{63}\) An illustration of how the stress on VP-internal material may be used can be seen in Catullus 13, where *nasum* ‘nose’ is delayed until the last word for a “humorous punch” (Philip Waddell, personal communication).

\(^{64}\) It is yet unclear if the precise mapping of the Latin left-periphery closely corresponds with what has been found for other languages (cf. Danckaert 2012).
nulla est enim natio quam pertimescamus, nullus rex qui bellum populo Romano facere possit: omnia sunt externa unius uirtute terra marique pacata, domesticum bellum manet, intus insidiae sunt, intus inclusum periculum est, intus est hostis: cum luxuria nobis, cum amentia, cum scelere certandum est. huic ego me bello ducem profiteor, Quirites. Suscipio inimicitias hominum perditorum (Cic. Cat. 2.11).

‘There is no nation for us to fear, no king who can make war on the Roman people. Everything abroad has been made peaceful on land and sea by one man’s virtue. War at home remains, ambushes await within, the danger has been confined within, the enemy is within. We must contend with extravagance, with madness, with crime. For this war I proclaim myself leader, Romans. I accept the hatred of wicked men...’

Of interest here are the two discontinuous expressions, *huic ... bello* and *me ... ducem*, in the pattern A *ego* B A B.

The former expression shows singular number and dative case connectivity, and denotes a single entity, suggesting that it is underlying a constituent. It is not the complement of *ducem*, which would require genitive case (OLD, s.v. “dux”; cf. Dyck ad loc.). It is therefore likely to be a benefactive adverbial (dative of advantage), or possibly an applicative argument of *profiteor* (as in the English double object construction; cf. McGinnis 2017).

Moving on, the expression *me ... ducem* shows singular number and accusative case connectivity, where *ducem* is predicated of *me*. The accusative case tells us that at least part of the expression is the direct object of the deponent verb *profiteor*, which is always morphologically passive but syntactically transitive. The simplest analysis is that *me ... ducem* is a bare predication structure without tense, as in (193), known in the literature as a “small clause” (SC) (for an overview, see Citko 2011).

(193)  [sc me ducem]

That such predication constructions exist in Latin has been proposed by Renato Oniga, without argument (Oniga 2014, 213ff.). There is evidence, however. Consider first (194)a, where the two expressions *Verrem suem* and *Aelium doctum* are coordinated by *aut*, suggesting that they are constituents, as in (b).
(194) (a) nos quis ferat, si Verrem suem aut Aelium doctum nominemus? (Quint. 8.6.37)

nos quis ferat, qui Verrem
1PL.NOM who.M/FSG.NOM carry.3SG.PRES.SBJV.ACT if Verres.MSG.ACC

suem aut Aelium doctum nominemus?
pig.MSG.ACC or Aelius.MSG.ACC learned.MSG.ACC name.1PL.PRES.SBJV.ACT

‘Who would bear it if we call Verres “Pig” or Aelius “Learned”?’

(b) [sc [sc [np Verrem] [np suem]] aut [sc [np Aelium] [np doctum]]]

Also consider that such expressions can be used in what are descriptively known as “expressive small clauses,” which have been characterized as “express[ing] a momentary attitude linked to a situation” (Potts and Roeper 2006). An example is given in (195)a, where the expression *tu Clodiane canis*, in vocative case, expresses predication without tense, which suggests the analysis (b). In fact, vocatives cannot be arguments of verbs of any kind, as shown in (c).

(195) (a) his, *tu Clodiane canis*, insignibus consulatum declarari putas? (Cic. Pis. 23)

his, tu Clodiane canis,
PROX.NPL.ABL 2SG.VOC of_Clodius.MSG.VOC dog.MSG.VOC

insignibus consulatum declarari
decoration.NPL.ABL consulship.MSG.ACC declare.PRES.INF.PASS

putas?
think.2SG.PRES.IND.ACT

‘Do you think, you dog of Clodius, that the consulship can be declared by these decorations?’

(b) [sc [np tu] [np Clodiane canis]]

(c) *tu Clodiane canis es
2SG.VOC of_Clodius.MSG.VOC dog.MSG.VOC be.2SG.PRES.IND

We are on good grounds, then, to conclude that small clauses exist in Latin, leaving their internal structure for future work. Then (193) is the most parsimonious analysis of the object of profiteor that is consistent with the evidence.

In (192) we see the verb in final position, as is typical. We have established that argument structure is established in the verb phrase, but that arguments may scramble (i.e., undergo syntactic movement) into the TP domain to escape nuclear focus, understood as sentential stress,
when such stress is not pragmatically appropriate (cf. Section 2.3.4). The general schema is shown in (196).

\[(196) \quad [CP \ldots \ldots TP \ldots XP \ldots [VP \ldots XP \ldots]]\]

Next, the position of *huic* is compatible with some property of it being topical, in the sense in which we have been using that term. First, Cicero has been describing the peculiar nature of the war that must be fought, namely, against Roman conspirators rather than against a foreign enemy. Whereas external threats required the “virtue of one man” (*unius virtue*), i.e., Pompey, to defeat, the new, internal threats require Cicero to be their leader, and his oratory and counsel in particular (cf. Cic. *Cat*. 17.8; “I will offer to each man the medicine of my counsel and oratory,” *singulis medicinam consili atque orationis meae [...] adferam*; cf. Dyck ad loc. and references provided there).

Second, soon after the passage under discussion, Cicero begins a sentence with *hic ego* ‘In this context, I ...,’ and generally places *hi- ‘PROX’* (see below) words in initial position to qualify an utterance to hold of the present situation (13.1; cf. Dyck ad loc.). We may then assume that it is the proximal deictic feature [PROX] (i.e., indicating closeness to the speaker) of *huic* that is topical. This feature is not shared by *bello*, so by economy of computation, only *huic* moves (cf. Chomsky 1995, 262ff. for *wh- movement*).

Taking each of these facts together, the most parsimonious syntactic analysis of (192) is as in (197), presented more fully in tree form in (198), where lower copies of syntactic objects are crossed out. Note that *ego* and *me* form a prosodic word in VP.

\[(197) \quad [CP [DemP huic] [TP [NP ego] [NP [DemP huic] bello] [SC [NP me] [NP ducem]] [VP profiteor [SC [ego] [SC [me] [NP ducem]]]]\]

---

65 This is essentially a formalization of Quintilian’s analysis, which we have just considered. It is also worth noting that Quintilian is himself aware of scrambling, in a sense: “words ... are moved from place to place in order to join where they fit best, like in a structure of rough stones: their very irregularity finds where each may fit and rest (9.4.27; verba [...] ex loco transferuntur in locum, ut iungantur quo congruunt maxime, sicut in structura saxorum rudium etiam ipsa enormitas invenit cui aduplici et in quo possit insistere.).
Reading (197)/(198) left to right, *huic* has scrambled to the left periphery to express topicality\(^{66}\); the subject *ego* has scrambled out of the verb phrase to Spec,TP; *huic bello* is an adverbial PP somewhere within TP; the small clause *me ducem* has scrambled out of the verb phrase also to somewhere in TP; finally, argument structure is established locally in VP.

It is plausible that either of the personal pronouns *ego* or *me* is weak, as suggested in Section 3.2.2. Examples such as (127), with MannerVSO order, indicate that arguments of the verb are adjacent in at least one stage in the derivation of the verb phrase, as we have indicated in (197)/(198) for *ego* and *me ducem*. Then the fact that the expression *ego me* occurs in the surface word-order is explicable in terms of them forming a prosodic word within VP: by the Accumulation Principle (186), they must subsequently be pronounced together. Then, by the principle that only the highest copy of each constituent is pronounced (discussed briefly in Section 2.1.2), the linearization of (197)/(198) is predicted to be (192).

Under only independently motivated and mostly minimal assumptions, then, we have deduced (192). This is an explanatory improvement on other potential analyses, such as that of James McCawley, who proposes that the constituency of (192) is (199), but where *huic* undergoes a special “order-changing transformation” that reorders elements without effecting constituency and without semantic effects (McCawley 1982, 102 (16b)).

\[
(199) \quad [s \ [np \ ego] \ [v' \ [np \ me] \ [np \ [det \ huic] \ [n \ bello]] \ [np \ ducem] \ profiteor]]
\]

As noted in the introduction, Ross (1967/1986) first introduced the “scrambling” transformation, which flips the relative order of any two adjacent words, and relegated it to a stylistic module of grammar, where meaning is unaffected.\(^{67}\) In our theory, however, the only transformations are syntactic movement and phonological movement, both of which we have motivated. Either kind can be considered stylistic when its prosodic effects are used by the speaker for some purpose, rhetorical or otherwise.

---

\(^{66}\) We are here assuming that *huic* is a Dem(onstrative) P(hrase), as was discussed in Section 2.2.4.3.

\(^{67}\) This is distinct from the term “scrambling” in the sense that we have been using.
In (199), there is no motivation for the stylistic movement of *huic*, other than the fact that under McCawley’s analysis it is a Det(erniner), like the English article, and thereby, as a nonconstituent, not capable of undergoing syntactic phrasal movement. Many other facts are also left unexplained, the evidence for the constituency of *me ... ducem*, and the establishment of argument structure, for instance.

### 3.5 Conclusion

The central thesis of this chapter is that the Latin sentence involves not only syntactic movement, necessary to satisfy scope transparency, but extensive prosodic movement.

In Section 3.2.1, I argued that the distribution of clause-second particles is best described by two lexically-specified features for clitics: [WEAK], which ensures that clitics form a phonological word with a nearby non-clitic; and [FOLLOW], which ensures that a clitic is final in its phonological word. Next, in Section 3.2.2 I argued that these features may be present quite generally on any functional element, including prepositions, the copula *esse*, *qu-* words, and demonstratives, yielding the taxonomy of clitics in Section 3.2.3.

Prosodic movement interacts with syntactic movement in a precise way, though we have largely left this unspecified. The accumulation principle (186)/(200) explains how split noun phrases can appear to involve nonconstituent fragments.

(200) **Accumulation Principle**

Throughout the derivation of a sentence, prosodic words can only become larger, not smaller.

We briefly considered the prosodic and pragmatic effects of split noun phrases in Section 3.4. Besides the semantic effects discussed in Chapter 2, it was argued here that the prosodic effect of splitting the noun phrase is to isolate the left fragment in the left periphery, or to isolate the right fragment in the verb phrase, in either case yielding an intonationally prominent constituent, thereby pragmatically useful for bringing attention to a topic. Conversely, an element scrambled out of the verb phrase but not into the left-periphery escapes the intonational prominence of the utterance, which is convenient when the material must be spoken without emphasis.

In the brief following chapter we will review the contributions of this thesis.
4. Conclusion

4.1 Summary of results

The central claim of this thesis is that split noun phrases are the consequence of the general architecture of grammar, as stated in (201), and schematically represented in (202), showing that a syntactic object \( SO \) is mapped to a logical form \( LF \) and a prosodic form \( PrF \), the latter in turn mapped to a phonological form \( PF \).

(201) *Structure-dependence of grammar* (2.1.1)
The sentence is a recursive, hierarchical structure with displacement that is deterministically mapped to a semantic interpretation and a morphophonological realization.

(202)
```
<table>
<thead>
<tr>
<th>SO</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
</tr>
<tr>
<td>Pr(osodic) F(orm)</td>
</tr>
<tr>
<td>PF</td>
</tr>
</tbody>
</table>
```

As a fact of language variation, Latin permits more extensive displacement than in other languages. This displacement is not free, but subject to scope transparency.

(203) *Scope transparency* (2.3.3.1)
The scope of a generalized quantifier is the denotation of its c-command domain.

Syntactic displacement interacts with prosodic movement according to the accumulation principle.

(204) *Accumulation principle* (3.3)
Throughout the derivation of a sentence, prosodic words can only become larger, not smaller.

The interaction of these three principles yields split noun phrase phenomena.

We corroborated these claims based on a variety of novel data:

- Epigraphic punctuation provides evidence for a noun phrase (2.2.1), and a tense phrase (2.3.4.2)
- Within the noun phrase:
  - The possible orders of nominal elements are limited: in the entire *Perseus* corpus, no noun phrase with the elements demonstrative, numeral, adjective, and noun has either the demonstrative or numeral final, consistent with a structural account (2.2.2)
o The relative orders of individual elements do not predict contrastivity, but a structural account does (2.2.3–4)

o The distribution of nominal idioms, in which a noun and adjective have an idiosyncratic interpretation, reveals an asymmetry between the orders A N and N A that is best explained by the former being derived from the latter by syntactic movement (2.2.5)

- Within the clause:
  o Novel data was provided for two generalizations:
    - Negative polarity items must be preceded-and-commanded by a licensor (2.3.1)
    - Quantifiers must precede-and-command their scope (2.3.2)
  o Both of these generalizations were argued to follow from scope transparency (203) (2.3.3)
  o The distribution of adverbs, verbs, and verbal inflection across Romance supports a verb phrase constituent (2.3.4.1)

- Extensive epigraphic evidence was provided for the structure of prosodic words (3.2)

- Second-position phenomena:
  o Were argued to result from the interaction of two features, [WEAK] and [FOLLOW], yielding prosodic movement (3.2.1)
  o Were argued to lack semantic effects (3.2)
  o Were argued to apply to every functional category (3.2.2)

4.2 Reflections and implications

One who is curious about texts—classical or otherwise—must face the very general question of why a given text is the way it is, and not otherwise. In Homeric studies, for instance, the answer for two millennia was that the Iliad and Odyssey were the products of an individual genius. This answer does not explain much, if anything, about the language or composition of those great works, and Milman Parry showed that it was largely a wrong one (Kanigel 2021). Instead, “the ... Greek epic legends were not themselves the original fictions of certain authors, but creations of a whole people ... so the style in which they were to be told was not a matter of individual creation, but a popular tradition,” with the choice and placement of phrases largely the consequence of traditional metrical constraints (Parry 1987, 421).

Tradition, then, is another answer. But explanation by tradition or history is incomplete: it does not explain why certain paths have been taken, and not others. More importantly, it cannot explain why common patterns appear in historically unrelated times and places. In this thesis I have argued that Latin grammar and the formal properties of texts are in major respects (i.e., (201)) common to all languages, ultimately the reflex of part of the human genotype, known as Universal Grammar (UG).

That UG must exist alongside language-specific idiosyncrasies is recognized in traditional grammar (though not the biological interpretation). We find, for instance, that
These customs [ZSF: the combinatory rules of a language] are in part the result of general laws or modes of thought (logic), resulting from our habits of mind (General Grammar); and in part are what may be called By-Laws, established by custom in a given language (Particular Grammar), and making what is called the Syntax of that language (AG, Section 268).

