

The Internal Syntax of the Nominal Phrase in Latin. A Diachronic Study

Chiara Gianollo - Università di Trieste

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Summary

This work is an attempt to give a formal account of the syntax of the Latin nominal phrase within the Principles & Parameters framework and to detect, during the history of the language, some crucial stages bearing witness of a complex chain of parameter-resetting operations, which prelude to future pan-Romance developments.

1. Introduction

In this paper, the analysis of the internal structure of the nominal phrase (more technically, Determiner Phrase, DP) in the history of Latin will deal with two fundamental problems related to word order:

- i) case position(s) within the DP and the mechanism of case checking
- ii) types of adjectival modification and ordering restrictions among adjectives

This kind of research has a twofold goal: on the one hand, it adds further evidence against the traditional descriptions of Latin grammar as characterized by a sort of “unconstrained word order”, by showing that the constituent structure of the Latin nominal phrase can be reasonably described in the same terms as that of other ancient and modern languages. This goal will be pursued within the framework of a theory of principles and parameters of the nominal phrase, which is the outcome of an extensive typological survey over a wide sample of languages (cf. Longobardi 2001 and Gianollo, Guardiano, Longobardi 2004).

On the other hand, the aforementioned facts regarding the order of genitives and adjectives prove to be particularly interesting in a diachronic perspective: different stages of the language have been analyzed, in order to detect some crucial parametric changes from Classical to Late Latin, which foresee subsequent converging features in the Romance languages.

2. Corpus

The corpus for Classical Latin (henceforth, CL) presented here includes Cicero's long letter *Ad Familiares* I, 9 and Petronius' *Cena Trimalchionis* (*Satyricon*, 26,7-78). The CL corpus, counting approximately 15,000 words, is not very significant from a quantitative point of view. However, the statistical tendencies concerning the distribution of constituents within the nominal phrase in these texts are confirmed by many previous studies which report quantitative data from the same and other CL authors (e.g. Marouzeau 1922, Adams 1976,

Fugier 1983, Elerick 1991, Bolkestein 1998, Lisón Huguet 2001). Thus, it is possible to consider the present corpus representative enough in order to operate on it a parametric analysis.

The study of the Late Latin (henceforth, LL) stage has been based on texts dating to the IV century AD, the *Peregrinatio Egeriae* and two Gospels -Matthew and Mark- from Saint Jerome's *Vulgata*. The LL corpus counts approximately 45,000 words.

3. The distribution of elements within the DP in Classical and Late Latin

3.1 Genitives

In the tables below, only genitives which are real arguments of the noun, i.e. subcategorized for by its argument structure, have been taken into consideration. Thus, partitive genitives, as well as other kinds of non-argumental genitives, like genitives of quality or reference, have not been included. Data about possessive adjectives are presented separately.

In the CL corpus, genitival arguments appear both before and after the head noun (henceforth, N) in a remarkably even distribution.

(1)	Classical Latin	NG	GN
	Cicero's <i>Ad Familiares</i> I.9	52 (49.5%)	53 (50.5%)
	Petronius' <i>Satyricon</i>, 26.7-78	113 (57.4%)	84 (42.6%)
	TOT	165	137

Every thematic role can be realized either in pre- or in post-N position.

(2)	Thematic roles	Cicero's <i>Ad Familiares</i> I.9		Petronius' <i>Satyricon</i> , 26.7-78	
		NG	GN	NG	GN
	Agent	10	26	23	19
	Theme	13	8	10	9
	Possessor	12	10	58	38
	R-relation ¹	17	9	22	18
	TOT	52	53	113	84

No strict adjacency constraint holds between N and its complement: in particular, adjectives can intervene, both in pre- and in post-N position. However, instances of real discontinuity (i.e. intervention of DP-external elements) between genitives and their head nouns are rare: in

¹ The R-relation, which can be paraphrased as “concerning” or “with respect to”, instantiates a looser semantic connection to the head noun than internal and external thematic roles. Elements expressing R-relations behave as arguments with respect to the case-checking mechanism and to their structural properties, as facts of control and binding show (cf. Giorgi & Longobardi 1991).

