Some Reflections on Inertia: Infinitive Complements in Latin

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0 Introduction

In this paper we discuss language change in the Latin subordination system. The discussion is based on Goldbach (2001) and Ferraresi and Goldbach (2002). This research tries to define a sufficiently restricted theory of syntactic change on the basis of the original proposals in Keenan (1999), elaborated upon in Longobardi (2001). We will locate our empirical results inside this framework, and thereby support Longobardi’s idea. Before doing so, some more general questions will be taken into consideration.

If we ask how it comes about that languages change, one might think that a language undergoes change because the property of changing is inherent in language systems, as in other natural systems. If this is the case, it should be possible to detect the factor responsible for a specific change, say from OV to VO, in other languages which show the same type of change. Appealing as this may be, however, it has never been worked out, and indeed seems implausible to linguists such as Lightfoot, who in his 1999 book discusses the reconstruction of syntactic change, i.e. the reconstruction of earlier, prehistoric stages of languages, and says that the interaction of forces too numerous to count or to analyse results in randomness, and thus unpredictability.

Excluding an inherent property of change, a second possibility could be that not the language system itself but rather some external factors are responsible for language change. A proposal has been made (Platzack 1995) which tries to reduce change to external causes such as quantity, i.e. the less evidence there is for a specific syntactic construction in a language, the more possible it is for such a structure to undergo reanalysis. The external pressure would in this case be sociolinguistic, involving for example prestige etc. So the redistribution of evidence is caused by nongrammatical factors. Lightfoot (1999) proposes that the evidence should quantitatively amount to 30% in order to be significant as an acquisitional threshold.

However, the logic of this proposal has been queried by Fodor (1998). Fodor argues that only one single specific feature is responsible for a deterministic parameter setting, i.e. an unambiguous trigger. The frequency of a specific structure plays no role in this process.

A more plausible scenario where an external factor could cause parametric change is a contact situation (cf. Weerman 1993; Kroch & Taylor 1995). In fact, in a contact situation L1-learners are exposed to the output of L2-learners, i.e. to a language which is not the speakers’ mother tongue and in which UG principles are possibly undermined.

Language acquisition research, however, has shown that parallel learning of two or more L1-languages does not produce any difference in the acquisition of language X compared to monolingual L1-learners. This means that not every language contact in L1-learning has an influence on syntactic acquisition.

Lightfoot (1999) argues against general theories of language change which are not restricted enough, and pleads for the search for ‘local causes’ for changes, i.e. for microfactors which together have wide repercussions in a specific syntactic field. However, his model also makes use of terms like ‘reanalysis’, which cannot be verified against empirical data. Longobardi (2001) makes a concrete proposal as to where to search for such microfactors. He considers as a starting point the methodological hypothesis proposed in Keenan (1994) for explaining the development of the reflexive himself in English. In Keenan (1994) (see also Keenan 2001) two general forces of change, Inertia and Decay, are offered
in explanation of the change of the English anaphoric system, interacting with two semantic constraints: the *Constituency interpretation* constraint (which says that constituents of an expression are semantically interpreted) and the *Anti-synonymy* constraint (showing a tendency for synonyms to differentiate semantically. According to Keenan, *Inertia* is a feature of language systems: things stay as they are unless they are acted upon by an outside force or by decay. Keenan (2001) proposes that *Decay* consists of phonologically induced morphological loss, or also of semantic decay. An example of the first case of decay is the negative *n’t* in English, which develops as in (1) (Keenan 2001: 1):

(1) ne+a/an+wih ‘not one whit (thing)’ > ne aught>not>n’t

An example of the second case of decay is the weakening of demonstratives to become definite articles, e.g. Latin *ille* ‘that’ > French *li* ‘the’.