There is something universal in every text, then: a text is a window into the soul of an author, their circumstances, tradition, and biology. As the world converges ever more rapidly, the various ways of being human become ever less apparent. Textual remains—and especially ancient ones, through their very remove from the present day—will continue to become more important for learning what is central to being human, and what varies. I have argued that this enterprise requires the development of a scientific methodology for corpus linguistics, and textual studies more broadly.
Appendix A. Texts searched

Below are a list of the ancient authors and their works that comprise the corpus used for electronic search throughout this study. Cited examples not included in the below list were not subject to systematic search. The data was collected from Perseus under Philologic 3 by means of the Persephil software application (Feldcamp 2021).

Ammianus Marcellinus, Rerum Gestarum [Amm.].
Apuleius, Apologia [Apol. Apol.].
———, Florida [Apul. Flor.].
———, Metamorphoses [Apul. Met.].
Augustine, Epistulae. Selections. [August.].
Augustus, Res Gestae [Aug.].
Aulus Gellius, Attic Nights [Gell.].
Boethius, Consolatio Philosophiae [Boethius].
Caesar, Civil War [Caes. Civ.].
———, Gallic War [Caes. Gal.].
Catullus, Carmina [Catul.].
Celsus, De Medicina [Cels. Med.].
Cicero, Academica [Cic. Acad. Pos.].
———, Brutus [Cic. Brut.].
———, De Amicitia [Cic. Amic.].
———, De Divinatione [Cic. Div.].
———, de Domino sua [Cic. Dom.].
———, de Fato [Cic. Fat.].
———, de Finibus Bonorum et Malorum [Cic. Fin.].
———, de Haruspicum Responso [Cic. Har.].
———, de Lege Agraria [Cic. Agr.].
———, de Natura Deorum [Cic. Nat. D.].
———, de Officiis [Cic. Off.].
———, de Oratore [Cic. de Orat.].
———, de Partitio Oratoria [Cic. Part. Orat.].
———, de Provinciis Consularibus [Cic. Prov.].
———, de Republica [Cic. Rep.].
———, de Senectute [Cic. Sen.].
———, Divinatio in Q. Caecilium [Cic. Div. Caec.].
———, Epistula ad Octavianum [Cic. Oct.].
———, Epistulae ad Atticum [Cic. Att.].
———, Epistulae ad Brutum [Cic. ad Brut.].
———, Epistulae ad Familiares [Cic. Fam.].
———, Epistulae ad Quintum fratrem [Cic. Q. fr.].
———, in Catilinam [Cic. Catil.].
———, in Pisonem [Cic. Pis.].
———, in Toga Candida [Cic. Tog. Cand.].
———, in Vatinium [Cic. Vat.].
———, in Verrem [Cic. Ver.].
———, Lucullus [Cic. Luc.].
———, Orator [Cic. Orat.].
———, Paradoxa stoicorum ad M. Brutum [Cic. Parad.].
———, Philippicae [Cic. Phil.].
———, post Reditum ad Populum [Cic. Red. Pop.].
———, post Reditum in Senatu [Cic. Red. Sen.].
———, pro Archia [Cic. Arch.].
———, pro Balbo [Cic. Balb.].
———, pro Caecina [Cic. Caec.].
———, pro Caelio [Cic. Cael.].
———, pro Cluentio [Cic. Clu.].
———, pro Flacco [Cic. Flac.].
———, pro Fonteio [Cic. Font.].
———, pro Lege Manilia [Cic. Man.].
———, pro Ligario [Cic. Lig.].
———, pro Marcello [Cic. Marc.].
———, pro Milone [Cic. Mil.].
———, pro Murena [Cic. Mur.].
———, pro Plancio [Cic. Planc.].
———, pro Q. Roscio comoedo [Cic. Q. Rosc.].
———, pro Quintio [Cic. Quinct.].
———, pro Rabirio Perduellionis Reo [Cic. Rab. Perd.].
———, pro Rabirio Postumo [Cic. Rab. Post.].
———, pro Rege Deiotaro [Cic. Deiot.].
———, pro S. Roscio Amerino [Cic. S. Rosc.].
———, pro Scauro [Cic. Scaur.].
———, pro Sestio [Cic. Sest.].
———, pro Sulla [Cic. Sul.].
———, pro Tullio [Cic. Tul.].
———, Topica [Cic. Top.].
———, Tusculanae Disputationes [Cic. Tusc.].
Columella, Lucius Junius Moderatus, Res Rustica, Books I-IV [Columella].
Cornelius Nepos, Vitae [Nep.].
Curtius Rufus, Quintus, Historiae Alexandri Magni [Curt.].
Horace, Ars Poetica [Hor. Ars].
———, Carmina [Hor. Carm.].
———, Satires [Hor. S.].
Juvenal, Satires [Juv.].
Livy, ab Urbe Condita [Liv.].
Lucan, Pharsalia [Luc.].
Florus, Lucius Annaeus, Epitome Rerum Romanorum [Flor.].
Lucretius, De Rerum Natura [Lucr.].
Martial, Epigrammata [Mart.].
Ovid, Amores [Ov. Am.].
———, Ars Amatoria [Ov. Ars].
——, Epistulae [Ov. Ep.].
——, Medicamina Faciei Femineae [Ov. Med.].
——, Metamorphoses [Ov. Met.].
——, Remedia Amoris [Ov. Rem.].
Persius, Satires [Pers.].
Petronius, Satyricon [Petron.].
Phaedrus, Fabulae [Phaed.].
Plautus, Amphitruo [Pl. Am.].
——, Asinaria [Pl. As.].
——, Aulularia [Pl. Aul.].
——, Bacchides [Pl. Bac.].
——, Captivi [Pl. Capt.].
——, Casina [Pl. Cas.].
——, Cistellaria [Pl. Cist.].
——, Curculio [Pl. Cur.].
——, Epidicus [Pl. Epid.].
——, Menaechmi [Pl. Men.].
——, Mercator [Pl. Merc.].
——, Miles Gloriosus [Pl. Mil.].
——, Mostellaria [Pl. Mos.].
——, Persa [Pl. Pre.].
——, Poenulus [Pl. Poen.].
——, Pseudolus [Pl. Ps.].
——, Rudens [Pl. Rud.].
——, Stichus [Pl. St.].
——, Trinummus [Pl. Trin.].
——, Truculentus [Pl. Truc.].
Pliny the Elder, Natural History [Plin. Nat.].
Pliny the Younger, Letters [Plin. Ep.].
Propertius, Elegies [Prop.].
Prudentius, Apotheosis [Prudent. Apoth.].
——, Cathemerina [Prudent. Cath.].
——, Contra Symmachum [Prudent. C. Symm.].
——, Dittochaeon [Prudent. Ditto.].
——, Epilogus [Prudent. Epil.].
——, Hamartigenia [Prudent. Hamar.].
——, Peristephanon Liber [Prudent. Perist.].
——, Praefatio [Prudent. praef.].
——, Psychomachia [Prudent. Psych.].
Quintilian, Institutio Oratoria [Quint.].
Sallust, Catilina [Sal. Cat.].
——, Jugurtha [Sal. Jug.].
Seneca the Elder, Controversiae [Sen. Controv.].
——, Excerpta Controversiae [Sen. Con. ex.].
——, Fragmenta [Sen. Frag.].
———, Suasoriae [Sen. Suas.].
Seneca, Ad Lucilium Epistulae Morales [Sen. Ep.].
———, Agamemnon [Sen. Ag.].
———, Apocolocyntosis [Sen. Apocol.].
———, De Beneficiis [Sen. Ben.].
———, De Brevitate Vitae [Sen. Brev. Vit.].
———, De Clementia [Sen. Clem.].
———, De Consolatione ad Helvium [Sen. Cons. Helv.].
———, De Consolatione ad Marciam [Sen. Cons. Marc.].
———, De Consolatione ad Polybium [Sen. Cons. Polyb.].
———, De Constantia [Sen. Constant.].
———, De Ira [Sen. Ira].
———, De Otio [Sen. Ot.].
———, De Providentia [Sen. Prov.].
———, De Tranquillitate Animi [Sen. Tranq.].
———, De Vita Beata [Sen. Vit. Beat.].
———, Hercules Furens [Sen. Herc. Fur.].
———, Hercules Oetaeus [Sen. Herc. Oet.].
———, Medea [Sen. Med.].
———, Octavia [Sen. Oct.].
———, Oedipus [Sen. Oed.].
———, Phaedra [Sen. Phaed.].
———, Phoenissae [Sen. Phoen.].
———, Thyestes [Sen. Thy.].
———, Troades [Sen. Tro.].
Sidonius Apollinaris, Carmina [Sid. Apoll. Carm.].
———, Epistulae, Books I-VII [Sid. Apoll. Epist.].
Silius Italicus, Punica [Sil. Pun.].
Statius, P. Papinius, Achilleis [Stat. Achil.].
———, P. Papinius, Silvae [Stat. Silv.].
———, P. Papinius, Thebais [Stat. Theb.].
Suetonius, Lives [Suet.].
Sulpicia, Poems [Sulpicia].
Tacitus, Agricola [Tac. Ag.].
———, Annales [Tac. Ann.].
———, Dialogus de Oratoribus [Tac. Dial.].
———, Germania [Tac. Ger.].
———, Historiae [Tac. Hist.].
Terence, Adelphi [Ter. Ad.].
———, Andria [Ter. An.].
———, Eunuchus [Ter. Eu.].
———, Heautontimoromenos [Ter. Hau.].
———, Hecyra [Ter. Hec.].
———, Phormio [Ter. Ph.].
Tertullian, Apologeticum [Tert. Apol.].
———, De Spectaculis [Tert. de spect.].
The Venerable Bede, *Historiam ecclesiasticam gentis Anglorum* [Bede].
Tibullus, *Elegiae* [Tib.].
Flaccus, Valerius, *Argonautica* [Flac.].
Vergil, *Aeneid* [Verg. A.].
———, *Eclogues* [Verg. Ecl.].
———, *Georgics* [Verg. G.].
Vitruvius, *de Architectura* [Vitr.].
Vulgate, *Latin Vulgate* [NT].
Appendix B. Sample of noun phrases with demonstrative, adjective, and noun

Provided below is a random sample of 100 noun phrases from the Perseus corpus, each containing a demonstrative, a noun, and an adjective. Only “true” adjectives were counted, as characterized in Section 2.2.4.2–3, excluding, for example, quantifiers such as omnis ‘every.’ Each logically possible word order was searched, and the results were collated into a spreadsheet, by means of the Persephil tool (Feldcamp 2021). The results were shuffled and the first 100 noun phrases adhering to one of the six desired patterns were marked. The frequency of each order is discussed in Section 2.2.2.

