

An unexpected root clause

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1 Introduction

Finiteness is a central concept in many linguistic theories, yet it is poorly understood. In this squib we provide new data that must be incorporated into current research on finiteness: the Latin infinitival structure known as the “accusative and infinitive” (AcI), which has properties that are typical of canonical non-finite clauses, can be syntactically unembedded.

While the format of a squib prevents us from both providing sufficient empirical detail and engaging in a full theoretical discussion, it is clear that this is unexpected. A common view – found in one variant or another in Hornstein (1990, 115–7, 146–54), Klein (1994), Rizzi (1997), Bianchi (2003), Adger (2007) and Giorgi (2010) – is that finiteness is responsible for anchoring the clause to the actual utterance, e.g. for the interpretation of tense. Since a root clause must be temporally anchored to the utterance time, we would not expect non-finite clauses to be root clauses.

Finiteness has morphological, syntactic and semantic dimensions, which do not always align. An example from Latin is clauses with historical infinitives, which are morphologically non-finite but syntactically unembedded and semantically like finite forms in having deictic time reference and speaker assertion semantics. What makes AcIs different from these and similar structures is that they behave like non-finite clauses both morphologically and semantically, yet are demonstrably syntactically unembedded in certain situations.

2 The AcI construction

The AcI canonically consists of an infinitive and a nominal subject which is in the accusative rather than the nominative. Internal arguments and adjuncts are realized as in a finite clause. AcIs are common as complements of report predicates, like *fateor* “confess” in (1), but also occur in longer passages of indirect discourse as in (2).

- (1) ego [me amare hanc] fateor.
 I.NOM me.ACC love.INF.PRS her.ACC confess.PRS.1S
 ‘I confess that I love her.’ (Ter. An. 898)
- (2) [reddi captivos]₁ negavit [esse utile]₁; [illos
 return.INF.PRS.PAS prisoners.ACC deny.PFV.PST.3SG be.INF.PRS useful they.ACC
 enim adulescentes esse et bonos duces]₂, [se iam
 for young.ACC be.INF.PRS and good.ACC officers.ACC himself.ACC already
 confectum senectute]₃.
 consumed.ACC age.ABL
 ‘He denied that it would be expedient to return the prisoners; for, he said, they are
 good officers, while he was already consumed with age.’ (Cic. Off. 3.100)

(2) contains three reported clauses each of which takes the form of an AcI.¹ The two instances of the infinitive *esse* “be” belong to the first and second AcI; the infinitive in the third AcI has been elided.² The first AcI is sandwiched around the report predicate *negavit* “denied” and the second and third AcI follow without any additional overt report predicate.

Two explanations for the lack of an additional report predicate immediately spring to mind. First, it could be that the three AcIs are asyndetically coordinated and syntactically embedded as a whole under *negavit*. This analysis is ruled out by the context. The overt report predicate is a negative utterance verb and the first AcI expresses what is being denied. The next two AcIs, on the other hand, are asserted, not denied, and cannot therefore be embedded on a par with the first AcI.

A second possible explanation is that there is an implicit affirmative utterance verb in the structures of the second and third AcIs. This is compatible with the interpretation we expect from the context, but in section 4 we show that such a null verb leads to empirically incorrect predictions. We therefore defend a third analysis under which the first AcI is syntactically embedded under *negavit* while the second and third AcIs are syntactically unembedded. Combine this with the claim that AcIs are non-finite, which we defend below,

¹Notice that the subject of the first AcI is itself an AcI: what we translate as “to return the prisoners” is really a passive AcI “for the prisoners to be returned”. This is orthogonal to our concern.

²Elision of certain forms of the verb *esse* is a general phenomenon in Latin and not restricted to AcIs.

and we have counterexamples to the idea that non-finite clauses cannot be root clauses.

3 Latin AcIs are non-finite

There is no agreed upon set of features that will identify a clause as (non-)finite. Nikolaeva (2007b, 2010) identifies both morphological, syntactic and semantic features of finiteness. Here we look at deficient tense, aspect and mood (TAM) categories, agreement and subject case assignment. None of these features can be taken as defining non-finiteness: there are, for example, languages in which all verbal forms lack agreement and yet some of those verbal forms can be considered finite on other grounds. What this section aims to show is that AcIs pattern with what we expect from non-finite forms on just about any test that has been proposed and that is relevant for Latin.

Deficient tense, aspect and mood Infinitives cannot express tense relative to the utterance time (Hornstein, 1990, 147). Infinitives instead either have *bound tense*,³ which means that they are tenseless and use the matrix tense as their own, or have *dependent tense* and express time relative to (but not necessarily identical to) the matrix. For aspect and modality, the typical situation cross-linguistically is that these categories can be expressed but to a more limited degree than in finite clauses (Nikolaeva, 2010, 1180).