Going a step further, Longobardi (2001) proposes that syntax should be completely inert concerning change. In other words, a direct change of the formal features of single lexical items should be impossible. Therefore, diachronic change in the formal features should be explained through changes in the interfaces with Phonology and with Semantics. Diachronic changes in the syntax are thus only epiphenomena, reflecting changes in the phonological and semantic components. Such a proposal makes no appeal to external factors like quantity, and therefore to ‘imperfect learning’, i.e., the re-analysis of superficial structures in L1-learning. Further, we can in this way understand why some languages such as Japanese have not changed for centuries. According to *Inertia Theory*, therefore, the task of historical linguistics is to show which semantic and/or phonological factors lead to changes in the realisation of the formal features.

In this paper therefore, we will sketch a small fragment of Latin syntax, where diachronic change can be observed, and we will try to paint a picture in which the contributory factors, like single colours, are blended into the language system - but are still identifiable. We wish to point out, however, that this work is still in progress.

1 The Phenomenon

Our discussion is concerned with a type of infinitive complementation, the (classical) Latin ‘*accusatius cum infinitivo*’ clause (ACI). This type of infinitival construction is a strategy of complementation after *verba dicendi*; it has a subject of its own in the accusative. This structure is illustrated in (2):

(2) non *Se* hostem *Vereri (…)* dicebant.

3. refl. acc. mas. sg. inf. pres. act. 3. pl. impf. act.

(acc.) (deponent)

They said [that] they were not afraid of the enemy (Caes. Gall. 1,39,6/7).

In the classical period (ca. 1st century B.C.), i.e. in the writings of for example Caesar and Cicero, the ACI is the most common infinitive construction and at the same time the canonical complementation device after *verba dicendi*. In late antiquity and in Medieval Latin it has been shown (cf. Herman 1989; Calboli 1989) that finite complement clauses with *quod*, *quia* and *quoniam* (i.e. with ‘that’ as complementizers) can also be used with *verba dicendi*, thus competing with the ACI in distribution. The Late Latin texts analysed by Herman and Calboli, however, are by church fathers, which means that they are possibly influenced by a Greek original. The generalizations regarding distribution and structure of *quod/-quia/-quoniam* and ACI complements made by Herman and Calboli are not confirmed by our own analyses of Late Latin and Middle Latin texts (Egeria and Gregory). We have
analysed the ACI in three Latin texts from three periods. These are Caesar’s *De bello gallico* for the classical period, the *Peregrinatio ad loca santa* by Egeria, a late-antiquity text from the end of the 4th century, and Gregory of Tours’ *Historiarum Libri Decem*, a Middle Latin text from the end of the 6th century. We thus selected three examples of narrative prose.

In the following, we will first present the morphological structure of Latin infinitives, before we show the distribution of the ACI in classical Latin. Then we will present our analysis of how the classical ACI developed. After that we will describe the development of the ACI from the classical to the medieval period and point out which factors have led to which changes. In particular, we are going to attribute the limitation in the distribution of the ACI in Late and Middle Latin to the decay of the realization of modality.

## 2 The morphological paradigm of Latin infinitives

A peculiarity of Latin infinitive forms is their morphological specification for tense and diathesis (voice), exemplified in table 1.

**Table 1: Infinitive forms in Latin** *(amare = 'to love')*

<table>
<thead>
<tr>
<th></th>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>amar-e</td>
<td>amar-i</td>
</tr>
<tr>
<td>Perfect</td>
<td>amaviss-e</td>
<td>amatum esse</td>
</tr>
<tr>
<td>Future</td>
<td>amaturum esse</td>
<td>amatum iri</td>
</tr>
</tbody>
</table>