Cicero, only 4 out of 53 pre-N and 7 out of 52 post-N genitives are discontinuous with respect to the rest of the DP, i.e., respectively, the 7.5% and the 13.5% of the total. In Petronius, discontinuous constituents are 4 (4.8%) out of 84 DPs with a pre-N genitive, and 4 (3.5%) out of 113 with a post-N one.

Notice that, as in Bolkestein (2001:251), elements typically occurring in the second position of the sentence, namely discourse particles such as *vero*, *quidem*, *autem*, etc., have not been considered as discontinuity-inducing elements, because their position is not entirely determined by syntactic structure, but is influenced by phonological factors. For the same reason, also most instances where the intervening elements are personal pronouns are questionable as instances of ‘real’ syntactic discontinuity (cf. Adams 1994 and Salvi 2004).

As regards possessive adjectives, in Cicero possessive adjectives behave like all other genitives, whereas in Petronius they surface consistently postnominally, anticipating a clear Late Latin tendency. In Petronius, also the genitive form *eius*, used in place of possessive adjectives to avoid co-reference with the subject, occurs almost exclusively in a post-N position, strictly adjacent to the head noun. Over the 18 instances in the *Cena*, only one is pre-N. In the remaining parts of the *Satyricon*, only one out of 13 instances of *eius* is pre-N, whereas all the others are in an immediately post-N position.

(3)	Classical Latin	NG ^{agr}	G ^{agr} N
	Cicero’s <i>Ad Familiares</i> I.9	50 (47%)	57 (53%)
	Petronius’ <i>Satyricon</i>, 26.7-78	139 (90%)	16 (10%)
	TOT	189	73

In LL, almost all genitives and possessive adjectives are post-N, and no significant difference can be noticed between Egeria’s text and Jerome’s translations from the Greek original.

(4)	Late Latin	NG	GN
	<i>Peregrinatio Egeriae</i>	505 (93.5%)	35 (6.5%)
	<i>Evangelium sec. Matthaeum</i>	576 (97.0%)	20 (3.0%)
	<i>Evangelium sec. Marcum</i>	267 (96.4%)	10 (3.6%)
	TOT	1348	65

(5)	Late Latin	NG ^{agr}	G ^{agr} N
	<i>Peregrinatio Egeriae</i>	96 (95.0%)	5 (5.0%)
	<i>Evangelium sec. Matthaeum</i>	371 (98.0%)	8 (2.0%)
	<i>Evangelium sec. Marcum</i>	149 (98.0%)	3 (2.0%)
	TOT	616	16

The residual instances of pre-N genitives in both texts are almost exclusively limited to fixed expressions (e.g. *pullorum cantus* or *galli cantus* “the cock-crow”, *terrae motus* “earthquake”, *Dei gratia* “Thanks God”, genitives preceding *dies* or *nomen*). Egeria also displays two translations of place names, containing an original pre-N genitive as witnessed by the Greek Septuagint (Eg., VI, 7 *Heroum autem civitas*, cf. LXX Gen. XLVI, 29; Eg., XII, 10 *Agri specula*, cf. LXX Num. XXIII, 14). In the two Gospels, frequently (9 instances out of 20 in Matthew and 5 out of 10 in Mark) the Latin GN construction parallels a marked Greek GN order. With possessive adjectives, in Matthew and Mark a pre-N possessive always corresponds to a pre-N genitive in the Greek original.

3.2 Adjectives

Adjectives too can occur both pre- and post-N. Our data show no significant prevalence of one configuration with respect to the other.

(6)	Classical Latin	NA	AN
	Cicero’s <i>Ad Familiares</i> I.9	62 (39.5%)	95 (60.5%)
	Petronius’ <i>Satyricon</i>, 26.7-78	291 (57.2%)	218 (42.8%)
	TOT	353	313

Moreover, often it is not possible to detect any salient variation in meaning when encountering minimal AN-NA pairs². Although sometimes an emphatic (focused) reading for the pre-N adjective is possible, under pragmatically unmarked conditions both configurations must be considered basic.