Latin infinitives conform to this picture: They never express absolute tense, only dependent tense (in AcIs) or bound tense (in many control structures). (3) illustrates the three possible “tense” forms of the Latin infinitive.⁴ (3-a) shows them under a present tense report predicate where they are interpreted relative to the utterance time. In (3-b) the report predicate is in the past and we see that the same infinitival forms are now interpreted relative to some past time:

³This is sometimes called anaphoric tense, but we will avoid that term here, since it risks confusion with *discourse anaphoric* tense, which is proper to finite verbs.

⁴We use constructed examples here because attested examples do not come in minimal pairs and we are illustrating an uncontroversial point about the verbal system of Latin (Pinkster, 2015, 521).

- (3) a. *Marcum bonum esse/fuisse/futurum esse dico.*
 Mark.ACC good.ACC be.INF.PRS/PRF/FUT say.PRS.1S
 ‘I say that Mark is/has been/will be good.’
- b. *Marcum bonum esse/fuisse/futurum esse dixi.*
 Mark.ACC good.ACC be.INF.PRS/PRF/FUT say.PRS.1S
 ‘I said that Mark was/had been/would be good.’

We conclude that Latin AcI structures never express deictic tense, only dependent tense.

When it comes to aspect, this category is obligatorily expressed in the indicative, but cannot be expressed in the infinitive (Pinkster, 2015, 384). Therefore, while (4-a) can distinguish between a imperfective verb and a past perfective verb, both will be reported as shown in (4-b) with an aspect-neutral infinitive:

- (4) a. *Marcus cenabat/cenavit.*
 Mark.NOM eat.IPFV/PFV.PST.3S
 ‘Mark was eating/ate.’
- b. *Marcum cenavisse dico.*
 Mark.NOM eat.INF.PRF say.PRS.1S
 ‘I say that Mark ate/was eating.’

The category of mood is also deficient as there is no subjunctive of the infinitive.⁵ We see this if we look at conditional structures, which make a distinction between ordinary conditionals in the indicative and “potential” conditionals in the subjunctive as shown in (5-a).⁶ Both would be reported as in (5-b) and since the infinitive cannot express mood the contrast has been neutralised in the consequent (Menge, 2000, 825).⁷

- (5) a. *Si hoc dicis/dicas, erras.*
 If this.ACC say.PRS.IND.2S/PRS.SBJV.2S be wrong.PRS.IND.2S
 ‘If you say/should say this, you are/would be wrong.’

⁵AcIs can however express counterfactuality, in the form of a future participle of the lexical verb and the perfect infinitive of the auxiliary (Menge, 2000, 826). Arguably, the counterfactual interpretation does not arise from the infinitive per se, but from the future in the past-construction as a whole.

⁶Note that despite the subjunctive mood this is not a “subjunctive conditional” in the sense of a counterfactual. Counterfactual conditionals are also in the subjunctive, but in addition require a shift to the past.

⁷In fact, since all dependent clauses in reports get subjunctive mood, there is no contrast in the antecedent clause either.

	Active	Passive
Future	amatur am esse love.FUT.PTCP be.INF.PRS	amatum iri love.SUP go.INF.PRS.PASS
Present	amare love.INF.PRS	amat am esse love.PRF.PTCP.PASS be.INF.PRS
Past	amavisse love.INF.PRF	amat am fuisse love.PRF.PTCP.PASS be.INF.PRF

Table 1: Infinitival paradigm for *amare*

- b. Puto te, si hoc dicas, errare.
 think.PRS.1S you.ACC if this.ACC say.PRS.SBJV.2S be wrong.INF.PRS
 ‘I think that if you say/should say this, you are/would be wrong.’

Deficient agreement Agreement, particularly in PERSON, is another phenomenon that is typically deficient in non-finite forms. Here too, there is cross-linguistic variation: several varieties of Romance have ‘inflected infinitives’, which agree even in PERSON (Raposo, 1987; Vincent, 1998; Ledgeway, 1998, 2000), and of course there are languages where even finite forms show no agreement in PERSON (e.g. Mandarin Chinese).

Latin presents the canonical picture in which finite forms display rich agreement while infinitives do not agree. Indicatives, subjunctives and imperatives all agree in person and number with their subjects in Latin. Participles and gerundives, in contrast, agree with their subject in gender, number and case, while infinitives and gerunds do not agree at all. The exception is periphrastic forms consisting of an infinitive and a participle, but even here the infinitival part of the periphrasis never agrees, as shown in Table 1. The highlighted ending *-am* is the feminine accusative singular ending, which is used as an illustration here.