These six slots represent a productive inflectional paradigm. That means that they mirror the full inflected paradigm in tense (every absolute stage of time is represented) and voice, although Latin infinitive forms have a reduced paradigm in that they are neither equipped with person and number nor with mood morphemes (such as the subjunctive or imperative). The subjunctive mood in the infinitive is instantiated by an analytic form, i.e. the participle future active plus the infinitive perfect active of *esse* (to be): *amaturus fuisse* - “to will love” + “to have been” (by this means the irrealis modality of the action is manifested). In addition there are further infinitival forms in passive voice denoting relative and aspectual temporal circumstances like *amatus fuisse* - “loved” (part.) + “to have been” (situation of being loved in the past), *amatus fore* - “loved” (part.) + “to will be” (situation of being loved in the future). Likewise the passive forms *amatus esse* - “to be loved” or “to have been loved”, *amatum iri* - “to will have been loved” may denote a situation, although in most cases they more accurately designate a process. From this illustration we can see that the Latin infinitive morphology is able to express not only tense and voice but also modality\(^2\) and aspect (cf. Menge 2000: 190ff.) even though there is no specific mood affix on the infinitival forms. The cells in the tense-voice matrix are exhaustively covered in the infinitival paradigm of every transitive Latin verb. Generally, the infinitival forms do not show irregularities like syncretism or suppletion along the two dimensions tense and voice across the conjugation classes. On the other hand, the categories modality and aspect just mentioned do not span a complete infinitival paradigm with all cells filled. Rather, they are expressed exclusively periphrastically, e.g. by combination with modal verbs as in (3):

(3) *amaturus fuisse* - “to will love” + “to have been” (irrealis)
*amatus fuisse* - “loved” (part.) + “to have been” (situation of being loved in the past)
*amatus fore* - “loved” (part.) + “to will be” (situation of being loved in the future)
*amatus esse* - “to be loved” or “to have been loved” (process in the past)
*amatum iri* - “to will have been loved” (process in the future)
3 The syntactic distribution of the ACI

In the following we are going to have a closer look at the distribution of the ACI. This construction is found essentially as a complement of declarative verbs. The following illustrate the use of the ACI as an object

A) after declarative and epistemic verbs

(4) a. non se hostem vereri (...) dicebant.
   3. refl. acc. mas. sg. inf. pres. act. 3. pl. impf. act.
   (deponent)
   They said [that] they were not afraid of the enemy (Caes. Gall. 1,39,6/7).

   b. angustos se fines habere arbitrabantur.
   mas. pl. 3. refl. mas. pl. inf. pres. 3. pl. ind. impf. act.
   acc. acc. act. (deponent)
   They decided/estimated [that] they had a small (narrow) territory (Caes. Gall. 1,2,5).

   c. pollicenturque sese ei dedituros [...]
   3. pl. ind. pres. act. 3. refl. 3. sg. mas inf. fut. act.
   (deponent) acc. dat.
   And they promise [that] they will surrender to him (Caes. Gall. 5,20,1).

B) after verbs of sensual and intellectual perception

(5) a. multum Aute fluxisse video de libris nostris.
   neutr. sg. inf. perf. 1. sg. pres.
   acc. act. act.
   But I see [that] much has flowed from our books (Cic. Nat. 1.6).

   b. Ulixem Audivi (...)uisse (...) audacem (...).
   mas. sg. acc. 1. sg. perf. act. inf. perf. act. mas. sg. acc.
   I have heard [that] Ulysses was bold (Plaut. Ba. 949).

   c. Ubi Se diutius duci intellexit [...]
   pass.
   When he knew [that] he was kept waiting longer, [...] (Caes. Gall. 1,16,5).

But one also finds the ACI as a complement after the following verbs:

C) volitional and optative verbs
   velle - to want, malle - to prefer, cupere - to wish;

D) verbs of decision
   censere - to decree, decernere - to decide, conclamare - to proclaim;

E) verbs of request
   praecipere - to prescribe, poscere - to demand, postulare - to urge;

F) verbs of enforcement and prohibition
   efficere - to provoke, to enforce, sinere - to admit, to allow, prohibere - to prevent, to prohibit;
G) affective verbs (factive)
mirari - to wonder, cruciari - to struggle, gaudere - to be glad.