While in Cicero’s text, out of 157 DPs containing adjectives, according to our criteria only 2 can be considered discontinuous, in Petronius the phenomenon is much more frequent and obeys different syntactic constraints (cf. Bolkestein 1998, 2001). In Petronius a purely literary flavor, and in particular the attention for the sentences’ rhythmic *clausulae*, seem to characterize the relatively many instances of discontinuous constituents involving head nouns and their adjectives. Herman’s (2003) study on the language of the *Cena*, which remarks that noun/adjective breakups are present only in the narrative part, and are totally absent from the freedmen’s speeches, confirms this impression, although the criteria used to define discontinuity are different from ours.

Also in LL adjectives can occur both post- and preminally and no obvious difference appears here superficially with respect to the CL situation:

² For a wide quantitative evaluation of adjectives occurring indifferently in both positions, see Lisón Huguet (2001)

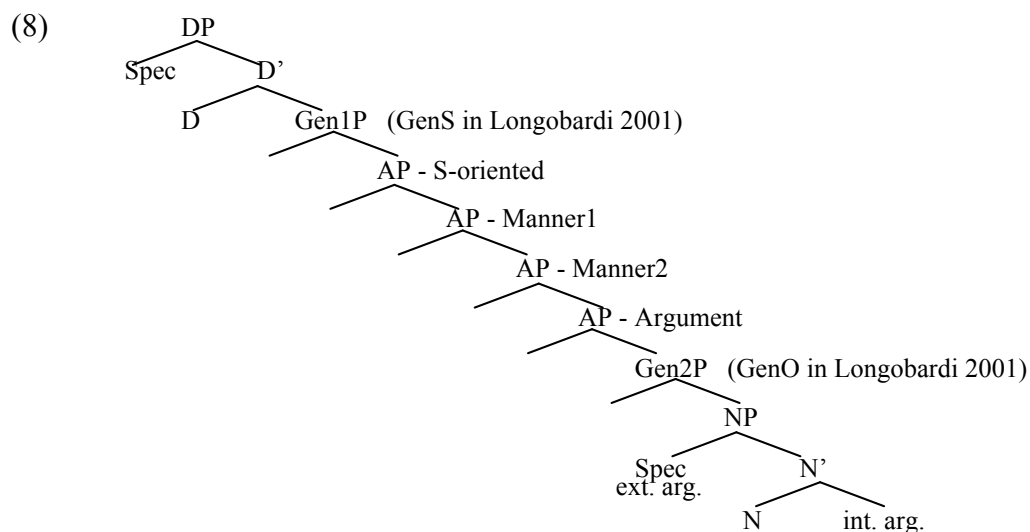
(7) Late Latin	NA	AN
<i>Peregrinatio Egeriae</i>	283 (50%)	284 (50%)
<i>Evangelium sec. Matthaeum</i>	164 (74%)	58 (26%)
<i>Evangelium sec. Marcum</i>	90 (60%)	60 (40%)
TOT	537	402

However, there is a recognizable preference towards the pre-N position when the adjective has an appositive reading, whereas the post-N position is typically restrictive. Consider *sanctus* “holy” in the *Peregrinatio*: it always appears pre-nominally with proper names and with nouns such as *ecclesia* “church”, *episcopus* “bishop”, *monachus* “monk”, etc., where it has a clearly appositive reading, i.e. it is an inherent characterization of the noun. On the other hand, when it restrictively modifies common nouns, such as *loca* “lands”, *mons* “mountain”, *liber* “book”, *dies* “day”, it is consistently post-N.

In order to account for the data in terms of a parametric typology and to propose a structural explanation for the apparent change concerning the distribution of genitives, in the next paragraph I will sketch the theoretical premises of the analysis presented in § 5 and § 6.

4. Theoretical background: the structure of DP

Throughout, basing on a number of current proposals formulated over a representative sample of modern languages, I will assume the structure in (8) for the DP (cf. Longobardi 2001 and references cited; cf. also Gianollo, Guardiano, Longobardi 2004 for an application of this parametric typology to more than 20 ancient and modern languages).