<table>
<thead>
<tr>
<th>Text</th>
<th>Work</th>
<th>Passage</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>ut antiquus ille Cunctator pro negotio consultabat</td>
<td>Amm.</td>
<td>29.5.32</td>
<td>A Dem N</td>
</tr>
<tr>
<td>quos Martia ista pectora viros existimant</td>
<td>Amm.</td>
<td>24.8.1</td>
<td>A Dem N</td>
</tr>
</tbody>
</table>
| cum haec ita essent, aestimari poterat (ut ipse aiebat), 
  vetus illa Iustitia, quam offensam vitiis hominum, 
  Aratus extollit in caelum, eo imperante                             | Amm.  | 25.4.19 | A Dem N |
<p>| rursus molares illos circuitus requirebam.                            | Apul. Met. | 7.17   | A Dem N |
| Adhuc cine miserum istum asinum iugi furore iactari credimus?         | Apul. Met. | 9.3    | A Dem N |
| arida haec medicamenta ex suco murti conteruntur.                     | Cels. Med. | 6.6.16b | A Dem N |
| Campanus ager et praecella illa Capua servatur                        | Cic. Agr. | 3.16   | A Dem N |
| quamquam blanda ista vanitas apud eos valet                           | Cic. Amic. | 99     | A Dem N |
| quod gravis illa opinio ...                                           | Cic. Att. | 3.24.2 | A Dem N |
| longumque illud tempus cum non ero magis me movet quam hoc exiguum    | Cic. Att. | 12.18.1 | A Dem N |
| vulgaris haec cognitio satis magna est ad eam, quam specto, eloquentiam | Cic. de Orat. | 3.147 | A Dem N |
| primas illas hastas ita iactare leniter, ut ...                      | Cic. de Orat. | 2.316 | A Dem N |
| nec vero alia sunt quaerenda contra Carneadeam illam sententiam       | Cic. Fin. | 5.22   | A Dem N |
| qui post patris mortem primam illam aetatulam suam ad scurrarum locupletium libidines detulit | Cic. Har. | 42     | A Dem N |
| diutius cogitandum est? ante fundum Clodi quo in fundo propter insanas illas substructiones facile hominum mille versabatur valentium, edito | Cic. Mil. | 53     | A Dem N |
| brevior altera, eadem etiam planior. est autem longioris prima illa quaestio sitne omnino ulla numerosa oratio; quibusdam enim non videtur, quia nih | Cic. Orat. | 54     | A Dem N |</p>
<table>
<thead>
<tr>
<th>Roman text</th>
<th>Author</th>
<th>Page</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>non existimes <strong>medium illam partem</strong> et turbam flagitiorum tuorum mihi esse inauditam</td>
<td>Cic. <em>Pis.</em></td>
<td>94</td>
<td>A Dem N</td>
</tr>
<tr>
<td>notata a nobis sunt et <strong>prima illa scelera</strong> in adventu</td>
<td>Cic. <em>Pis.</em></td>
<td>83</td>
<td>A Dem N</td>
</tr>
<tr>
<td>ut meminerim Iovis orationem quae est in <strong>extremo illo libro</strong></td>
<td>Cic. <em>Q. fr.</em></td>
<td>2.7.1</td>
<td>A Dem N</td>
</tr>
<tr>
<td>quamquam non est omittenda <strong>singularis illa integritas</strong> provincialis</td>
<td>Cic. <em>Sest.</em></td>
<td>13</td>
<td>A Dem N</td>
</tr>
<tr>
<td>renovabitur <strong>prima illa militia</strong></td>
<td>Cic. <em>Ver.</em></td>
<td>2.5.33</td>
<td>A Dem N</td>
</tr>
<tr>
<td>responderet illud argentum se <strong>paucis illis diebus</strong> misisse Lilybaeum.</td>
<td>Cic. <em>Ver.</em></td>
<td>2.4.39</td>
<td>A Dem N</td>
</tr>
<tr>
<td><em>Timaeum, nobilem illum dialo</em> <strong>gum</strong>, concinnasset.</td>
<td>Gell.</td>
<td>3.17.5</td>
<td>A Dem N</td>
</tr>
<tr>
<td><em>convolante quidem tam numerosa illa cohorte</em></td>
<td>Plin. <em>Nat.</em></td>
<td>7.63</td>
<td>A Dem N</td>
</tr>
<tr>
<td>potest turpis esse <strong>domesticus ille praecipitator</strong></td>
<td>Quint.</td>
<td>1.2.4</td>
<td>A Dem N</td>
</tr>
<tr>
<td><strong>veterem illum horrorem</strong> dicendi malim quam istam novam licentiam.</td>
<td>Quint.</td>
<td>8.5.34</td>
<td>A Dem N</td>
</tr>
<tr>
<td><strong>novum illud exemplum</strong> ab dignis et idoneis ad indignos et non idoneos transfertur.</td>
<td>Sal. Cat.</td>
<td>51</td>
<td>A Dem N</td>
</tr>
<tr>
<td><em>Fuit sine dubio, ut dicitis, vetus illa sapientia</em></td>
<td>Sen. <em>Ep.</em></td>
<td>95.14</td>
<td>A Dem N</td>
</tr>
<tr>
<td><em>in unum saporem varia illa libamenta</em> confundere</td>
<td>Sen. <em>Ep.</em></td>
<td>84.5</td>
<td>A Dem N</td>
</tr>
<tr>
<td><strong>Tertium illud genus</strong> extra multa et magna vitia est</td>
<td>Sen. <em>Ep.</em></td>
<td>75.14</td>
<td>A Dem N</td>
</tr>
<tr>
<td>quamquam bene cognita et olim <strong>atrox illa fides</strong></td>
<td>Sil. <em>Pun.</em></td>
<td>6.378</td>
<td>A Dem N</td>
</tr>
<tr>
<td><em>At non quotidiania cura haec</em> angeret animum.*</td>
<td>Ter. <em>Ph.</em></td>
<td>157</td>
<td>A N Dem</td>
</tr>
<tr>
<td><strong>Hoc memorabili bello</strong>, comparando quidem Punicis et Teutonicis, ...</td>
<td>Amm.</td>
<td>17.1.14</td>
<td>Dem A N</td>
</tr>
<tr>
<td><strong>Hac opportuna fallacia</strong> vigorati iuvenis</td>
<td>Apul. <em>Met.</em></td>
<td>9.21</td>
<td>Dem A N</td>
</tr>
<tr>
<td>quare <strong>haec diuina praenotio</strong> naturam rerum proprietatemque non mutat</td>
<td>Boethius</td>
<td>5.P6</td>
<td>Dem A N</td>
</tr>
<tr>
<td>hoc tu emes <strong>ista innumerabili pecunia</strong> quod arari aut coli possit?</td>
<td>Cic. <em>Agr.</em></td>
<td>2.67</td>
<td>Dem A N</td>
</tr>
<tr>
<td>gratia haec et magna mihiqne nondum laboriosa ex <strong>illa veterum militia</strong></td>
<td>Cic. <em>Att.</em></td>
<td>6.2.5</td>
<td>Dem A N</td>
</tr>
<tr>
<td>verum tamen <strong>ista multa iudicia</strong> quae sunt?</td>
<td>Cic. <em>Clu.</em></td>
<td>88</td>
<td>Dem A N</td>
</tr>
<tr>
<td>Latin Text</td>
<td>Author</td>
<td>Location</td>
<td>Reference</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>quod in tanto otio etiam sine hac forensi exercitatio efficere potuerunt</td>
<td>Cic. de Orat.</td>
<td>2.139</td>
<td>Dem A N</td>
</tr>
<tr>
<td>aut vobis haec Carneadia aut illa Aristotelia vis comprehendenda est.</td>
<td>Cic. de Orat.</td>
<td>3.71</td>
<td>Dem A N</td>
</tr>
<tr>
<td>quam huius civilis turbae ac fori.</td>
<td>Cic. de Orat.</td>
<td>1.81</td>
<td>Dem A N</td>
</tr>
<tr>
<td>denique etiam ille novicius Ligus, venalis adscriptor et subscriptor tuus, ...</td>
<td>Cic. Dom.</td>
<td>49</td>
<td>Dem A N</td>
</tr>
<tr>
<td>has paternas possessiones tenebis</td>
<td>Cic. Fam.</td>
<td>7.20.1</td>
<td>Dem A N</td>
</tr>
<tr>
<td>itaque neque ego hunc Hispaniensem casum expecto</td>
<td>Cic. Fam.</td>
<td>2.16.6</td>
<td>Dem A N</td>
</tr>
<tr>
<td>de quo tibi homine haec spondeo non illo vetera verbo meo</td>
<td>Cic. Fam.</td>
<td>7.5.3</td>
<td>Dem A N</td>
</tr>
<tr>
<td>hi novi timores retexunt superiora.</td>
<td>Cic. Fam.</td>
<td>11.14.3</td>
<td>Dem A N</td>
</tr>
<tr>
<td>si istas exiguas copias, quas habuisti, quam minime imminueris.</td>
<td>Cic. Fam.</td>
<td>3.3.2</td>
<td>Dem A N</td>
</tr>
<tr>
<td>multa praeclera in illo calamitoso otio scripsit</td>
<td>Cic. Fin.</td>
<td>5.54</td>
<td>Dem A N</td>
</tr>
<tr>
<td>Decianus ad Laelium detulerit hanc optimam accusationem.</td>
<td>Cic. Flac.</td>
<td>81</td>
<td>Dem A N</td>
</tr>
<tr>
<td>sed ad hanc insignem poenam reservatus.</td>
<td>Cic. Mil.</td>
<td>86</td>
<td>Dem A N</td>
</tr>
<tr>
<td>Servius hic nobiscum hanc urbanam militiam respondendi, scribendi, cavendi plenam sollicitudinis ac stomachi secutus est</td>
<td>Cic. Mur.</td>
<td>19</td>
<td>Dem A N</td>
</tr>
<tr>
<td>laetatus est statimque illa mirabilia facinora effecit.</td>
<td>Cic. Phil.</td>
<td>2.109</td>
<td>Dem A N</td>
</tr>
<tr>
<td>si mihi cum illo bustuario gladiatore et tecum et cum conlega tuo decertandum fuisset.</td>
<td>Cic. Pis.</td>
<td>19</td>
<td>Dem A N</td>
</tr>
<tr>
<td>caverat enim sibi ille sororius adulter ut ...</td>
<td>Cic. Pis.</td>
<td>28</td>
<td>Dem A N</td>
</tr>
<tr>
<td>ubi illa antiqua libertas quae ...</td>
<td>Cic. Planc.</td>
<td>33</td>
<td>Dem A N</td>
</tr>
<tr>
<td>si planum facio post hanc recentem stipulationem Rosci HS CCCCI caval. te abstulisse</td>
<td>Cic. Q. Rosc.</td>
<td>41</td>
<td>Dem A N</td>
</tr>
<tr>
<td>sed in his veteribus municipiis quae ...</td>
<td>Cic. S. Rosc.</td>
<td>48</td>
<td>Dem A N</td>
</tr>
<tr>
<td>sin istius ingentes divitiae iudiciorum religionem veritatemque perfregerint ...</td>
<td>Cic. Ver.</td>
<td>1.1.3</td>
<td>Dem A N</td>
</tr>
<tr>
<td>Haec mera veritas Tusculani hominis ...</td>
<td>Gell.</td>
<td>13.24.2</td>
<td>Dem A N</td>
</tr>
<tr>
<td>eodem tenore duo insequentes consulatus gessi, eodem haec imperiosa dictatura geretur</td>
<td>Liv.</td>
<td>7.40.9</td>
<td>Dem A N</td>
</tr>
<tr>
<td>iisdem istis ferocibus animis egredimini extra portam Esquilineam</td>
<td>Liv.</td>
<td>3.68.2</td>
<td>Dem A N</td>
</tr>
<tr>
<td>qui me nominationis die per <strong>hos continuos annos</strong> inter sacerdotes nominabat</td>
<td>Plin. <em>Ep.</em></td>
<td>4.8.3</td>
<td>Dem A N</td>
</tr>
<tr>
<td>ut obiter emolliam catullum conterraneum meum (agnoscis et <strong>hoc castrense verbum</strong>) ...</td>
<td>Plin. <em>Nat.</em></td>
<td>preface.1</td>
<td>Dem A N</td>
</tr>
<tr>
<td>iacet <strong>illud nobile templum</strong>, cur iacet?</td>
<td>Prudent. <em>Apoth.</em></td>
<td>3</td>
<td>Dem A N</td>
</tr>
<tr>
<td>hic <strong>ille natalis dies</strong>, quo te creator arduus spiravit et limo indidit, ...</td>
<td>Prudent. <em>Cath.</em></td>
<td>11</td>
<td>Dem A N</td>
</tr>
<tr>
<td>sed quis, tyrannus pertinax, <strong>hunc inpotentem spiritum</strong> determinabit exitus?</td>
<td>Prudent. <em>Perist.</em></td>
<td>5</td>
<td>Dem A N</td>
</tr>
<tr>
<td>quales legimus panegyricos, totumque <strong>hoc demonstrativum genus</strong>, permittitur adhibere plus cultus omnemque artem</td>
<td>Quint.</td>
<td>2.10.11</td>
<td>Dem A N</td>
</tr>
<tr>
<td><strong>illis antiquis temporibus</strong> non studii modo verum etiam venerationis habuisse</td>
<td>Quint.</td>
<td>1.10.9</td>
<td>Dem A N</td>
</tr>
<tr>
<td>et sic in <strong>hac calamitosa fama</strong> quasi in aliqua perniciosissima flamma, et non enim tam spe</td>
<td>Quint.</td>
<td>9.3.75</td>
<td>Dem A N</td>
</tr>
<tr>
<td>si hoc tibi inter cenam in <strong>illis immanibus poculis</strong> tuis accidisset.</td>
<td>Quint.</td>
<td>5.10.99</td>
<td>Dem A N</td>
</tr>
<tr>
<td>ab <strong>illa vera imagine</strong> orandi recesserunt</td>
<td>Quint.</td>
<td>5.12.16</td>
<td>Dem A N</td>
</tr>
<tr>
<td>scalpello aperitur ad <strong>illam magnam libertatem</strong> via et puncto securitas constat.</td>
<td>Sen. <em>Ep.</em></td>
<td>70.16</td>
<td>Dem A N</td>
</tr>
<tr>
<td>hoc maximum vinculum, haec arcana sacra, <strong>hos coniugales deos</strong> arbitrantur.</td>
<td>Tac. <em>Ger.</em></td>
<td>18.3</td>
<td>Dem A N</td>
</tr>
<tr>
<td>si litterae M. Aurelii gravissimi imperatoris requirantur, quibus <strong>illam Germaniam sitim</strong> Christianorum forte militum precationibus impetrato imbri discussam contestatur.</td>
<td>Tert. <em>Apol.</em></td>
<td>5.6</td>
<td>Dem A N</td>
</tr>
<tr>
<td>ad <strong>hanc mortem repentinam</strong> vocemque morientis omnia praeterea quae solent esse ...</td>
<td>Cic. <em>Clu.</em></td>
<td>30</td>
<td>Dem N A</td>
</tr>
<tr>
<td>non numquam in <strong>hoc vitium scurrile</strong> delabitur.</td>
<td>Cic. <em>de Orat.</em></td>
<td>2.246</td>
<td>Dem N A</td>
</tr>
<tr>
<td>sibi ipse peperit maximam laudem ex <strong>illa accusatione nobili et gloriosa</strong></td>
<td>Cic. <em>Off.</em></td>
<td>2.47</td>
<td>Dem N A</td>
</tr>
<tr>
<td>quam ad <strong>hanc rationem</strong> extremam necessario devenire.</td>
<td>Cic. <em>Quinct.</em></td>
<td>54</td>
<td>Dem N A</td>
</tr>
<tr>
<td>sin <strong>illa res prima</strong> valuit, num ...</td>
<td>Cic. <em>Sul.</em></td>
<td>81</td>
<td>Dem N A</td>
</tr>
<tr>
<td>valeret hoc crimen in <strong>illa vetere severitate</strong> ac dignitate rei publicae</td>
<td>Cic. <em>Ver.</em></td>
<td>2.5.46</td>
<td>Dem N A</td>
</tr>
<tr>
<td>sed mi intervallum iam <strong>hos dies multos</strong> fuit</td>
<td>Pl. <em>Men.</em></td>
<td>101</td>
<td>Dem N A</td>
</tr>
<tr>
<td>Latin Text</td>
<td>Source</td>
<td>Line</td>
<td>Notes</td>
</tr>
<tr>
<td>------------</td>
<td>--------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>ut occeci dicere, lenulle, de <strong>illa pugna Pentetronica</strong></td>
<td>Pl. <em>Poen.</em></td>
<td>471</td>
<td>Dem N A</td>
</tr>
<tr>
<td><strong>Hi iudices Clodiiani</strong> a senatu petierant praesidium</td>
<td>Sen. <em>Ep.</em></td>
<td>97.6</td>
<td>Dem N A</td>
</tr>
<tr>
<td>unde <strong>haec aula recens</strong> fulgorque inopinus agresti Alcidae?</td>
<td>Stat. <em>Silv.</em></td>
<td>3.1</td>
<td>Dem N A</td>
</tr>
<tr>
<td>eis indito <strong>catenas singularias istas</strong>, maiores</td>
<td>Pl. <em>Capt.</em></td>
<td>108</td>
<td>N A Dem</td>
</tr>
<tr>
<td><strong>Athos in Macedonia</strong> <strong>mons ille praecepsus</strong> navibus quondam Medicis pervius</td>
<td>Amm.</td>
<td>22.8.2</td>
<td>N Dem A</td>
</tr>
<tr>
<td>Unico illi contubernio communem vitam sustinebant meque ad <strong>vasa illa compluria</strong> gestanda praedestinarant, quae ...</td>
<td>Apul. <em>Met.</em></td>
<td>10.13</td>
<td>N Dem A</td>
</tr>
<tr>
<td><strong>orationem illam vanam</strong> testimonium esse laudum suarum putant.</td>
<td>Cic. <em>Amic.</em></td>
<td>98</td>
<td>N Dem A</td>
</tr>
<tr>
<td>nam M. Coelium Vinicianum <strong>mentio illa fatua,</strong> quam ...</td>
<td>Cic. <em>Fam.</em></td>
<td>8.4.3</td>
<td>N Dem A</td>
</tr>
<tr>
<td>quod se <strong>legem illam praecelaram</strong> neglecturum negaret</td>
<td>Cic. <em>Rep.</em></td>
<td>2.61</td>
<td>N Dem A</td>
</tr>
<tr>
<td>Eius nominii Plato <strong>librum illum divinum</strong> de immortalitate animae dedit.</td>
<td>Gell.</td>
<td>2.18.2</td>
<td>N Dem A</td>
</tr>
<tr>
<td>audiens populus <strong>sermonem hunc pessimum</strong> luxit</td>
<td>NT</td>
<td>Exod.33</td>
<td>N Dem A</td>
</tr>
<tr>
<td>si ingreditibus nobis terram signum fuerit <strong>funiculus iste coccineus</strong></td>
<td>NT</td>
<td>Josh.2</td>
<td>N Dem A</td>
</tr>
<tr>
<td>ipse fecit nobis <strong>malum hoc grande</strong></td>
<td>NT</td>
<td>1 Sam.6</td>
<td>N Dem A</td>
</tr>
<tr>
<td>adduxistis in <strong>locum istum pessimum</strong></td>
<td>NT</td>
<td>Num.20</td>
<td>N Dem A</td>
</tr>
<tr>
<td>ut omni studio <strong>dies ista sollemnis</strong> sanciretur in posterum</td>
<td>NT</td>
<td>Esther.9</td>
<td>N Dem A</td>
</tr>
<tr>
<td>egeritque bitumen temperandum <strong>fonte illo ingustabili</strong></td>
<td>Plin. <em>Nat.</em></td>
<td>2.105</td>
<td>N Dem A</td>
</tr>
<tr>
<td>alioqui <strong>tumor ille inanis</strong> primo cuiusque veri operis conatu deprehendetur.</td>
<td>Quint.</td>
<td>2.10.6</td>
<td>N Dem A</td>
</tr>
<tr>
<td><strong>huc ager ille malus</strong> dulcesque a fontibus undae ad plenum calcentur</td>
<td>Verg. <em>G.</em></td>
<td>2.240</td>
<td>N Dem A</td>
</tr>
</tbody>
</table>
Appendix C. NPI licensing