The ACI in subject function is found:

H) after impersonal verbs and after predicative expressions with specific nouns or adjectives

(6) a. nuntiatum est Ei Ariovistum ad occupandum [...] Vesontionem contendere
     He has been informed [that] Ariovist [...] aspired to occupy Vesontio (Caes. Gall. 1,38,1).

b. dicitur eo tempore matrem Pausaniae vixisse.
     It is said [that] the mother of Pausanias lived at the same time (Nepos 4,5,3).

c. datam [...] tum constabat.
     esse [...] adv. 3. sg. impf.
     It was a fact [that] [it/she] has been delivered in those days (Cic. Verr. 1,39, 101)

Functioning as a complement of the verbal classes A to G and as subject sentence after verbs of type H, the ACI is a productive syntactic pattern. From Old Latin (Cato) to Late Latin (e.g. Tertullian and later) it represents the canonical form of a complement sentence in subject or object position. Thus we can see that the morphological diversity of the infinitive as illustrated in section 2 corresponds to the breadth of its syntactic distribution.

4 Hypotheses

In our view the wide syntactic distribution of the ACI is dependent on the functional breadth of morphological inflections on the infinitival forms. The data in (7) show that the infinitive is able to express modality morphologically:

(7) a. Stipendium scitote pependisse socios vestros Gallis et nunc, liberatos per vos regio imperio, fuisse pensuros, si a me foret cessatum. (irrealis)
     You [should] know that your allies paid tribute to the Gauls and now released from royal domination by you they would continue to pay if I had hesitated. (Liv. 38,47,13).

b. nec se superstitem filiae futurum fuisse, nisi sper ulciscendae mortis eius in auxilio commilitonum habuisset. (irrealis)
     And he would not have lived [the death of] his daughter if he had not had the hope to take revenge for her death with the help of his comrades. (Liv. 3,50,7).

In (7a) and b. the periphrastic infinite forms fuisse pensuros and futurum fuisse express irrealis in the ACI. No other Latin system of complementation can do that. That means that there is no complement clause with quod-, quin- o ut that expresses irrealis or potentialis.
Not only does the ACI denote modality, it can also have a tense independent from the matrix clause, as is shown for example in (5b). In the matrix clause we have present tense (*dicitur*), while in the ACI we find perfect tense (*vixisse = inf. perf. act.*). Consider too (3c): there we find future (*dedituros*) in the ACI.

At this point, let us emphasize the main features of the ACI.

1. The ACI has a subject in the accusative. It has been shown (Bolkestien 1979; Pillinger 1980; Goldbach 2001) that the subject accusative of the ACI is not checked or assigned in the matrix clause.
2. The ACI expresses tense, and in this it is independent of the tense reference of the matrix clause.

These features contrast with modern Romance languages. Thus the infinitive paradigm of Italian does not cover tense and modality, and the distribution of the Latin ACI after declarative verbs is possible in Italian only via finite complement clauses, i.e. *che* (‘that’) clauses. Infinite constructions in the modern Romance languages do not have an overt subject, but only - to use the terminology of generative grammar - PRO or traces. In modern Romance languages, only finite complement clauses have overt subjects. In contrast to the ACI, however, these subjects are in the nominative instead of the accusative. This means that the infinite Latin ACI corresponds to a finite complement clause in modern Romance languages. From this we have concluded (Goldbach 2001) that the vast distribution of the ACI described above and also its ability to license a subject are due to the fact that the ACI is “more finite” than other infinitival constructions. We have posited a morpho-syntactic source for this feature: we assume the existence of a syntactic position - in generative terms a syntactic node - which checks both tense and mode features, as in (8). Following Giorgi and Pianesi (1997), we call this node syncretic.

Here we will omit details of the model. The tree diagram in (8) serves only to show that the syntactic model contains a morphological disposition. The morphological categories Mood and Tense, which, as we have seen in section 2, diverge in the paradigm, can be realized in one node in the syntax (cf. (5a)).

In the case of a periphrastic infinitive construction such as (7a), Mood and Tense should be separate categories in the syntax, too. The advantage of Giorgi & Pianesi’s model lies in the fact that we can - in a certain way - deal economically with the syntactic categories and that we have to represent the paradigmatic morphological diversity by several syntactic nodes only in case of positional necessity, i.e. when the existence of more than one syntactic position can be shown.