The NP level represents the DP’s lexical structure, i.e. the basic positions for the noun’s arguments. The functional layer above NP hosts two positions for the checking of genitive

case (Longobardi 1996, 2001), which are labeled Gen1P and Gen2P, and some projections for adjectives, which obey a universal hierarchical ordering imposed by their semantic content (cf e.g. Crisma 1993, Bernstein 2001). The observation that, cross-linguistically, in the pre-N field genitives can be found both before and after adjectives leads to the conclusion that there exist two distinct positions for the checking of genitive case: we will label genitives in Gen1P and Gen2P “functional genitives”, as case is assigned by means of the movement of the nominal argument to a higher functional projection.

Another fundamental piece of evidence for two distinct functional projections is represented by the possibility, attested in some languages, of expressing simultaneously two arguments of the same head noun by means of the functional genitive configuration:

(9) German:

<i>Marias</i>	<i>sorgfältige</i>	<i>Beschreibung</i>	<i>Ottos</i>
Maria-Gen1	accurate	description	Otto-Gen2

“Maria’s accurate description of Otto”

A first parametric difference arising cross-linguistically concerns the activation of Gen1 and Gen2: some languages -as German- activate both, some languages -as Italian- none, some other languages activate either Gen1, above adjectives, as in English, or Gen2, below adjectives, as in Modern Greek. The realization of genitive case by means of the functional strategy is subject to strict structural requirements, due to general constraints on movement: the argument which raises to the most prominent genitival projection must be the most prominent also in the argument structure, i.e. from the point of view of its thematic role. In other words, when occurring in a functional configuration, the genitive of the subject will always precede the genitive of the object, respecting the Thematic Hierarchy summarized in (10).

(10) Thematic Hierarchy:

Possessor>Agent>Theme

Languages may also assign genitive case by means of a different configuration, which will be labeled “free genitive”, due to its freer distribution both from the point of view of word order and from the point of view of the range of arguments it can express. The free genitive configuration, usually involving the realization of the noun’s argument by means of a prepositional phrase, can be the only way of realizing genitive in a language -cf. most Romance languages- or can coexist with the functional genitive -as in German or English-, giving rise to a potential optionality in the ways of expressing a genitival argument and, therefore, to potentially synonymous constructions. Notice that nothing in principle prevents from allowing the free genitive configuration to be realized also by means of inflectional endings. I assume that the structural source for the free genitive configuration is an additional projection for predication, ModP, which surfaces postnominally in Indo-European languages and is parametrized according to the types of elements it may host (cf. Gianollo 2005:50-53).

Another crucial point of variation concerns the position of the N head within the structure at the end of the derivation: N can be raised to higher positions, by undergoing a movement known as (partial) N-raising. There are several possible landing sites for the head noun, as shown by the boldfaced elements in (11), where *N* is the position reached by the noun in most Romance varieties:

(11) from Longobardi (2001:577)

[1 GenS 2 [S-oriented [Manner₁ ***N*** [Manner₂ [Argument 3 [GenO [_α P [S [O...N...]] _α]]]]]]]]

This implies that, despite the fact that the underlying structure is supposed to obey a universal order, the position of N with respect to other DP-internal constituents varies considerably cross-linguistically. In some languages -German or Modern Greek, for instance- N can raise over the lower genitival projection (Gen2).

(12) a. German: *Das rote **Buch** Marias*

b. Modern Greek: τό κόκκινο βιβλίο της Μαρίας
 “Maria’s red book”

As concerns adjectives, while their structural ordering is supposed to be universally invariant, differences among languages arise in the superficial linear ordering of N with respect to the adjectival series, depending on the scope of N-movement. In a given language, N always raises to the same position in every derivation³.

The adjectival hierarchy in (8) strongly resembles the one which is traditionally recognized for adverbs (cf. Crisma 1993) and its crosslinguistic validity is very significant because it offers a useful diagnostics for the level reached in each language by DP-internal N-movement. In Germanic, adjectives are never raised over by N, whereas in Romance N raises to an intermediate position, causing some of the adjectives to appear in a derived post-N position, although their relative order is not affected. Manner adjectives which are raised over by the noun display a peculiar restrictive interpretation: Italian exhibits a clear contrast between *l’impiegato gentile* (restrictive) and *il gentile impiegato* (speaker-oriented) “the kind clerk”.