The complete data for the results presented in Section 2.3.1, regarding the precede-and-command constraint on NPI licensing, is presented below.

C1 Nego licenses ullus

Below is listed each instance in the Perseus corpus where *nego* ‘deny’ licenses *ullus* ‘any.’ A search was conducted on 2/27/21 over the entire corpus listed in Appendix A, with the query ‘lemma:ullus lemma:nego,’ anywhere in the same sentence.

As indicated in Section 2.3.1.3, in each case, *nego* precedes-and-commands *ullus*.

<table>
<thead>
<tr>
<th>Excerpt</th>
<th>Text</th>
<th>Passage</th>
<th>Nego licenses <em>ullus</em>?</th>
<th>Nego precedes-and-commands <em>ullus</em>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ego uero nego ullum esse bonum quod noceat habenti num id mentior?</td>
<td>Boethius</td>
<td>2.P5</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negat se more et exemplo populi Romani posse iter ulli per provinciam dare</td>
<td>Caes. Gal.</td>
<td>1.8.3</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negabant me adduci posse ut ullam largitionem probarem. finem feci offerendi mei ne forte mea sedulitas</td>
<td>Cic. Agr.</td>
<td>2.12</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negabat ullam vocem inimiciorem amicitiae potuisse reperiri quam eius qui dixisset ita</td>
<td>Cic. Amic.</td>
<td>59</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quod negas praeicipuum mihi ullum in communibus incommodis impedere, etsi ista res non nihil habet con</td>
<td>Cic. Att.</td>
<td>11.3.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nego ullam rem esse quae aut comprehendi satis aut caveri aut excipi possit</td>
<td>Cic. Caec.</td>
<td>81</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nego rem esse ullam cuquam illorum obiectam quae Fidiculanio non obiecta</td>
<td>Cic. Clu.</td>
<td>113</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Artem vero negabat esse ullam, nisi quae cognitis penitusque perspectis et in unum exitum spectantibus et</td>
<td>Cic. de Orat.</td>
<td>1.92</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>qui partim omnino motus negant in animis ullos esse debere, quique eos in iudicum mentibus concitent, scelus eos nefarium</td>
<td>Cic. de Orat.</td>
<td>1.220</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Non possum negare prodesse ullam scientiam, ei praeertim, cuius eloquentia copia rerum debeat esse ornata; sed</td>
<td>Cic. de Orat.</td>
<td>1.250</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quae negatullo modo posse dissolvi, et genus sermonis adfert non liquidum, non fusum</td>
<td>Cic. <em>de Orat.</em></td>
<td>2.159</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>et negant historici Lacedaemonii ulla ostentum hoc tristius accidisse!</td>
<td>Cic. <em>Div.</em></td>
<td>2.69</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negatullo modo posse sciri</td>
<td>Cic. <em>Div.</em></td>
<td>2.90</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>sed quid ad te, qui negas esse verum quemquam ulli rei publicae extra ordinem praefici? atque</td>
<td>Cic. <em>Dom.</em></td>
<td>21</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nego potuisse iure publico, legibus iis quibus haec civitas utitur, quemquam civem ulla eius modi calamitate adfici sine iudicio</td>
<td>Cic. <em>Dom.</em></td>
<td>33</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Caninius et Cato negarunt se legem ulla ante comitia esse laturos.</td>
<td>Cic. <em>Fam.</em></td>
<td>1.4.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>hostem esse in Syria negant ulla.</td>
<td>Cic. <em>Fam.</em></td>
<td>3.8.10</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negabat seullo modo pati posse decerni supplicationes, ne quod furore Pauli adeptus esse</td>
<td>Cic. <em>Fam.</em></td>
<td>8.11.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>contra equitem Parthum negant ulla armaturam meliorem inveniri posse.</td>
<td>Cic. <em>Fam.</em></td>
<td>9.25.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>sed ut ad rem redeam, legionem Martiam et quartam negant qui illas norunt ulla condizione ad te posse perduci</td>
<td>Cic. <em>Fam.</em></td>
<td>11.14.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>sin autem ad animum, falsum est, quod negas animi ulla esse gaudium, quod non referatur ad corpus.</td>
<td>Cic. <em>Fin.</em></td>
<td>2.98</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negarineullo modo possit numquam quemquam stabilis et firmo et magno</td>
<td>Cic. <em>Fin.</em></td>
<td>3.29</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negabat igitur ulla esse artem, quae ipsa a se profecciceretur</td>
<td>Cic. <em>Fin.</em></td>
<td>5.16</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negant esse ulla causam, cur aliud aliique anteponatur</td>
<td>Cic. <em>Fin.</em></td>
<td>5.23</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>praeter vitia atque virtutes negavit rem esse ulla aut fugiendam aut expetendam.</td>
<td>Cic. <em>Fin.</em></td>
<td>5.73</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>at enim negas fratrem meum, qui L. Flacco successerit, pecuniam ulla in remiges imperasse.</td>
<td>Cic. <em>Flac.</em></td>
<td>33</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>negavit sese omnino versuram ulla fecisse Romae</td>
<td>Cic. <em>Flac.</em></td>
<td>48</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nego</strong></td>
<td>Umquam post sacra constituta, quorum eadem est antiquitas quae ipsius urbis, <strong>Ulla</strong> de re, ne de capite quidem virginum Vestalium, tam frequens conlegium</td>
<td>Cic. Har.</td>
<td>13</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nego esse Ullam</strong></td>
<td>Domum aliam privato eodem quo quae optima lege,</td>
<td>Cic. Har.</td>
<td>14</td>
<td>y</td>
</tr>
<tr>
<td><strong>Negoullo</strong></td>
<td>De opere publico, de monumento, de templo tot senatus exst</td>
<td>Cic. Har.</td>
<td>15</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nego Ulla</strong></td>
<td>Verba Lentulum, gravem oratorem ac disertum, saepius, cum te accusaret,</td>
<td>Cic. Har.</td>
<td>37</td>
<td>y</td>
</tr>
<tr>
<td><strong>Negabis</strong></td>
<td>Esse rem <strong>Ullam</strong> quae cognosci conprendi percipi possit?</td>
<td>Cic. Luc.</td>
<td>62</td>
<td>y</td>
</tr>
<tr>
<td>Praelo est qui <strong>Neget</strong> rem <strong>Ullam</strong> percipi posse sensibus.</td>
<td>Cic. Luc.</td>
<td>101</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Licet enim haec quivis arbitratu suo reprehendat quod <strong>Negemus</strong> rem <strong>Ullam</strong> percipi posse, certe levior reprehensio est, quod tamen dicimus esse quae ad</td>
<td>Cic. Luc.</td>
<td>102</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Alterum est quod <strong>Negatis</strong> actionem <strong>Ullius</strong> rei posse in eo esse qui nullam rem adsensu suo conprobet.</td>
<td>Cic. Luc.</td>
<td>108</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>At scire <strong>Negatis</strong> quemquam rem <strong>Ullam</strong> nisi sapientem.</td>
<td>Cic. Luc.</td>
<td>145</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Ea forma <strong>Neget Ullam</strong> esse pulchriorem Plato</td>
<td>Cic. Nat. D.</td>
<td>1.24</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>Negat</strong> enim esse <strong>Ullum</strong> cibum tam gravem quin is nocte et die concoquatur</td>
<td>Cic. Nat. D.</td>
<td>2.24</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>Neget</strong> in his <strong>Ullum</strong> inesse rationem eaque casu fieri dicat</td>
<td>Cic. Nat. D.</td>
<td>2.97</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>Negabant</strong> immortalis esse <strong>Ullos</strong> qui aliquando homines fuissent</td>
<td>Cic. Nat. D.</td>
<td>3.49</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>M. Crassus <strong>Negat Ullam</strong> satis magnam pecuniam esse ei</td>
<td>Cic. Off.</td>
<td>1.25</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Saepe testatur <strong>Negatque Ullam</strong> pestem maiorem in vitam hominum invasisse quam eorum opinionem</td>
<td>Cic. Off.</td>
<td>3.34</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>Negat</strong> Calenus rem <strong>Ullam</strong> novam adlatam esse.</td>
<td>Cic. Phil.</td>
<td>12.3</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Quod <strong>Negant</strong> sapientem suspicatum <strong>Ullam</strong> rei publicae partem</td>
<td>Cic. Rep.</td>
<td>1.10</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Latin Text</td>
<td>Source</td>
<td>Page</td>
<td>Ind.</td>
<td>Use</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>Xenocrates animi figuram et quasi corpus <strong>negavit</strong> esse <strong>ullum</strong>, numerum dixit esse, cuius vis, ut tam ante Pyt</td>
<td>Cic. <em>Tusc.</em></td>
<td>1.20</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negat ullum</strong> in sapientem vim esse fortunae, tenuem victum antefert copioso</td>
<td>Cic. <em>Tusc.</em></td>
<td>3.49</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negat ullum</strong> esse tempus, quo sapiens non beatus sit.</td>
<td>Cic. <em>Tusc.</em></td>
<td>3.49</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negant ab ullo</strong> philosopho quicquam dictum esse languidius.</td>
<td>Cic. <em>Tusc.</em></td>
<td>5.25</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nego</strong> tibi ipsi <strong>ullum</strong> nummum esse numeratum</td>
<td>Cic. <em>Ver.</em></td>
<td>2.2.26</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negant</strong> id Syracusani per religiones sacrorum <strong>ullo</strong> modo fieri posse</td>
<td>Cic. <em>Ver.</em></td>
<td>2.2.127</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>istam se cellam atque istam aestimationem <strong>negant ullo</strong> modo ferre posse.</td>
<td>Cic. <em>Ver.</em></td>
<td>2.3.203</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nego</strong> in Sicilia tota, tam locupleti, tam vetere provincia, tot oppidis, tot familiis tam copiosis, <strong>ullum</strong> argenteum vas, ullum Corinthium aut Deliacum fuisse</td>
<td>Cic. <em>Ver.</em></td>
<td>2.4.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nego</strong> in Sicilia tota, tam locupleti, tam vetere provincia, tot oppidis, tot familiis tam copiosis, <strong>ullum</strong> argenteum vas, ullum Corinthium aut Deliacum fuisse</td>
<td>Cic. <em>Ver.</em></td>
<td>2.4.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nego</strong> in Sicilia tota, tam locupleti, tam vetere provincia, tot oppidis, tot familiis tam copiosis, <strong>ullum</strong> argenteum vas, ullum Corinthium aut Deliacum fuisse, <strong>ullam</strong> gemmam aut margaritam</td>
<td>Cic. <em>Ver.</em></td>
<td>2.4.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nego</strong> in Sicilia tota, tam locupleti, tam vetere provincia, tot oppidis, tot familiis tam copiosis, <strong>ullum</strong> argenteum vas, ullum Corinthium aut Deliacum fuisse, ullum gemmam aut margaritam, quicquam ex auro aut ebore factum, <em>signum</em> <strong>ullum</strong> aeneum, marmoreum, eburneum</td>
<td>Cic. <em>Ver.</em></td>
<td>2.4.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nego ullam</strong> picturam neque in tabula neque in textili</td>
<td>Cic. <em>Ver.</em></td>
<td>2.4.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negat ullo</strong> modo fieri posse</td>
<td>Cic. <em>Ver.</em></td>
<td>2.4.85</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Sacerdos parentem eius <strong>negat ullius</strong> scelere posse violari</td>
<td>Curt.</td>
<td>4.7.27</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>qui <strong>negant ullam</strong> avem praeter ficedulam totam comesse oportere</td>
<td>Gell.</td>
<td>15.8.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>qui cum ex ueteribus tribunis <strong>negaret se ullius</strong> rationem habiturum</td>
<td>Liv.</td>
<td>3.64.5</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>qua <strong>negarent</strong> oportere extra Peloponnesum <strong>ullam</strong> urbe muros habere</td>
<td>Nep. Them.</td>
<td>6.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negat</strong> ponere álio modo <strong>úllo</strong> profécto, nísí se scíat vilićiō non datum íri.</td>
<td>Pl. Cas.</td>
<td>697</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negabisque ullius</strong> pretiiesse, cuius pretium reposcaris.</td>
<td>Plin. Ep.</td>
<td>7.12.6</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>praeterea <strong>negat ulla</strong>m atrocìus esse animal ad conficiendum hominem in aqua.</td>
<td>Plin. Nat.</td>
<td>9.50</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>et insectis <strong>negatur</strong> aequë esse <strong>ulla</strong> cartilagine a aquatilium habent medullam in spina</td>
<td>Plin. Nat.</td>
<td>11.90</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>qui <strong>negant</strong> volucrem <strong>ulla</strong>m sine pedibus esse</td>
<td>Plin. Nat.</td>
<td>11.112</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>artemisiam quoque secum habentibus <strong>negant</strong> nocere mala medicamenta aut bestiam <strong>ulla</strong>m, ne solem quidem</td>
<td>Plin. Nat.</td>
<td>25.67</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>lysippum sicyonium duris <strong>negat ulla</strong>ius fuisset discipulum</td>
<td>Plin. Nat.</td>
<td>34.26</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negas</strong> te <strong>ulla</strong>m munus accepsisse?</td>
<td>Sen. Ben.</td>
<td>4.6.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>Negas,</strong> &quot;inquit,&quot; <strong>ulla</strong>m dare beneficium eum, qui me gratuita nave per flumen Padum tulit?&quot;</td>
<td>Sen. Ben.</td>
<td>6.19.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>et <strong>negauit ulla</strong>m aliam illi causam esse persequendì tyrannicidam nisi libertatem publicam</td>
<td>Sen. Controv.</td>
<td>1.7.13</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>primum <strong>negauit ulla</strong>m esse prodicionem</td>
<td>Sen. Controv.</td>
<td>7.7.10</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>negabat</strong> itaque <strong>ulli</strong> se placere posse nisi totum;</td>
<td>Sen. Controv.</td>
<td>10.pr.15</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quod <strong>negatis ulla</strong>m esse aliud honesto bonum</td>
<td>Sen. Ep.</td>
<td>74.22</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ut primum <strong>negaret ullahs</strong> in Oceano aut trans Oceanum esse terras habitables.</td>
<td>Sen. Suas.</td>
<td>1.10</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ac <strong>negante</strong> quodam per contumeliam facile hoc <strong>ulli</strong> feminae fore, responderit quasi adlusdens</td>
<td>Suet. Jul.</td>
<td>22.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>uerum neque senatu interueniente et aduersarìis <strong>negantibus ulla</strong>m se de re</td>
<td>Suet. Jul.</td>
<td>30.1</td>
<td>y</td>
<td>y</td>
</tr>
</tbody>
</table>