This syncretic node covering tense and modality leads to the wide syntactic distribution of the ACI. Further, we maintain that the denotation of tense and modality makes the ACI construction so “finite” that it can even license a subject. That is, we trace back subject licensing to finiteness as an expression of modality. In support of this argument we present the following examples, which show that the ACI - in contrast to other infinitival constructions like control, raising or ECM - can stand as an independent clause.
(9) a. mene haec posse ferre?
[That] I can stand this (Cic. Att. 9,13a)?

b. Suessiones suos esse finitimos:
The Suessions are their neighbors (Caes. Gall. 2,4,6).

(10) a.* Him to be a good pilot.

b.* PRO to be a good pilot.

At the moment, we can not present further independent evidence for the assumption that this
form of finiteness of the ACI itself licenses a subject. We suppose a comparison with the ACI
constructions of Ancient Greek may be illuminating, but this has, up to now, not yet been
carried out.

Let us now turn to the question why the ACI has a subject in the accusative instead of the
nominative. In our view, the special morphological character of the accusative is of relevance
here. It seems to us that the accusative is closely related to the nominative: as an Indo-
European heritage, there is a case of syncretism between nominative and accusative in the
neuter nominal system:

(11) Verbum = nom. sg. neutr. = akk. sg. neutr. (“word”)
verba = nom. pl. neutr. = akk. pl. neutr.

This syncretism pervades the declensions, i.e. it concerns all neuter nominal categories.
Furthermore there is, in the 3rd, 4th and 5th declensions, a nominative/accusative syncretism
in the masculine and feminine of the plural, in addition to the neuter one.

(12) consules = nom. pl. mas. = akk. pl. mas. (“consuls”)
radices = nom. pl. fem. = akk. pl. fem. (“roots”)
fructus = nom. pl. mas. = akk. pl. mas. (“fruits”)
domus = nom. pl. fem. = akk. pl. fem. (“houses”)
dies = nom. pl. mas. = akk. pl. mas. (“days”)
res = nom. pl. fem. = akk. pl. fem. (“things”)

Thus we can assume the nominative and the accusative to be closely related morphologically
as well, so that one can, speaking metaphorically, imagine the nominative to be “represented”
in a specified environment of the accusative. In Latin, the far-reaching syncretism between
nominative and accusative allows us to view the accusative as representing the nominative in
certain grammatical contexts.

At this stage we shall turn to the development of classical Latin into Middle Latin. The
first sources of the early Romance languages (e.g. the Strassbourg Oath from 842) are known
to contain no remnant of an ACI. In some Middle Latin texts of the late 6th century, however,
there are ACIs at a time when Latin supposedly still functioned as a first language. In the
following, we shall describe the development of the ACI from the classical period through
late antiquity to Middle Latin.

5 Diachrony of the ACI

We have assembled a small corpus of three Latin texts from different periods. These are
Caesar’s De bello gallico (1st century B.C.) from the classical period, Egeria’s Peregrinatio
ad Loca Sancta (4th century) from late antiquity and the Middle Latin Historiarum Libri
Decem (6th/7th centuries) by Gregory of Tours.
All three texts are narrative prose texts such that they are stylistically comparable. From each text we have analysed the first 4544 words: this corresponds in Caesar to the complete fourth book, in Gregory of Tours to the first part of the first book and in Egeria to the first 12 paragraph of the first book.

Firstly, we look at the subordination strategies in each of these three texts.

Table 2: Complementation

<table>
<thead>
<tr>
<th>complement</th>
<th>Caes. IV</th>
<th>Egeria</th>
<th>Greg. II</th>
</tr>
</thead>
<tbody>
<tr>
<td>sentences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>quod</em>-complements</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><em>quia</em>-complements</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>indir. questions as complements</td>
<td>13</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gerund</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Perception-verbs + pres part</td>
<td>1</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Perception-verbs + bare inf</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td><em>quin</em>-complements</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>ut</em>/uti-*complements</td>
<td>15</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Null-compl. + conj.</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>ne</em>-complements</td>
<td>5</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Sum</td>
<td>41</td>
<td>13</td>
<td>35</td>
</tr>
<tr>
<td>ACI-complements</td>
<td>80</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>121</strong></td>
<td><strong>30</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