In our account we take into consideration also another kind of modification, the predicative one. Predicative adjectives occur at the right of the nominal head, but they are clearly different from the ones which are raised over by the noun: they can occur after the

³ Except when a further filling of the D position by the noun itself is required (cf. Longobardi 1994).

complement of the noun and are usually pronounced with a different intonation and a sharp break after the NP complex. Moreover, and most interestingly, they do not obey the ordering constraints on pre-N adjectives, occurring in a quite free order. We will consider such adjectives to originate in the ModP position for predication which also hosts free genitives. Some languages give overt morphological evidence for this different mechanism of adjectival modification: in Ancient and Modern Greek, for instance, post-N adjectives are obligatorily introduced by a “copy” of the definite article when the DP is definite. Interestingly, this also happens with some post-N genitives.

In order to describe these contrasts among languages, parameters of the “head-complement” format, like NG/GN, NA/AN, are not sufficient to account for the observed differences. NG and NA configurations may have very different structural sources. In particular, post-N genitives can be either free genitives (e.g. Italian) or functional genitives raised over by N (e.g. Modern Greek); post-N adjectives can be either predicative adjectives in the Mod position (e.g. Modern Greek) or hierarchically ordered adjectives crossed over by N-raising (e.g. some Italian post-N adjectives).

In light of this parametric framework, the main questions to answer in analyzing the Latin data are the following:

- i) which kind of genitive checking mechanism does the language have?
- ii) does N raise in Latin? Is there any evidence provided by the adjectival hierarchy?
- iii) does Latin display a Mod position?

We will try to show that the Latin nominal system can be described by means of an independently expected combination of parametric choices, attested also in presently spoken languages. We will also see that the parametric values of Classical Latin (CL) differ from those of modern Romance languages, with respect to the grammatical features examined here, and that they undergo a deep diachronic resetting, already observable in the Late Latin (LL) texts analyzed.

5. DP structure in Classical Latin

In § 4 it has been argued that two crucial diagnostics for the parametrization of the genitive-checking mechanism consist in the relative order of adjectives and genitives co-occurring in the same DP and in the constraints ruling the expression of multiple arguments of the same head noun.

Regarding the latter point, in *Fam.* I.9 there are two instances of “double genitives”, i.e. of a low-frequency construction where both the external and the internal argument of a noun are

expressed (we consider here genitives and possessive adjectives on a par, as will be further argued):

- (13) a. *repentinam [eius] defensionem [Gabini]* (Cic. *Fam.* I.9.20)
 “his sudden defence of Gabinius”
 b. *propter [tuam] propugnationem [salutis meae]* (Cic. *Fam.* I.9.2)
 “because of your protection of my safety”

In both examples, one genitive is pre-N and the other is post-N. If the evidence is enriched by means of additional queries outside the corpus, and especially by studying the syntax of deverbal nominalizations, we see that other combinations are also possible⁴: up to two genitives to the left of N and up to two to the right are possible, yielding GGN (cf. 14) and NGG (cf. 15) sequences. Notice that all the relevant examples consist of two real arguments of the head noun.

- (14) a. [*L. Sullae, C. Caesaris*] [*pecuniarum*] *translatio* (Cic. *Off.* I.43)
 “L. Sulla’s, C. Caesar’s transfer of money”
 b. *ista [Platonis] [orationis] ornamenta* (Cic. *Fin.* I.14)
 “these ornaments of speech by Plato”
 (15) a. *memoria [tua] [nostrae coniunctionis]* (Cic. *Fam.* VI.17)
 “your remembrance of our friendship”
 b. *memoria [nostris] [tua]* (Cic. *Fam.* XII.17.1)
 “your memory of us”

The simultaneous expression of two argumental genitives unequivocally hints at the conclusion that Latin uses more than one position to check genitive case. Consider now the data concerning thematic roles in (16), where G^S is the genitive of the external role and G^O the genitive of the internal role:

(16)	GNG = 18		GGN = 10		NGG = 9	
	$G^S N G^O = 18$	$G^O N G^S = 0$	$G^S G^O N = 10$	$G^O G^S N = 0$	$N G^S G^O = 6$	$N G^O G^S = 3$