publica facturos pactionem, transiit in citeriorem Galliam

C2 Nego licenses *umquam*

Below is listed each instance in the *Perseus* corpus where *nego* ‘deny’ licenses *umquam* ‘ever.’ A search was conducted on 3/7/21 over the entire corpus listed in Appendix A, with the query ‘lemma:nego umquam,’ anywhere in the same sentence.

As indicated in Section 2.3.1.3, in each case, *nego* precedes-and-commands *umquam.*

<table>
<thead>
<tr>
<th>Excerpt</th>
<th>Text</th>
<th>Passage</th>
<th>Nego licenses <em>umquam</em>?</th>
<th>Nego precedes-and-commands <em>umquam</em>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>negansque <em>umquam</em> habuisse, uxoris colli decus vel capitis poscebatur.</td>
<td>Amm.</td>
<td>20.4.17</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>sed enim uersutiam tam insidiosam, tam admirabili scelere conflatam <em>negabis</em> te <em>umquam</em> cognouisse.</td>
<td>Apul. <em>Apol.</em></td>
<td>81</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>introductus Vettius primo <em>negabat</em> se <em>umquam</em> cum Curione constissit, neque id sane diu</td>
<td>Cic. <em>Att.</em></td>
<td>2.24.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>nego</em> usquam <em>umquam</em> fuisse maiores</td>
<td>Cic. <em>Clu.</em></td>
<td>111</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quod eum <em>negasti</em>, qui non cite quid didicisset, <em>umquam</em> omnino posse perdiscere</td>
<td>Cic. <em>de Orat.</em></td>
<td>3.146</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>negat</em> <em>umquam</em> se a te in Deiotari tetrarchia pedem discessisse</td>
<td>Cic. <em>Deiot.</em></td>
<td>42</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>qui tibi venit in mentem <em>negare</em> Papirium quemquam <em>umquam</em> nisi plebeium fuisse?</td>
<td>Cic. <em>Fam.</em></td>
<td>9.21.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>qui omnia ponat in voluptate, et tamen non <em>negat</em> libenter cenasse <em>umquam</em> Gallonium—mentiretur enim—, sed bene.</td>
<td>Cic. <em>Fin.</em></td>
<td>2.24</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>recte ergo is <em>negat umquam</em> bene cenasse Gallonium, recte miserum</td>
<td>Cic. <em>Fin.</em></td>
<td>2.25</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>nego</em> <em>umquam</em> post sacra constituta</td>
<td>Cic. <em>Har.</em></td>
<td>13</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Latin Phrase</td>
<td>Author</td>
<td>Page</td>
<td>Precede</td>
<td>Command</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
<td>------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>itaque Timagoras Epicureus <em>negat</em> sibi <em>umquam</em> cum oculum torsisset duas ex lucerna flammulas esse visas</td>
<td>Cic. Luc.</td>
<td>80</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>si negem</em> me <em>umquam</em> ad te istas litteras misisse*</td>
<td>Cic. Phil.</td>
<td>2.8</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>negavit</em> se triumphi cupidum <em>umquam</em> fuisse.</td>
<td>Cic. Pis.</td>
<td>56</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>negat</em> se <em>umquam</em> sensisse senectutem suam imbecilliorem factam quam adolescentia fuisset.</td>
<td>Cic. Sen.</td>
<td>30</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>negare umquam</em> laetitia adfici posse insipientem, quod nihil umquam haberet boni</td>
<td>Cic. Tusc.</td>
<td>4.66</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>negaretque umquam</em> beatiorem quemquam fuisse</td>
<td>Cic. Tusc.</td>
<td>5.61</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>negavit umquam</em> se bibisse iucundius.</td>
<td>Cic. Tusc.</td>
<td>5.97</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>negat</em> Socrat de caeli atque naturae causis rationibusque <em>umquam</em> disputavisse</td>
<td>Gell.</td>
<td>14.3.5</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>quosque neges umquam</em> posse iacere, cadunt.</td>
<td>Ov. Am.</td>
<td>1.9.30</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Sanun es, qui istuc exoptes aut <em>neges</em> te <em>umquam</em> pedem in eas aedis intulisse ubi habitas, insanissime?</td>
<td>Pl. Men.</td>
<td>817</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>umquam</em> solam hanc alitem fulmine examinatam</td>
<td>Plin. Nat.</td>
<td>10.4</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>nil suis bonus negavit</em> Christus <em>umquam</em> testibus.</td>
<td>Prudent. Perist.</td>
<td>1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><em>Idem enim negat umquam</em> virtutem esse sine voluptate*</td>
<td>Sen. Ep.</td>
<td>85.18</td>
<td>y</td>
<td>y</td>
</tr>
</tbody>
</table>

**C3 Nemo licenses ullus**

Below is listed each instance in the Perseus corpus where *nemo* ‘no one’ licenses *ullus* ‘any.’ A search was conducted on 3/7/21 over the entire corpus listed in Appendix A, with the query ‘lemma:nemo lemma:ullus,’ anywhere in the same sentence. As indicated in Section 2.3.1.3, in each case, *nemo* precedes-and-commands *ullus.*
<table>
<thead>
<tr>
<th>Excerpt</th>
<th>Text</th>
<th>Passage</th>
<th>Nemo licenses ullus?</th>
<th>Nemo precedes-and-commands ullus?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad urbem ita veni ut nemo ullius ordinis homo nomenclator notus fuerit qui mihi obviam non venerit</td>
<td>Cic. Att.</td>
<td>4.1.5</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quo neminem umquam melius ullam oravisse capitis causam</td>
<td>Cic. Brut.</td>
<td>12.47</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nemo rem ullam contrahebat</td>
<td>Cic. Clu.</td>
<td>41</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nemo umquam te placavit inimicus qui ellas resedisse in te simultatis reliquias senserit.</td>
<td>Cic. Deiot.</td>
<td>9</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>civitatem vero nemo umquam ullo populi iussu amittet invitus.</td>
<td>Cic. Dom.</td>
<td>78</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>civis est nemo tanto in populo, extra contaminatam illam et cruentam P. Clodimmanum, qui rem ullam de meis bonis attigerit</td>
<td>Cic. Dom.</td>
<td>108</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ex quibus nemo rem ullam attigit qui non omnium iudicio sceleratissimus haberetur</td>
<td>Cic. Dom.</td>
<td>108</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>in qua neminem prudentem hominem res alla delectet</td>
<td>Cic. Fam.</td>
<td>5.17.3</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Min qua nemo nostrum post Afranium superatum bellum ullam fore putaret.</td>
<td>Cic. Fam.</td>
<td>9.13.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>sic nemo ullam in re potest id</td>
<td>Cic. Fin.</td>
<td>3.29</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>neminem tamen adeo infatuare potuit ut ei nummum ullam crederet.</td>
<td>Cic. Flac.</td>
<td>47</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nemo est civis Romanus qui sibi ullam excusatione utendum putet</td>
<td>Cic. Font.</td>
<td>46</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ut coarguant neminem ullam de re posse contendere</td>
<td>Cic. Luc.</td>
<td>35</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>et quem ad modum nemini illorum molestus ullam in me umquam fuisti</td>
<td>Cic. Pet.</td>
<td>5.20</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>omnino nemo ullius rei fuit emptor cui defuerit hic venditor.</td>
<td>Cic. Phil.</td>
<td>2.97</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ex vobis audio nemini civi ullam quo minus adesset satis iustam excusationem esse visam</td>
<td>Cic. Pis.</td>
<td>36</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>neminem</strong> umquam est hic ordo complexus honoribus et beneficiis suis qui <strong>ullam</strong> dignitatem praestabiliorem ea quam per vos esset adeptus putarit</td>
<td>Cic. <em>Prov.</em></td>
<td>38</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>quorum regum summo imperio</strong> nemo umquam verbum <strong>ullam</strong> asperius audivit.</td>
<td>Cic. <em>Q. fr.</em></td>
<td>1.2.7</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Quem vi/dit nemo ulla i/ngemescence/m malo!</td>
<td>Cic. <em>Tusc.</em></td>
<td>2.21</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> sit qui te ulla cruciatu esse indignum putet</td>
<td>Cic. <em>Vat.</em></td>
<td>19</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>quorum ex testimoniis cognoscere potuistis tota Sicilia per triennium neminem ulla</strong> in civitate senatorem factum esse gratis</td>
<td>Cic. <em>Ver.</em></td>
<td>2.2.120</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ad quod facinus nemo praeter te ulla pecunia adduci potuerit</td>
<td>Cic. <em>Ver.</em></td>
<td>2.5.11</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> est qui ulla spem salutis reliquam esse arbitretur.</td>
<td>Cic. <em>Ver.</em></td>
<td>2.5.12</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ut nemini minus expediret ulla in Sicilia tumultum aut bellum commoveri</td>
<td>Cic. <em>Ver.</em></td>
<td>2.5.20</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ut nemo tam rusticanus homo L. Lucullo [et ] M. Cotta consulibus Romam ex ulla municipio vadimoni causa venerit</td>
<td>Cic. <em>Ver.</em></td>
<td>2.5.34</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo ullius</strong> nisi fugae memor.</td>
<td>Liv.</td>
<td>2.59.8</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> in Epirum venit, cui res ulla defuerit</td>
<td>Nep. <em>Att.</em></td>
<td>11.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ut nemo interpellet adversus eum de ulla negotio nec quisquam ei molestus sit de ulla ratione</td>
<td>NT</td>
<td>1 Macc.10</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ut ludaei utantur cibis et legibus suis sicut et prius et nemo eorum ulla modo molestiam patiatur de his quae per ignorantiam gesta sunt</td>
<td>NT</td>
<td>2 Macc.11</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ecce nunc tempus acceptabile ecce nunc dies salutis nemini dantes ulla offensionem ut non vituperetur ministerium</td>
<td>NT</td>
<td>2 Cor.6</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> umquam ulla artium validius favit.</td>
<td>Plin. <em>Nat.</em></td>
<td>30.4</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo rem ulla</strong> contrahebat</td>
<td>Quint.</td>
<td>9.3.38</td>
<td>y</td>
<td>y</td>
</tr>
</tbody>
</table>
nemo enim tam expers erit sensus ac sanitatis, ut fortunam ulli queratur luctum intulisse

Nemo ullam auferat diem nihil dignum tanto impendio redditurus

Itaque nemo artem ullam aliam conatur domi facere

C4 Nemo licenses umquam

Below is listed each instance in the Perseus corpus where nemo ‘no one’ licenses umquam ‘ever.’ A search was conducted on 3/7/21 over the entire corpus listed in Appendix A, with the query ‘lemma:nemo lemma:umquam,’ anywhere in the same sentence. As indicated in Section 2.3.1.3, in each case, nemo precedes-and-commands umquam.