Table 3: Infinitive constructions

<table>
<thead>
<tr>
<th>Infinitive constructions</th>
<th>Caes. IV</th>
<th>Egeria part I</th>
<th>Greg. II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>32</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>NCI</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>histor. infinitive</td>
<td>0</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Sum</td>
<td>37</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>ACI</td>
<td>94</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>131</strong></td>
<td><strong>29</strong></td>
<td><strong>56</strong></td>
</tr>
</tbody>
</table>

Table 4: Functions of the ACI

<table>
<thead>
<tr>
<th></th>
<th>Caes. IV</th>
<th>Egeria</th>
<th>Greg. II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACI total</strong></td>
<td><strong>94</strong></td>
<td><strong>17</strong></td>
<td><strong>26</strong></td>
</tr>
<tr>
<td>ACI as indirect speech</td>
<td><strong>14</strong></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 5: Adjuncts vs. complements

<table>
<thead>
<tr>
<th>Adjuncts vs. Complements</th>
<th>Caes. IV</th>
<th>Egeria</th>
<th>Greg. II</th>
</tr>
</thead>
<tbody>
<tr>
<td>quod-occurrences total</td>
<td>30</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>quod-complements</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>causal quod</td>
<td>25</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>ut/uti-occurrences total</td>
<td>37</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>ut/uti-complements</td>
<td>15</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>ut/uti-adjuncts</td>
<td>22</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>ut-modal</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ut-consecutive</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>ut-purposive</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ne-adjuncts</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>quia/quoniam-adjuncts</td>
<td>-</td>
<td>9</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 2 shows that in Caesar the ACI is the principle type of complementation (80 cases out of a total of 121). The ratio between the ACI and other strategies of complementation falls in Egeria and falls still further in Gregory. This means that the ACI continues to be productive through late antiquity to the Middle Latin period, but is no longer the main complementation system. Contrary to the results in Calboli (1989) and Herman (1989), neither in Egeria nor in Gregory did we find a drastic increase of finite complementation by means of *quod, quia* or *quoniam*, which might be seen as an incursion of these constructions into the original ACI distribution. Complementation with *ut* has remained and does not show marked variation.

Table 3 shows the ACI to be not only the principal strategy of complementation of classical Latin, but also its most widely-use infinitive construction. In the late-antiquity and Middle Latin texts this is no longer the case. From table 4 one can deduce that a further function of the ACI in classical Latin - namely expressing reported speech - disappears completely at the later stages. In the sections from Egeria and Gregory so far analysed, we could not find a single instance of ACI expressing reported speech, or otherwise standing independent of an embedding matrix clause, as we have seen above in (9a).

Table 5 shows that the adjunct strategies have hardly undergone any changes either. Only the causal system shows some shift from *quod* in the classical period towards *quia* and *quoniam* in late and medieval Latin.

Contrary to the common belief that the ACI as a way of Latin complementation was substituted by *quod/quia* and *quoniam* complements as early as late antiquity, this infinitive complement continues to appear in the post-classical text analysed here. However, we have not found an ACI as an expression of reported speech either in Egeria or in Gregory. In the post-classical texts, it does no longer appear as a construction independent of the matrix verb. Apart from that, there are no more examples of the ACI expressing modality. There are no cases such as (7a).
The morphological system, however, remains intact, i.e. the components of the periphrastic forms continue to appear, even some periphrastic combinations - both finite and infinite - are still attested, although combined as in (7a), i.e. no longer as an expression of irrealis or potentialis (cf. (13):

(13) Nam ... referat, post divi Honori excessum Valentinianum puerulum ... a consubrino Theodosio imperatorem fuisse creatum (Greg. 8.78.24-29).
Then he refers that after the death of the divine Honorius the little boy Valentinianus was made emperor by his cousin Theodosius.