Significantly, genitives in the GNG and in the GGN configurations, where at least one argument is realized prenominal, always preserve in the linear order a reflex of the thematic hierarchy (cf. 10), according to which the linearly most prominent genitive expresses the structurally most prominent argument. The same is not true for the NGG configuration, a fact which hints to a fundamental syntactic difference between pre-N and post-N genitives in CL. According to our typology, the possibility of expressing two arguments of the same noun prenominal respecting the thematic hierarchy holds only in languages where both projections for genitive case checking, Gen1P and Gen2P, are activated. Thus, the existence

⁴ See Gianollo (2005:73-78), for a more comprehensive list, and also the very well-documented study by Bertocchi & Maraldi (1990), who, however, reach different conclusions in their syntactic analysis.

and the properties of the GGN configuration in CL lead us to conclude that both Gen1P and Gen2P were active in Latin at this stage.

As for post-N genitives, assuming that N, in a given language, always occupies the same position within the structure, given the existence of GGN orders, the GNG or NGG order can not be interpreted as derived by the movement of N above the genitival projections. Furthermore, the different behavior of the NGG construction with respect to thematic roles, which strongly resembles the typical behavior of prepositional genitives (cf. § 4), shows that the structural mechanism of case checking must be different. Namely, post-N genitives can be interpreted as free genitives. In Latin free genitives and functional genitives are realized by the same morphological marks (cf. Gianollo 2005:25-43 for discussion); due to the position of the noun within the structure, functional genitives always surface preminally, whereas free genitives are always post-N.

This conclusion is supported by the data concerning the relative position of genitives with respect to adjectives. In cases of genitive-adjective co-occurrence in the CL corpus, every configuration is attested:

(17)	AGN=14	GAN=8	GNA=6	ANG=14	NAG=2	NGA=3
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The AGN and the GAN orders are particularly significant in this context:

(18) *nova ludorum commissio* (Petr. Sat. 60.5)

“a new beginning of tricks”

(19) *pedum extremos pollices* (Petr. Sat. 73.4)

“the points of (their) toes”

These sequences confirm that two distinct projections for genitive case checking are active in CL, namely Gen1P, above the adjectival projections, and Gen2P, below adjectives. Crucially, as the existence of GGN sequences already reveals, in CL none of the functional projections in (8) is raised over by N, which surfaces below Gen2P.

This leads us to formulate another prediction: pre-N adjectives in CL must originate in the hierarchically ordered projections between Gen1P and Gen2P, i.e. they should display the same ordering restrictions encountered in those modern languages which activate such projections. In order to support this statement, one must look at cases of multiple, non-coordinated adjectival modification. As with “double genitives”, we are again facing a low-frequency phenomenon and we must resort to additional information outside the corpus.

Risselada (1984), by adopting classical constituency tests, like coordination and co-occurrence, recognizes a structural hierarchy, summarized in the schema in (20), for adjectival modification in CL:

(20) from Risselada (1984:225)

subjective evaluation > size > relative position > age > noninherent > inherent > color > substance > possessor > provenance > period > social position > typical characteristic > purpose > agent > N

This hierarchy can be easily accounted for in the present framework: adjectives occurring in the first part roughly correspond to adjectives realized in the S-oriented projection; the middle field (especially the classes of noninherent and inherent adjectives) corresponds to the split projection of Manner1 and Manner2 adjectives; the lower classes are typical instantiations of adjectives occurring in the Argument projection.

The corpus of CL adjectival strings collected in Gianollo (2005) suggests that when all adjectives are pre-N the order is stricter than when adjectives are post-N: in the pre-N field, the hierarchy must be preserved by the linear order, whereas more combinations are possible in the post-N field. In particular, the Argument>Manner, Argument>S-oriented, Manner>S-oriented orders are not attested when both adjectives are pre-N, whereas they appear when both adjectives are post-N.

In light of such considerations on the ordering restrictions on adjectives, and also on the basis of the relative positioning of adjectives and genitives in the pre-N field, we can conclude that CL pre-N adjectives are realized in the stacked adjectival projections represented in (8). On the other hand, the source of CL post-N adjectives must be different from that of pre-N ones. Given that N does not move from its base position, post-N adjectives must originate directly in a predicative post-N position, which can be identified as the Mod position discussed in § 4. The different licensing conditions of the Mod position explain why the order of adjectives is freer in the post-N field.