<table>
<thead>
<tr>
<th>Excerpt</th>
<th>Text</th>
<th>Passage</th>
<th>Nemo licenses umquam?</th>
<th>Nemo precedes-and-commands umquam?</th>
</tr>
</thead>
<tbody>
<tr>
<td>probro nemini umquam fuit.</td>
<td>Amm.</td>
<td>30.8.7</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>neminem umquam superbia influit</td>
<td>Apul. Apol.</td>
<td>18</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>reliquit enim te quam non relicturam nemo umquam poterit esse securus.</td>
<td>Boethius</td>
<td>2.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>cui nemo umquam ueterum refragatus est</td>
<td>Boethius</td>
<td>5.P1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>moveor enim tali amico orbatus, qualis, ut arbitror, nemo umquam erit, ut confirmare possum, nemo certe fuit.</td>
<td>Cic. Amic.</td>
<td>10</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nemo umquam animo aut spe maiora suscipiet qui sibi non illius memoriam</td>
<td>Cic. Amic.</td>
<td>102</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>hoc adf firmo, neminem umquam tanta calamitate esse adfectum, nemini mortem magis optandam fuisse.</td>
<td>Cic. Att.</td>
<td>3.7.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ita sim adfictus ut nemo umquam, quod tute intellegis.</td>
<td>Cic. Att.</td>
<td>3.12.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>me adfictum vides ut neminem umquam nec videris nec audieris.</td>
<td>Cic. Att.</td>
<td>3.13.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nemo enim umquam tantum de urbanis praedis detraxit.</td>
<td>Cic. Att.</td>
<td>7.17.1</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>iam illa HS LX quae scribis nemo mihi umquam dixit ex dote esse detracta</td>
<td>Cic. Att.</td>
<td>11.2.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> neque poeta neque orator fuit qui quemquam meliorem quam se arbitraretur.</td>
<td>Cic. <em>Att.</em></td>
<td>14.20.3</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>hoc vero <strong>neminem umquam</strong> audivi!</td>
<td>Cic. <em>Att.</em></td>
<td>15.11.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> doctus <strong>umquam</strong> (multa autem de hoc genere scripta sunt) mutationem consili inconstantiam dixit</td>
<td>Cic. <em>Att.</em></td>
<td>16.7.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>peritus vero nostri moris ac iuris <strong>nemo umquam</strong>, qui hanc civitatem retinere vellet, in aliam se civitatem dicavit.</td>
<td>Cic. <em>Balb.</em></td>
<td>30</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> est de civitate accusatus</td>
<td>Cic. <em>Balb.</em></td>
<td>52</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>in maximis nostris malis atque discordiis <strong>neminem umquam</strong> alterius rationis ac partis non re, non verbo, non vultu</td>
<td>Cic. <em>Balb.</em></td>
<td>58</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quo <strong>neminem umquam</strong> melius ullam oravisse capitis causam</td>
<td>Cic. <em>Brut.</em></td>
<td>12.47</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>eum enim magistratum <strong>nemo umquam</strong> Scaevolarum petivit.</td>
<td>Cic. <em>Brut.</em></td>
<td>43.161</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>sed <strong>nemo umquam</strong> urbanitate, nemo lepore, nemo suavitate condition.</td>
<td>Cic. <em>Brut.</em></td>
<td>48.177</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>sic <strong>nemo umquam</strong> interdixit; novum est, non dico inusitatum, verum omnino inauditum.</td>
<td>Cic. <em>Caec.</em></td>
<td>36</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>nam quod est obiectum municipibus esse adulescentem non probatum suis, <strong>nemini umquam</strong> praesenti Praestutiani</td>
<td>Cic. <em>Cael.</em></td>
<td>5</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>obiurgavit M. Caelium, sicut <strong>neminem umquam</strong> parens</td>
<td>Cic. <em>Cael.</em></td>
<td>25</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>postea <strong>nemini umquam</strong> concessit aequalium plus ut in foro</td>
<td>Cic. <em>Cael.</em></td>
<td>74</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>neminen umquam</strong> maioribus criminibus gravioribus testibus esse in iudicium vocatum</td>
<td>Cic. <em>Clu.</em></td>
<td>9</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> illum ex tam multis cognatis et adfinibus tutorem <strong>umquam</strong> liberis suis scripsit</td>
<td>Cic. <em>Clu.</em></td>
<td>41</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quae res <strong>nemini umquam</strong> fraudi fuit</td>
<td>Cic. <em>Clu.</em></td>
<td>91</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>neminen umquam</strong> esse confirmo.</td>
<td>Cic. <em>Clu.</em></td>
<td>157</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quamquam tibi par mea sententia <strong>nemo umquam</strong> fuit</td>
<td>Cic. <em>de Orat.</em></td>
<td>1.122</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> adsequetur</td>
<td>Cic. de Orat.</td>
<td>1.134</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>qua tibi <strong>nemo umquam</strong> praestitit</td>
<td>Cic. de Orat.</td>
<td>1.263</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>etenim me dicentem qui audiret, <strong>nemo umquam</strong> tam sui despiciens</td>
<td>Cic. de Orat.</td>
<td>2.364</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Crasso dicente <strong>nemo</strong> tam arrogans, qui similiter se <strong>umquam</strong> dictum esse confideret.</td>
<td>Cic. de Orat.</td>
<td>2.364</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> enim <strong>umquam</strong> est oratorem, quod Latine loqueretur, admiratus</td>
<td>Cic. de Orat.</td>
<td>3.52</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quos <strong>nemo</strong> oratorum istorum <strong>umquam</strong> attigit</td>
<td>Cic. de Orat.</td>
<td>3.81</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> te placavit inimicus qui uillas resedisse in te simulatatis reliquias sensorit.</td>
<td>Cic. Deiot.</td>
<td>9</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemone</strong> igitur <strong>umquam</strong> alius ovum somniavit?</td>
<td>Cic. Div.</td>
<td>2.134</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> tulit</td>
<td>Cic. Dom.</td>
<td>43</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>civitatem vero <strong>nemo umquam</strong>ullo populi iussu amittet invitus</td>
<td>Cic. Dom.</td>
<td>78</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> sanus exsulem appellavit</td>
<td>Cic. Dom.</td>
<td>83</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ambulationis postis <strong>nemo umquam</strong> tenuit in dedicando</td>
<td>Cic. Dom.</td>
<td>121</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>etenim si <strong>nemo umquam</strong> praedo tam barbarus atque immanis fuit</td>
<td>Cic. Dom.</td>
<td>140</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>qua iniuria <strong>nemo umquam</strong> in aliquo magistratu improbissimus civis adfectus est</td>
<td>Cic. Fam.</td>
<td>5.2.7</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>hominem esse <strong>neminem</strong>, qui <strong>umquam</strong> mentionem tui sine tua summa laude fecerit</td>
<td>Cic. Fam.</td>
<td>13.24.2</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ut <strong>nemini</strong> se intellegat commendatio rem <strong>umquam</strong> fuisset</td>
<td>Cic. Fam.</td>
<td>13.49</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>ut <strong>nemo umquam</strong> vinulentum illum, nemo in eo libidinis vestigium viderit.</td>
<td>Cic. Fat.</td>
<td>10</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>quam <strong>nemo umquam</strong> voluptatem appellavit, appellat</td>
<td>Cic. Fin.</td>
<td>2.30</td>
<td>y</td>
<td>y</td>
</tr>
</tbody>
</table>
Nam *nemo* haec *umquam* est transvectus caerula cursu  

<table>
<thead>
<tr>
<th>Text</th>
<th>Cic.</th>
<th>Y</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>neminem unquam</em> putavi per eos ipsos periculum huus fortunis atque insidias creaturum</td>
<td>Cic. Flac.</td>
<td>2</td>
<td>Y</td>
</tr>
<tr>
<td>Cum vero is quem <em>nemo</em> vestrum vidit <em>umquam</em></td>
<td>Cic. Flac.</td>
<td>40</td>
<td>Y</td>
</tr>
<tr>
<td><em>nemo unquam</em> adiit</td>
<td>Cic. Har.</td>
<td>37</td>
<td>Y</td>
</tr>
<tr>
<td><em>nemo unquam</em> superiorum non modo expresserat</td>
<td>Cic. Luc.</td>
<td>77</td>
<td>Y</td>
</tr>
<tr>
<td>hoc brevissime dicam, <em>neminem unquam</em> tam impudentem fuisse</td>
<td>Cic. Man.</td>
<td>48</td>
<td>Y</td>
</tr>
<tr>
<td><em>neminem unquam</em> hominem homini cariorem fuisse quam te sibi</td>
<td>Cic. Mil.</td>
<td>68</td>
<td>Y</td>
</tr>
<tr>
<td>in qua <em>nemini unquam</em> infimo maiores nostri patronum deesse voluerunt.</td>
<td>Cic. Mur.</td>
<td>10</td>
<td>Y</td>
</tr>
<tr>
<td><em>nemo</em> gustavit <em>umquam</em> cubans</td>
<td>Cic. Mur.</td>
<td>74</td>
<td>Y</td>
</tr>
<tr>
<td>sed <em>nemo unquam</em> docebit</td>
<td>Cic. Nat. D.</td>
<td>2.87</td>
<td>Y</td>
</tr>
<tr>
<td>virtutem autem <em>nemo unquam</em> acceptam deo rettulit</td>
<td>Cic. Nat. D.</td>
<td>3.86</td>
<td>Y</td>
</tr>
<tr>
<td>si exploratum quidem habeat id omnino <em>neminem unquam</em> suspicaturum.</td>
<td>Cic. Off.</td>
<td>3.75</td>
<td>Y</td>
</tr>
<tr>
<td><em>nemo unquam</em> multitudini fuit carior.</td>
<td>Cic. Off.</td>
<td>3.80</td>
<td>Y</td>
</tr>
<tr>
<td><em>Nemo</em> is, inquies, <em>umquam</em> fuit.</td>
<td>Cic. Orat.</td>
<td>29</td>
<td>Y</td>
</tr>
<tr>
<td>hoc modo dicere <em>nemo unquam</em> noluit</td>
<td>Cic. Orat.</td>
<td>70.234</td>
<td>Y</td>
</tr>
<tr>
<td>et quem ad modum <em>nemini illorum</em> molestus ulla in me <em>umquam</em> fuisti</td>
<td>Cic. Pet.</td>
<td>5.20</td>
<td>Y</td>
</tr>
<tr>
<td>se probatos <em>nemini unquam</em> fore.</td>
<td>Cic. Pet.</td>
<td>6.21</td>
<td>Y</td>
</tr>
<tr>
<td><em>nemo</em> credet <em>umquam</em></td>
<td>Cic. Phil.</td>
<td>2.36</td>
<td>Y</td>
</tr>
<tr>
<td><em>nemo unquam</em> puer emptus libidinis causa tam fuit in domini potestate quam tu</td>
<td>Cic. Phil.</td>
<td>2.45</td>
<td>Y</td>
</tr>
<tr>
<td>non modo hic latro quem clientem habere <em>nemo</em> velit sed quis <em>umquam</em> tantis opibus</td>
<td>Cic. Phil.</td>
<td>6.12</td>
<td>Y</td>
</tr>
<tr>
<td>tempus habes tale quale <em>nemo</em> habuit <em>umquam</em>.</td>
<td>Cic. Phil.</td>
<td>7.27</td>
<td>Y</td>
</tr>
<tr>
<td>Latin Phrase</td>
<td>Reference</td>
<td>Book</td>
<td>Location</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------</td>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td>est autem ita adfectus ut nemo umquam unici fili mortem magis doluerit quam ille maeret patris.</td>
<td>Cic. Phil.</td>
<td>9.12</td>
<td>y y</td>
</tr>
<tr>
<td>qua nemo umquam ignominia notaretur</td>
<td>Cic. Pis.</td>
<td>45</td>
<td>y y</td>
</tr>
<tr>
<td>ut nemo umquam prior eam tulerit</td>
<td>Cic. Planc.</td>
<td>49</td>
<td>y y</td>
</tr>
<tr>
<td>sed nemo umquam sic egit ut tu</td>
<td>Cic. Planc.</td>
<td>60</td>
<td>y y</td>
</tr>
<tr>
<td>quas nationes nemo umquam fuit quin frangit domarique cuperet.</td>
<td>Cic. Prov.</td>
<td>33</td>
<td>y y</td>
</tr>
<tr>
<td>neminem umquam est hic ordo complexus honoribus et beneficiis suis</td>
<td>Cic. Prov.</td>
<td>38</td>
<td>y y</td>
</tr>
<tr>
<td>nemo umquam hic potuit esse princeps qui maluerit esse popularis.</td>
<td>Cic. Prov.</td>
<td>38</td>
<td>y y</td>
</tr>
<tr>
<td>quorum regum summo imperio nemo umquam verbum ulla asperius audivit.</td>
<td>Cic. Q. fr.</td>
<td>1.2.7</td>
<td>y y</td>
</tr>
<tr>
<td>quoniam in tantum luctum laboremque detrusus es quantum nemo umquam</td>
<td>Cic. Q. fr.</td>
<td>1.4.4</td>
<td>y y</td>
</tr>
<tr>
<td>ne is de cuius officio nemo umquam dubitavit</td>
<td>Cic. Quinct.</td>
<td>99</td>
<td>y y</td>
</tr>
<tr>
<td>neminem umquam adhuc de se esse confessum</td>
<td>Cic. Rab. Perd.</td>
<td>23</td>
<td>y y</td>
</tr>
<tr>
<td>ita contendo, neminem umquam 'Qvo ea pecvnia pervenisset ' causam dixisse</td>
<td>Cic. Rab. Post.</td>
<td>9</td>
<td>y y</td>
</tr>
<tr>
<td>quo nemo melior umquam fuit</td>
<td>Cic. Rab. Post.</td>
<td>48</td>
<td>y y</td>
</tr>
<tr>
<td>ut intelligere possitis neminem umquam tanta eloquentia fuisse</td>
<td>Cic. Red. Pop.</td>
<td>5</td>
<td>y y</td>
</tr>
<tr>
<td>inrisit squalorem vestrum et luctum gratissimae civitatis, fecitque, quod nemo umquam tyrannus</td>
<td>Cic. Red. Sen.</td>
<td>12</td>
<td>y y</td>
</tr>
<tr>
<td>quam opinionem nemo umquam mortalis adsequi potuit sine eximia virtutis gloria.</td>
<td>Cic. Rep.</td>
<td>2.17</td>
<td>y y</td>
</tr>
<tr>
<td>nemo umquam mihi, Scipio, persuadebit</td>
<td>Cic. Sen.</td>
<td>82</td>
<td>y y</td>
</tr>
<tr>
<td>qui per se pungere neminem umquam potuissent</td>
<td>Cic. Sest.</td>
<td>24</td>
<td>y y</td>
</tr>
<tr>
<td><strong>neminem umquam</strong> fore qui auderet suscipere contra improbos civis salutem rei publicae</td>
<td>Cic. Sest.</td>
<td>49</td>
<td>y</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>nemo</strong> huic ipsi nostro C. Mario, cum ei multi inviderent, obiecit <strong>umquam</strong></td>
<td>Cic. Sul.</td>
<td>23</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> me tenuissima suspicione perstrinxit</td>
<td>Cic. Sul.</td>
<td>46</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> sine magna spe inmortalitatis se pro patria offerret ad mortem.</td>
<td>Cic. Tusc.</td>
<td>1.32</td>
<td>y</td>
</tr>
<tr>
<td>quorum non modo <strong>nemo</strong> exclamavit <strong>umquam</strong>, sed ne ingemuit quidem.</td>
<td>Cic. Tusc.</td>
<td>2.34</td>
<td>y</td>
</tr>
<tr>
<td>in qua sapiens <strong>nemo</strong> efficietur <strong>umquam</strong></td>
<td>Cic. Tusc.</td>
<td>5.100</td>
<td>y</td>
</tr>
<tr>
<td>quas contra praeter te <strong>nemo umquam</strong> est facere conatus</td>
<td>Cic. Vat.</td>
<td>18</td>
<td>y</td>
</tr>
<tr>
<td>quod <strong>nemo umquam</strong> ademit</td>
<td>Cic. Vat.</td>
<td>35</td>
<td>y</td>
</tr>
<tr>
<td><strong>ut nemo umquam</strong> post hominum memoriam paratior, vigilantior, compositior ad iudicium venisse videatur.</td>
<td>Cic. Ver.</td>
<td>1.1.32</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> sapiens proditori credendum putavit.</td>
<td>Cic. Ver.</td>
<td>2.1.38</td>
<td>y</td>
</tr>
<tr>
<td><strong>neminem umquam</strong> hoc postea alium edixisse?</td>
<td>Cic. Ver.</td>
<td>2.1.117</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> reus tam nocens adducetur</td>
<td>Cic. Ver.</td>
<td>2.2.27</td>
<td>y</td>
</tr>
<tr>
<td>clamare omnes ex conventu <strong>neminem umquam</strong> in Sicilia fuisse Verrucium.</td>
<td>Cic. Ver.</td>
<td>2.2.188</td>
<td>y</td>
</tr>
<tr>
<td>quod <strong>nemo umquam</strong> post hominum memoriam fecit</td>
<td>Cic. Ver.</td>
<td>2.3.44</td>
<td>y</td>
</tr>
<tr>
<td>vivere <strong>nemo umquam</strong> nisi turpis impurusque voluisset</td>
<td>Cic. Ver.</td>
<td>2.3.65</td>
<td>y</td>
</tr>
<tr>
<td><strong>ut eum nemo umquam</strong> in equo sedentem viderit</td>
<td>Cic. Ver.</td>
<td>2.5.27</td>
<td>y</td>
</tr>
<tr>
<td>quodque <strong>nemo</strong> visurum se <strong>umquam</strong> speraverat factum</td>
<td>Flor.</td>
<td>1.34.18.11</td>
<td>y</td>
</tr>
<tr>
<td>quod <strong>nemo umquam</strong> meminerat</td>
<td>Flor.</td>
<td>2.13.2.79</td>
<td>y</td>
</tr>
<tr>
<td><strong>neminem umquam</strong> ab eo descivisse</td>
<td>Gell.</td>
<td>15.22.10</td>
<td>y</td>
</tr>
<tr>
<td>quod praeter tribunos plebi—et id ipsum pessimo exemplo—<strong>nemo unquam</strong> fecisset.</td>
<td>Liv.</td>
<td>3.35.8</td>
<td>y</td>
</tr>
<tr>
<td>ut <strong>neminem unquam</strong> Graeca lingua loquentem magis sint admirati.</td>
<td>Nep. Di.</td>
<td>1.5</td>
<td>y</td>
</tr>
<tr>
<td>quas <strong>nemo unquam</strong> cum exercitu ante eum praeter Herculem Graium transierat</td>
<td>Nep. Han.</td>
<td>3.4</td>
<td>y</td>
</tr>
<tr>
<td>cui <strong>nemo unquam</strong> hominum sedit</td>
<td>NT</td>
<td>Luke.19</td>
<td>y</td>
</tr>
<tr>
<td>Deum <strong>nemo</strong> vidit <strong>umquam</strong> unigenitus Filius</td>
<td>NT</td>
<td>John.1</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemini</strong> servivimus <strong>umquam</strong></td>
<td>NT</td>
<td>John.8</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> enim <strong>umquam</strong> carnem suam odio habuit</td>
<td>NT</td>
<td>Eph.5</td>
<td>y</td>
</tr>
<tr>
<td>Deum <strong>nemo</strong> vidit <strong>umquam</strong></td>
<td>NT</td>
<td>1 John.4</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nemo unquam</strong> convivaram per eandem ianuam emissus est</td>
<td>Petron. Satyricon</td>
<td>72</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nemo unquam</strong> tibi parem gratiam refert.</td>
<td>Petron. Satyricon</td>
<td>77</td>
<td>y</td>
</tr>
<tr>
<td>Amor ingenii <strong>neminem unquam</strong> divitem fecit.</td>
<td>Petron. Satyricon</td>
<td>83</td>
<td>y</td>
</tr>
<tr>
<td>quod <strong>nemo unquam</strong> homo antehac vidit</td>
<td>Pl. Am.</td>
<td>565</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nemo</strong> homo <strong>umquam</strong> ita arbitratust.</td>
<td>Pl. Pre.</td>
<td>207</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo unquam</strong> ulli artium validius favit.</td>
<td>Plin. Nat.</td>
<td>30.4</td>
<td>y</td>
</tr>
<tr>
<td>quem <strong>nemo</strong> vidit <strong>umquam</strong></td>
<td>Prudent. Cath.</td>
<td>6</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> illum ex tam multis cognatis et adfinibus tutorem unquam liberis suis scripsit</td>
<td>Quint.</td>
<td>9.3.38</td>
<td>y</td>
</tr>
<tr>
<td>ut <strong>nemo unquam</strong> ab eo frustra auxilium petiverit.</td>
<td>Sal. Cat.</td>
<td>34</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> enim <strong>unquam</strong> illum natum putavit.</td>
<td>Sen. Apocol.</td>
<td>3</td>
<td>y</td>
</tr>
<tr>
<td><strong>Neminem unquam</strong> vidi tam benignum etiam levissimorum officiorum aestimatorem</td>
<td>Sen. Ben.</td>
<td>5.1.3</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nemo</strong> in summam nequitiam incidit, qui <strong>umquam</strong> haesit sapientiae</td>
<td>Sen. Ben.</td>
<td>7.19.6</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> unus homo uni homini tam carus</td>
<td><strong>umquam</strong> fuit</td>
<td>Sen. <em>Clem.</em></td>
<td>1.1.5</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> tardius periit</td>
<td>Sen. <em>Con. ex.</em></td>
<td>4.3</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nemo umquam</strong> tam palam uxori</td>
<td>Sen. <em>Con. ex.</em></td>
<td>6.4</td>
<td>y</td>
</tr>
<tr>
<td><strong>Nemo umquam</strong> raptor serius periit.</td>
<td>Sen. <em>Con. ex.</em></td>
<td>8.6</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> quod cupiit deflet.</td>
<td>Sen. <em>Con. ex.</em></td>
<td>8.6</td>
<td>y</td>
</tr>
<tr>
<td>Hoc <strong>nemo</strong> praestitit <strong>umquam</strong> Gallione nostro decentius.</td>
<td>Sen. <em>Controv.</em></td>
<td>7.pr.5</td>
<td>y</td>
</tr>
<tr>
<td>quibus <strong>nemo umquam</strong> nisi dum disputat captus est?</td>
<td>Sen. <em>Ep.</em></td>
<td>45.6</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo</strong> me comitem tibi eripiet <strong>umquam.</strong></td>
<td>Sen. <em>Phoen.</em></td>
<td>53</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo umquam</strong> amplius declamantem audiuit</td>
<td>Sen. <em>Suas.</em></td>
<td>2.15</td>
<td>y</td>
</tr>
<tr>
<td>Valerius Messala tradit, <strong>neminem</strong></td>
<td>Suet. <em>Aug.</em></td>
<td>74.1</td>
<td>y</td>
</tr>
<tr>
<td><strong>umquam</strong> libertinorum adhibitum ab eo cenae excepto Mena</td>
<td>Suet. <em>Cl.</em></td>
<td>39.2</td>
<td>y</td>
</tr>
<tr>
<td>identidem diuulgauit <strong>neminem</strong></td>
<td>Tac. <em>Hist.</em></td>
<td>1.30</td>
<td>y</td>
</tr>
<tr>
<td><strong>umquam</strong> per adoptionem familiae Claudiae insertum.</td>
<td>Ter. <em>Hec.</em></td>
<td>279</td>
<td>y</td>
</tr>
<tr>
<td><strong>nemo enim umquam</strong> imperium flagitio</td>
<td>Tert. <em>Apol.</em></td>
<td>46.16</td>
<td>y</td>
</tr>
<tr>
<td>quasitum bonis artibus exercuit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nemini</strong> ego plura acerba credo esse ex amore homini <strong>umquam</strong> oblata quam mihi.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hoc pro suis omni atrocitate dissipatis <strong>nemo umquam</strong> temptavit Christianus.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D. Quantifier scope