Although the morphological inflections are still available, the syntactic system evidently does not use them to denote modality. According to Perrochat 1932, the irreal use of the infinitive appears as late as the classical Latin period. The pre-classical Latin of Plautus and Terence (3rd/2nd centuries B.C.) does not contain these forms. This means that the category of modality is the last to develop in the infinitival system, and it is also the first to disappear. In this regard, the diachrony of the Latin infinitive system seems to respect a universal hierarchy of functional categories, like the one put forward by Wunderlich:

(14) voice > aspect > tense > mood etc. (Wunderlich 1993: 63)

In fact, the categories voice, aspect and tense have been preserved in the infinitival paradigm of late-antiquity and Middle Latin. We interpret the development thus: the category modality is subject to some semantic decay in the paradigm of the infinitive, as the forms to be combined do not show any phonological or morphological change. For the syntax of the ACI this means that the structure no longer has a syncretic Mood/Tense node in late Latin. Tense is realized as a monofunctional node, but how is Mood to be realized? In Late Latin this category is encoded only in finite sentences with complementizer and conjunctive. We assume then that modality comes into existence in a coordinated effort between the complementizer and a Mood node, such that mood might be realized together with Force syncretically (in a rather hybrid way, according to Giorgi & Pianesi 1997) - in this case in the syntax.

Let us sum up our results:

1. We have seen that the syntax of the ACI did not undergo any drastic change over the course of seven centuries.
2. The complementation system as a whole does not undergo any major shift.
3. The ACI as the expression of irrealis disappears, as does the ACI as a construction independent of a matrix verb.
4. The category modality is no longer expressed by the infinitival system.

We consider it necessary to investigate the realization of modality in greater detail, and therefore to analyse the distribution of the Latin conjunctive, too. In addition, we expect further hints on the nature and the development of the Latin ACI from a comparison with the development of the ACI in Ancient Greek, as noted above.

6 Conclusion

At this stage of research we think that the development of the modality expression in the Latin infinitival system is congruent with the one of the pronoun system discussed in Keenan (2001) that is, we observe semantic decay of modality in the infinitive having repercussions.
on the syntactic distribution of the ACI. The superficial form of the ACI, though, did not change: neither did the constituent structure alter nor did the morphological material suffer from phonological erosion.

Our results do not confirm the suggestion that the infinitival paradigm ceases to express passive or future maintained by Hoffmann and Szantyr (1972), with reference to Thielmann (1886). A superseding of the ACI by quodiliaquia or quonium complements could not be established for the texts analysed here either. That means that our survey by and large supports the result of Cuzzolin (1994) that the ACI remains as a complement clause in Latin texts up to a rather late period. To sum up, we find only a small change: modality is no longer expressed in the ACI of post-classical Latin. We assume this to be connected with the fact that the ACI no longer appears as an independent clause. On the whole we may say that the ACI hardly changed over the course of 700 years. While its form remained stable, however, its distribution became more restricted. The other strategies of complementation do not show any dramatic change in the Latin system of embedding either. From the perspective of Latin complementation we can thus support Keenan’s and Longobardi’s hypothesis that syntax is inert and evidences change only when this is induced by phonological or semantic interfacing.

References

Thielmann, Ph. 1886. Facere mit dem Infinitiv. *Archiv für lateinische Lexikographie und Grammatik* 3, 180-238.


1 In cited data, the matrix verb is underlined, the embedded infinitive is italicised and its infinitival subject is bold-printed. We use the following grammatical abbreviations: 1., 2., 3.= person; sg., pl. = number; ind. = indicative, subj. = subjunctive, pres. = present tense, perf. = perfect, impf. = imperfect, fut. = future, act. = active, pass. = passive, deponent = deponent verb (which exhibits passive morphology but denotes active action), mas. = masculine, fem. = feminine, neutr. = neutral, refl. = reflexive, nom. = nominative, acc. = accusative, dat. = dative, abl. = ablative, gen. = genitive, inf. = infinitive, part. = participle, adv. = adverb. The abbreviations of the Latin authors’ names and texts are as in the index of the Thesaurus Linguae Latinae.

2 We will use ‘mood’ to refer to the morphological material while we use ‘modality’ to designate the semantic category.

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