The existence of structurally based restrictions in the distribution of elements in the CL nominal phrase is proved also by the behavior of the genitive of personal pronouns. We anticipated that possessives can be treated on a par with other genitives when analyzing CL data. When pre-N, two structural positions, one above and one below adjectives, can be recognized, corresponding, respectively, to the Gen1 and Gen2 projections cross-linguistically identified for genitives.

(21) a. *ad tuam summam amplitudinem* (Cic. *Fam.I.9.25*)

“to your greatest honor”

b. *veteribus nostris delectationibus* (Cic. *Fam.*I.9.23)

“my old relaxations”

When observing instances of “double genitives” involving personal pronouns, we are faced with the well-known fact that, as it is never possible to express more than one argument with the possessive adjective, subjects are realized by the possessive adjective, whereas co-occurring objects are encoded by means of the genitive form of the personal pronoun (cf. 22, where 15.b is repeated as 22.b):

(22) a. [*tua*] [*sui*] *memoria* (Cic. *Att.* XIII.1.3)

“your memory of him”

b. *memoria [nostris] [tua]* (Cic. *Fam.* XII.17.1)

“your memory of us”

In other terms, the possessive form will always be taken by the thematically most prominent one. Again, however, a crucial difference is apparent between the pre-N and the post-N mechanisms of genitive case checking: while preminally the possessive adjective, expressing the subject, always precede the genitive of the object, the same is not true in the post-N field, where linear orders which do not respect the thematic hierarchy, as (22.b), freely appear.

As has been noticed in § 3.1, Petronius displays a remarkably different distribution of possessive adjectives, similar to what is found in LL texts. As no other difference arises in the mechanisms of genitive case checking with respect to Cicero’s grammar (i.e. Gen1P and Gen2P are activated and should, in principle, be able to host also possessive adjectives), it is plausible that no purely syntactical motivations can be found for the phenomenon and that its explanation lies in extra-syntactical features of possessive items, namely in their prosodic characteristics. In Gianollo (2005:123-127), basing also on comparative data from Greek and on some Romance developments, I have proposed an analysis of post-N possessives in Petronius as prosodically reduced enclitic forms requiring adjacency with their head noun. A similar explanation is proposed also for the peculiar distribution of *eius* (cf. § 3.1).

6. Parameter resetting in Late Latin

The main shift between CL and LL concerns the distribution of genitives, which in LL are consistently post-N. This fact does not seem to correlate with any difference in case morphology, as the case system is substantially preserved in the texts under exam. The proposed account, however, will argue for a deep change in the syntactic mechanism of case checking due to a reanalysis of the post-N construction.

First of all, notice that, more in general, no internal morpho-syntactic explanation for the causes of the shift to the post-N construction can be envisaged, as no other co-occurring change potentially relevant for DP-syntax appears in the grammar at this period: the motivation for the loss of pre-N genitives must be usage-based, i.e. it must be caused by the increased use of a construction already possible in the old grammar. It is not feasible here to face the arduous problem of detecting the actual factors producing such an increase in the use of the post-N construction. A plausible hypothesis consists in assuming that the socio-linguistic environment might have played a crucial role in this process; in particular, massive bilingualism and (imperfect) second-language acquisition of Latin by speakers whose first language was exclusively characterized by a NG order (Semitic, New Testament Greek) may have been a decisive factor. Of course, a similar suggestion can be put forward only as a working hypothesis at the present stage of the research, pending further, systematic studies on language contact in ancient society and on its influence on deep syntactic parameters, independent of the features of single lexical items, such as those investigated here. It is clear, however, that a copious alteration of the primary corpus in this direction will have caused the new learners to operate a different parameter setting with respect to that of the previous generations: at a certain point, the positive evidence for pre-N genitives became so scant that it was neglected by the learners, giving rise to a phenomenon of resetting in the process of first language acquisition.