The complete data for the results presented in Section 2.3.2, regarding the precede-and-command constraint on quantifier scope, is presented below.

**D1 Omnis ... aliquis**

Below is listed each instance in the *Perseus* corpus where *omnis* ‘every’ precedes-and-commands *aliquis* ‘some,’ separated by up to three words, due to time constraints. A search was conducted on 3/9/21 over the entire corpus listed in Appendix A, with the query ‘lemma:omnis lemma:aliquis.’

As indicated in Section 2.3.2.3–5, *omnis* preceding-and-commanding *aliquis* implies the former containing the latter in its scope, excepting certain cases of ellipsis.

<table>
<thead>
<tr>
<th>Excerpt</th>
<th>Text</th>
<th>Passage</th>
<th>∀ &gt; ∃?</th>
</tr>
</thead>
<tbody>
<tr>
<td>et <em>omnibus</em> annis <em>aliqua</em> sanitatatum miracula in eodem loco solent ad utilitatem eorum</td>
<td>Bede</td>
<td>2.16</td>
<td>y</td>
</tr>
<tr>
<td><em>omnes</em> qui <em>aliquid</em> de ingeniis poterant iudicare cognitione atque hospitio dignum existimarunt.</td>
<td>Cic. Arch.</td>
<td>5</td>
<td>y</td>
</tr>
<tr>
<td>quocum <em>omnia</em> quae me cura <em>aliqua</em> adficiunt uno communicem</td>
<td>Cic. Att.</td>
<td>1.18.1</td>
<td>y</td>
</tr>
<tr>
<td>de re publica video te conligere <em>omnia</em> quae putes <em>aliquam</em> spem mihi posse adferre mutandarum rerum.</td>
<td>Cic. Att.</td>
<td>3.7.3</td>
<td>y</td>
</tr>
<tr>
<td>hanc vero iniquitatem <em>omnes</em> cum <em>aliqua</em> crudelitate coniunctam.</td>
<td>Cic. Balb.</td>
<td>62</td>
<td>?</td>
</tr>
<tr>
<td>non quo <em>omnes</em> sint procuratores qui <em>aliquid</em> nostri negoti gerunt</td>
<td>Cic. Caec.</td>
<td>58</td>
<td>y</td>
</tr>
<tr>
<td>ab <em>omnibus</em> quibus potuerit <em>aliqua</em> de causa esse notus.</td>
<td>Cic. Cael.</td>
<td>3</td>
<td>y</td>
</tr>
<tr>
<td>datur enim concessu <em>omnia</em> huic <em>aliqui</em> ludus aetati</td>
<td>Cic. Cael.</td>
<td>28</td>
<td>y</td>
</tr>
<tr>
<td>nisi <em>omnia</em> quae cum turpitudine <em>aliqua</em> dicerentur in istam quadrare apte viderentur.</td>
<td>Cic. Cael.</td>
<td>69</td>
<td>y</td>
</tr>
<tr>
<td><em>omnes</em> abhorrebat, <em>omnes ut aliquam</em> immanem ac perniciosam bestiam pestemque fugiebant.</td>
<td>Cic. Clu.</td>
<td>41</td>
<td>?</td>
</tr>
<tr>
<td><em>omnes ut aliquam</em> immanem ac perniciosam bestiam pestemque fugiebant.</td>
<td>Cic. Clu.</td>
<td>41</td>
<td>?</td>
</tr>
<tr>
<td>commotus Crassus surrexit <em>omnesque</em> admirati maiorem <em>aliquam</em> esse causam eorum adventus suspiciati sunt.</td>
<td>Cic. de Orat.</td>
<td>2.12</td>
<td>y</td>
</tr>
<tr>
<td>maxime necessarius, homo et magnis meis beneficiis devinctus et prope <em>omnia</em>, qui mihi debere <em>aliquid</em> videntur, gratissimus</td>
<td>Cic. Fam.</td>
<td>13.27.2</td>
<td>y</td>
</tr>
<tr>
<td>Line</td>
<td>Translation</td>
<td>Author</td>
<td>Page</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>134</td>
<td>nostri non ex <em>omni</em> quod aestimatione <em>aliaqua</em> dignum sit, compleperi vitam beatam putent.</td>
<td>Cic. <em>Fin.</em></td>
<td>3.41</td>
</tr>
<tr>
<td>135</td>
<td>eorum <em>omnia</em> est <em>aliaqua</em> summa facienda</td>
<td>Cic. <em>Fin.</em></td>
<td>4.32</td>
</tr>
<tr>
<td>136</td>
<td>existimavique in <em>omnibus</em> rebus esse <em>aliaquid</em> optimum</td>
<td>Cic. <em>Orat.</em></td>
<td>11.36</td>
</tr>
<tr>
<td>137</td>
<td>nec quicquam est aliud dicere nisi <em>omnis</em> aut certe plerasque <em>aliaqua</em> specie inluminare sententias</td>
<td>Cic. <em>Orat.</em></td>
<td>39.136</td>
</tr>
<tr>
<td>138</td>
<td><em>omnes</em>, qui <em>aliaquid</em> scire videntur, tamquam domini timentur</td>
<td>Cic. <em>Parad.</em></td>
<td>40</td>
</tr>
<tr>
<td>140</td>
<td>cum plebes publica calamitate impendiis debilitata deficeret, salutis <em>omnia</em> causa <em>aliaqua</em> sublevatio et medicina quaesita est.</td>
<td>Cic. <em>Rep.</em></td>
<td>2.59</td>
</tr>
<tr>
<td>141</td>
<td>nam cum <em>omnia</em> horis <em>aliaquid</em> atrociter fieri videmus aut audimus,</td>
<td>Cic. <em>S. Rosc.</em></td>
<td>154</td>
</tr>
<tr>
<td>142</td>
<td>Testimonium autem nunc dicimus <em>omne</em> quod ab <em>aliaqua</em> re externa sumitur ad faciendam fidem.</td>
<td>Cic. <em>Top.</em></td>
<td>19.73</td>
</tr>
<tr>
<td>143</td>
<td>Sed <em>omnis</em> quaestio earum <em>aliaqua</em> de re est quibus causae continentur</td>
<td>Cic. <em>Top.</em></td>
<td>21.80</td>
</tr>
<tr>
<td>144</td>
<td>putasti, te in prætura atque imperio tot re quibus pretiosas, <em>omnis</em> denique res quae <em>aliacuius</em> preti fuerint, tota ex provincia coemisse?</td>
<td>Cic. <em>Ver.</em></td>
<td>2.4.8</td>
</tr>
<tr>
<td>145</td>
<td>quod <em>omnis</em> qui artifici <em>aliaquid</em> habuerant aut formae removerat atque abduxerat</td>
<td>Cic. <em>Ver.</em></td>
<td>2.5.71</td>
</tr>
<tr>
<td>146</td>
<td>sed <em>omnia</em> prorsum ad <em>aliaquid</em> referri taliaque videri qualis sit eorum species dum videntur</td>
<td>Gell.</td>
<td>11.5.7</td>
</tr>
<tr>
<td>147</td>
<td>et ut <em>omnia</em> ordinum uribus <em>aliaquid</em> ex nouo populo adiceretur equitum decem turmas ex Albanis legit</td>
<td>Liv.</td>
<td>1.30.3</td>
</tr>
<tr>
<td>148</td>
<td>et <em>omnis</em> populus qui habebat <em>aliaquam</em> quaestionem egrediabantur</td>
<td>NT</td>
<td>Exod.33</td>
</tr>
<tr>
<td>149</td>
<td><em>Omnibus</em> ergo dandum est <em>aliaquid</em> quod teneant</td>
<td>Plin. <em>Ep.</em></td>
<td>1.20.13</td>
</tr>
<tr>
<td>150</td>
<td>Nam cum est <em>omnia</em> officiorum finis <em>aliaquis</em></td>
<td>Plin. <em>Ep.</em></td>
<td>3.4.8</td>
</tr>
<tr>
<td>151</td>
<td>Equidem <em>omnes</em> qui <em>aliaquid</em> in studiis faciunt venerari etiam mirarique soleo</td>
<td>Plin. <em>Ep.</em></td>
<td>6.17.5</td>
</tr>
<tr>
<td>154</td>
<td></td>
<td>Plin. <em>Ep.</em></td>
<td>10.112.3</td>
</tr>
</tbody>
</table>
Superest ergo, ut ipse dispicias, an in **omnibus** civitatibus certum **aliquid** omnes, qui deinde buleutae legentur, debeat pro introitu dare.

<table>
<thead>
<tr>
<th>Statutenummer</th>
<th>Quellenangabe</th>
<th>Vers</th>
<th>Buch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nec dubium est <strong>omnes</strong> istos famam novitate <strong>aliqua</strong> auncupantes anima statim nostra negotiari.</td>
<td>Plin. <em>Nat.</em></td>
<td>29.3</td>
</tr>
<tr>
<td></td>
<td>fore libri videbantur, quos ab ipsis dicendi velut incunabulis, per <strong>omnes</strong>, quae modo <strong>aliquid</strong> oratori futuro conferant, artis ad summam eius operis perducere destinabamus</td>
<td>Quint.</td>
<td>1.pr.6</td>
</tr>
<tr>
<td></td>
<td>danda est tamen <strong>omnibus aliqua</strong> remissio</td>
<td>Quint.</td>
<td>1.3.8</td>
</tr>
<tr>
<td></td>
<td>cantatur ac saltatur per <strong>omnes</strong> gentes <strong>aliquo</strong> modo.</td>
<td>Quint.</td>
<td>2.17.10</td>
</tr>
<tr>
<td></td>
<td>aiunt etiam <strong>omnes</strong> artes habere finem <strong>aliquem</strong> propositum, ad quem tendant</td>
<td>Quint.</td>
<td>2.17.22</td>
</tr>
<tr>
<td></td>
<td>omnibus aut in plerisque eorum. ergo cum <strong>omnis</strong> causa contineatur <strong>aliquo</strong> statu</td>
<td>Quint.</td>
<td>3.6.1</td>
</tr>
<tr>
<td></td>
<td>praeter haec in <strong>omni</strong> partitione est utique <strong>aliquid</strong> potentissimum</td>
<td>Quint.</td>
<td>4.5.8</td>
</tr>
<tr>
<td></td>
<td>sed in <strong>omnes aliquid</strong> ex his cadit.</td>
<td>Quint.</td>
<td>7.2.50</td>
</tr>
<tr>
<td></td>
<td>nisi <strong>omnes</strong> aut certe plerasque <strong>aliqua</strong> specie illuminare sententias.</td>
<td>Quint.</td>
<td>9.1.40</td>
</tr>
<tr>
<td></td>
<td>ratus ex <strong>omnibus</strong> aeque <strong>aliquos</strong> ab tergo hostibus venturos.</td>
<td>Sal. <em>Jug.</em></td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>Hoc commune est patri eum <strong>omnibus</strong>, qui vitam <strong>alicui</strong> dederunt;</td>
<td>Sen. <em>Ben.</em></td>
<td>3.35.4</td>
</tr>
<tr>
<td></td>
<td>sic in <strong>omni</strong> negotio, etiam cum <strong>aliquid</strong>, quod prodesset sibi, fecerit, non tamen debeat referre gratiam sibi</td>
<td>Sen. <em>Ben.</em></td>
<td>5.8.2</td>
</tr>
<tr>
<td></td>
<td>erat a paucis etiam iustam excusationem non accipi quam ab <strong>omnibus aliquam</strong> temptari.</td>
<td>Sen. <em>Ben.</em></td>
<td>7.16.3</td>
</tr>
<tr>
<td></td>
<td>Scio a praeceptis incipere <strong>omnis</strong>, qui monere <strong>aliquem</strong> volunt, in exemplis desinere.</td>
<td>Sen. <em>Cons. Marc.</em></td>
<td>6.2.1</td>
</tr>
<tr>
<td></td>
<td>contumeliosus mira libido ferebatur <strong>omnis aliqua</strong> nota feriendi, ipse materia risus benignissima</td>
<td>Sen. <em>Constant.</em></td>
<td>2.18.1</td>
</tr>
<tr>
<td></td>
<td><strong>Omnes aliquid</strong> belli dixerunt illo loco quo deprensus sunt adulteri et dimissi.</td>
<td>Sen. <em>Controv.</em></td>
<td>1.4.10</td>
</tr>
<tr>
<td></td>
<td><strong>omnes aliquid</strong> ad uos inbecilli, alter alterius onera, detulimus:</td>
<td>Sen. <em>Controv.</em></td>
<td>2.4.12</td>
</tr>
<tr>
<td></td>
<td><strong>Omnes</strong> declamatores aiebat ululisse <strong>aliquid</strong> noui dicere illo loco quo nominabat nouerca filiam consciam.</td>
<td>Sen. <em>Controv.</em></td>
<td>8.6.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sen. <em>Controv.</em></td>
<td>10.pr.3</td>
</tr>
</tbody>
</table>
Pleraeque actiones malae, in omnibus tamen aliquod magni neclectique ingeni uestigium extabat.

Illud autem vide, ne ista lectio auctorum multorum et omnis generis voluminum habeat aliquid vagum et instabile. Sen. Ep. 2.2 y

noster error imposuit, et vocentur, quo turpius non sint—omnibus rebus tuis desset aliquid

Illud probo, quod omnia ad aliquem profectum redigis et tunc tantum offenderis Sen. Ep. 124.1 y

Omnis scientia atque ars aliquid debet habere manifestum sensuque conprehensum,

colit hic reges, calcet ut omnes perdatque aliquos nullumque levet

ad omne, quodcumque calore aliquo gerendum est, vocet. Sen. Ira 3.3.5 y

aeque autem et ab esuriente et a sitiente et ab omni homine quem aliqua res urit.

Omnis itaque labor aliquo referatur, aliquo respiciat!

Nam nos omnes, quibus est alicunde aliquis obiectus labos

Ter. Hec. 286 y

D2 Aliquis ... omnis

Below is listed each instance in the Perseus corpus where aliquis ‘some’ precedes-and-commands omnis ‘every,’ separated by up to three words, due to limited time. A search was conducted on 3/10/21 over the entire corpus listed in Appendix A, with the query ‘lemma:aliquis lemma:omnis.’

As indicated in Section 2.3.2.3–5, aliquis preceding-and-commanding omnis implies the former containing the latter in its scope, excepting certain cases of ellipsis.

<table>
<thead>
<tr>
<th>Excerpt</th>
<th>Text</th>
<th>Passage</th>
<th>Ǝ &gt; ∀?</th>
</tr>
</thead>
<tbody>
<tr>
<td>aliquis qui omnia posse homines putet?</td>
<td>Boethius</td>
<td>4.P2</td>
<td>y</td>
</tr>
<tr>
<td>bellum aliquod relinqueretur quod omnis Gallia libenter sine praesenti periculo susciperet.</td>
<td>Caes. Gal.</td>
<td>8.49.2</td>
<td>y</td>
</tr>
<tr>
<td>Accedit uero aliquid difficultatis sub omni ictu</td>
<td>Cels. Med.</td>
<td>7.5.4a</td>
<td>y</td>
</tr>
<tr>
<td>da ponderosam alium epistulam plenam omnium non modo actorum sed etiam opinionum tuarum</td>
<td>Cic. Att.</td>
<td>2.11.1</td>
<td>y</td>
</tr>
<tr>
<td>eo multi etiam sine doctrina aliquid omnium generum atque artium consequuntur</td>
<td>Cic. de Orat.</td>
<td>2.38</td>
<td>y</td>
</tr>
<tr>
<td>Quoniam igitur aliquid omnes, quid Lucius nostert?</td>
<td>Cic. Fin.</td>
<td>5.5</td>
<td>?</td>
</tr>
<tr>
<td>hisce aliqua fretus mora semper omnis aditus ad Sullam intercludere.</td>
<td>Cic. S. Rose.</td>
<td>110</td>
<td>y</td>
</tr>
<tr>
<td>line</td>
<td>text</td>
<td>source</td>
<td>line_number</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>137</td>
<td>vique cogat aliqua de suis bonis omnibus decedere</td>
<td>Cic. Ver.</td>
<td>2.2.43</td>
</tr>
<tr>
<td></td>
<td>fingite vobis si potestis, aliqua qui in omnibus isti rebus par ad omnium flagitiorum nefarias libidines</td>
<td>Cic. Ver.</td>
<td>2.3.23</td>
</tr>
<tr>
<td></td>
<td>erit etiam aliquis qui haec omnia dissimulare ac neglegere possit?</td>
<td>Cic. Ver.</td>
<td>2.3.144</td>
</tr>
<tr>
<td></td>
<td>spem sibi aliquam proponit, quorum omnum palam causa incognita voce damnatus est?</td>
<td>Cic. Ver.</td>
<td>2.5.41</td>
</tr>
<tr>
<td></td>
<td>cum eo sunt ne unum quidem quod si urbem aliquam fuerit ingressus circundabit omnis Israhel civitatii illi funes et trahemus eam in torrentem ut non</td>
<td>NT</td>
<td>2 Sam.17</td>
</tr>
<tr>
<td></td>
<td>et nemo potestatem agere aliquid habeat et movere negotii adversus aliquem eorum in omni causa et ut adscribantur ex Iudaei in exercitu regis</td>
<td>NT</td>
<td>1 Macc.10</td>
</tr>
<tr>
<td></td>
<td>hic statuit volo primum ♠ aliqua mihi, unde égo omnis hilaros, ludentis, laetificantis faciam utiant</td>
<td>Pl. Pre.</td>
<td>760</td>
</tr>
<tr>
<td></td>
<td>Superest ergo, ut ipse dispicias, an in omnibus civitatis certum aliquid omnes, qui deinde buleutas legentur, debeant pro introitu dare.</td>
<td>Plin. Ep.</td>
<td>10.112.3</td>
</tr>
<tr>
<td></td>
<td>interque eos candor aliquius praeter lucem omnia excludens</td>
<td>Plin. Nat.</td>
<td>2.92</td>
</tr>
<tr>
<td></td>
<td>aliquae omnibus animal dumtaxat generantibus</td>
<td>Plin. Nat.</td>
<td>11.54</td>
</tr>
<tr>
<td></td>
<td>aliqui omnia haec in milio servari malunt</td>
<td>Plin. Nat.</td>
<td>15.21</td>
</tr>
<tr>
<td></td>
<td>quin et protinus moriuntur aliqua caelo fecunditatem omnem ebandito, quod maxime vitibus evenit.</td>
<td>Plin. Nat.</td>
<td>16.63</td>
</tr>
<tr>
<td></td>
<td>libet et coquendi dare aliquas communes in omni eo genere observationes</td>
<td>Plin. Nat.</td>
<td>22.47</td>
</tr>
<tr>
<td></td>
<td>quia est aliquid in omni materia naturaliter primum.</td>
<td>Quint.</td>
<td>3.8.6</td>
</tr>
<tr>
<td></td>
<td>si certa aliqua via tradi in omnes materias ullo modo posset</td>
<td>Quint.</td>
<td>7.pr.4</td>
</tr>
<tr>
<td></td>
<td>Quemadmodum potest aliquis donare sapienti, si omnia sapientis sunt?</td>
<td>Sen. Ben.</td>
<td>7.4.1</td>
</tr>
<tr>
<td></td>
<td>ne in hoc quidem aliquem retinuit, ut non omnes abdicaret.</td>
<td>Sen. Controv.</td>
<td>2.1.30</td>
</tr>
<tr>
<td></td>
<td>Est aliquis, qui omnis conplectatur et cingat</td>
<td>Sen. Ep.</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>ergo commune aliquod quaerendum est his omnibus vinculum, quod illa conplectatur et sub se habeat.</td>
<td>Sen. Ep.</td>
<td>58.9</td>
</tr>
<tr>
<td></td>
<td>Contemnere aliquis omnia potest, omnia habere nemo potest.</td>
<td>Sen. Ep.</td>
<td>62.3</td>
</tr>
<tr>
<td></td>
<td>apud nos veritatis argumentum est aliquid omnibus videri.</td>
<td>Sen. Ep.</td>
<td>117.6</td>
</tr>
<tr>
<td></td>
<td>Inventus est qui concupisceret aliquid post omnia</td>
<td>Sen. Ep.</td>
<td>119.8</td>
</tr>
<tr>
<td></td>
<td>Tac. Ann.</td>
<td>14.44</td>
<td>y</td>
</tr>
<tr>
<td>------------------------------------</td>
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</tr>
<tr>
<td>Habet <em>aliquid</em> ex iniquo <em>omne</em> magnum exemplum, quod contra singulos utilitate publica rependitur.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nam nos omnes, quibus est alicunde <em>aliquis</em> obiectus labos, <em>Omne</em> quod est interea tempus prius quam id rescitum est lucro est.</td>
<td>Ter. <em>Hec.</em></td>
<td>286</td>
<td>y</td>
</tr>
</tbody>
</table>
Works cited

Works frequently cited are identified by the following abbreviations:


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Rama. “Claudian Table.” Wikimedia Commons, April 21, 2011. https://commons.wikimedia.org/wiki/File:Claudian_table_IMG_1073-black.jpg