Post-N genitives in CL were realized in the free genitive configuration. However, according to our parametric typology, the learner, during the parameter-setting operation, is presented by Universal Grammar also with another possible analysis, compatible with the primary data: the post-N genitive could also be a functional genitive raised over by the noun.

I propose that an acquisitional strategy leads the learner to choose the most economical representation for any given sequence, interpreted here as the structural representation which can generate all and only the structures encountered in the primary corpus, restrictively guaranteeing against over-generation. Thus, I propose that a principle such as (23) guides the process of parameter setting with respect to the syntax of genitives:

(23) Functional First Principle:

Interpret a genitive as functional whenever possible

Given this principle, a learner would rule out the possibility of analyzing post-N genitives as free, whenever there is no contrary evidence to analyzing them as functional. The preference towards a functional analysis in this case basically obeys a well-known principle of acquisitional research, the Subset Principle, according to which the learner adopts the most

restrictive grammar which can generate all and only the structures s/he encounters in the primary corpus.

In Crisma & Gianollo (*in press*) it is proposed that there is also another contingent reason favoring, in the LL context, the functional analysis as more economical: the free genitive configuration would result in an unmotivated realization of additional structure, namely the Mod projection. On the other hand, the head-movement operation necessary to derive the post-N position by raising the noun to a higher projection is an economical operation, which is learned very early by the child (cf. Wexler 1994 and references cited).

The crucial pieces of evidence which, in CL, ruled out the more economical operation of N-movement were the GGN construction and the existence of both the GAN and the AGN combinations. Needless to say, the GGN construction is never attested in the LL corpus. Moreover, when considering the data about the relative order of adjectives and genitives co-occurring in the LL Latin corpus, we see that also the GAN and the AGN constructions are never attested:

(24)	AGN=0	GAN=0	GNA=1	ANG=7	NAG=13	NGA=7
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Thus, the LL primary corpus allows for the reanalysis of post-N genitives as functional genitives raised over by N.

The existence of the ANG order becomes particularly relevant at this point:

- (25) a. *in novissimo autem die magno **festivitatis*** (Vulg. Joh. VII.37)
 “in the last great day of festivity”
 b. *integras septimanas **ieiuniorum*** (Per. Eg. 28.3)
 “entire weeks of fasting”

The configuration in (25) and, in general, every occurrence of pre-N adjectives, are unambiguous triggers toward the activation of the Gen2 projection, i.e. the position for genitives below adjectives.

Also NAG sequences constitute a very significant trigger for parameter setting:

- (26) a. *lignum sanctum **crucis*** (Per. Eg. 37.1)
 “the Cross’ holy wood”
 b. *dies festus **Iudaeorum*** (Vulg. Joh. VII.2)
 “the Jews’ solemn day”

According to the structure in (8), if our hypothesis concerning the parametrization of the LL genitive is correct, the adjective in the NAG sequences must be analyzed as occurring in one of the basically pre-N, hierarchically ordered projections for adjectives, plausibly the Manner2 position in (26). This is probably the reason for the neater contrast appearing in LL between appositive pre-N and restrictive post-N adjectives, which strongly resembles a characteristic Romance feature: if our parametrization is correct, the noun in LL would occupy an intermediate position within the structure, in between the adjectival projections, similarly to most Romance languages (cf. 11). This amounts to saying that the primitive reanalysis concerning the mechanism of genitive case checking has a strong impact also on the syntax of adjectives: the activation of N-raising, in order to derive the post-N order for Gen2 genitives, allows for a further reanalysis of at least some post-N adjectives, which, in CL grammar, were realized in the ModP projection. Again, a tendency towards structural economy leads the learner to prefer head movement to the generation of the ModP projection, when permitted by the primary corpus. Adjectives in the ModP position remain nonetheless possible, as shown by the NGA sequence.

7. Conclusion

An examination of Classical and Late Latin data in the light of a restrictive theoretical framework, based on a wide typological survey, allows one to discover a deep regularity in the position of the constituents inside the Latin noun phrase, and to trace back some major diachronic changes, leading towards Romance nominal syntax, to a few discrete processes of parametric resetting which act, with a sort of chain-effect, on a whole cluster of phenomena.

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