No nominative assignment A third property that is often used to distinguish non-finite forms from finite ones is the absence of nominative case assignment (Nikolaeva, 2007b, 4). This too is not a universal property of non-finite forms, as demonstrated, for example, by ‘personal infinitives’ in various Romance languages (Mensching, 2000; Ledgeway, 2000),⁸ but again the situation in Latin is (almost) the canonical one. Finite verbs invariably assign

⁸But note that the personal infinitive only appears in embedded contexts, so it is not relevant for this squib.

nominative case to their subjects,⁹ while non-finite forms (participles, infinitives, gerunds and gerundives) typically do not. An exception is the ill-understood ‘historical infinitive’ which is used in narrative contexts (6).

- (6) Graecus primo distinguere et dividere, quemadmodum
 Graecus.NOM first distinguish.INF.PRS and divide.INF.PRS as
 illa dicerentur.
 they.NOM.PL say.3PL.PRS.SBJV.PAS
 ‘The Greek (i.e. the philosopher Philodemus) first drew distinctions and split hairs
 about how they (i.e. those doctrines) were meant’ (Cicero, Pis. 69)

We will briefly return to this construction in section 5. This case apart, the subject of an infinitive appears in the accusative case, even when there is no evidence for raising to an object position, as in the example below where the infinitival clause appears to be the subject of the matrix verb:

- (7) ... si eos hoc nomine appellari fas est ...
 if them.ACC that.ABL name.ABL call.INF.PRS.PASS right is.PRS.3SG
 ‘if it is right to call them by that name’ (Cic. Mur. 80)

Of course, the existence of such structures does not in principle rule out that other instances of the AcI involve raising to object. We cannot go into the detail of the Latin-specific literature (see Jøhndal (2012, 68–76) for a summary) but two views dominate: either the accusative is a default case (Goldbach, 2003; Ferraresi & Goldbach, 2003; Calboli, 2005) or the infinitive assigns accusative case either directly or mediated by a null complementizer (Cecchetto & Oniga, 2002; Melazzo, 2005; Jøhndal, 2012). Either way it is clear that the infinitive is unable to assign nominative case and therefore behaves as traditionally expected of a canonical non-finite form.

⁹Barðdal et al. (2012) discuss what they call the “Dative Subject Construction” but, as they admit, they have no evidence that the dative arguments in question are actually subjects in Latin.

4 AcIs can be root clauses

Despite the non-finite nature of AcIs, we will argue that AcIs can be used as root clauses, i.e. without any syntactic embedding, in a specific environment, namely so-called *unembedded indirect discourse* (UID, Bary & Maier, 2014), i.e. contexts like (2).¹⁰

The term UID was coined by Bary & Maier (2014) They discuss the Ancient Greek discourse particle *gar*, which is the rough functional equivalent of Latin *enim* seen in (2). These particles unambiguously indicate the start of a new sentence and regularly¹¹ occupy the second position of their sentences. This strongly suggests a sentence break at the orthographic semicolon in (2), which militates against the coordination view that we dismissed on other grounds in section 1. However, the presence of *enim* in (2) does not on its own tell us whether the sentence that it introduces contains an embedding null report verb. We will show that a conclusive argument against a null report verb can be constructed if we take the *scope* of the discourse particle into account. Moreover, evidence from rhetorical questions also militate against assuming a null verb.

The discourse particle *enim* in AcIs The discourse particle *enim* “for” is a connective that prototypically expresses a causal relationship between discourse units. A typical example is (8) (from Kroon 1995, 137):

- (8) iam eum, ut puto, videbo; misit enim puerum. . .
now him.ACC, as think.PRS.1SG, see.FUT.1SG send.PFV.PST.3SG for boy.ACC
‘I will see him, I think. For he has sent a boy. . .’ (Cic. Att. 10.6.5)

We can represent the logical form of the second sentence in (8) as (9). For concreteness we assume that *enim* is somewhere in the CP domain. DEIC-PAST relates the event to the utterance time and marks it as prior to it.

¹⁰UID should not be confused with *free* indirect discourse. In free indirect discourse, pronouns and tenses are shifted but the discourse is otherwise interpreted from the perspective of the reported speaker. For example, there are no *de re* readings of definite descriptions.

¹¹But not invariably; see Spevak (2010, 16f) for details on the position of *enim*.

this involves the very unattractive assumption that *enim* can scope under null verbs of saying, whereas it always scopes above overt verbs of saying. A simpler generalization is that *enim* always scopes over *all the syntactic material* in the sentence in which it occurs. Given that *enim* in (12) clearly scopes over the content of the report only, this means that the LF must be as in (14).

(14) [CP enim [TP REL-PAST [VP he is in the habit of promising but not paying]]]

(14) is correct as far as it goes, in that it represents the assertoric contents of (12). However, a crucial part of the meaning of (14) is that this proposition is *not* asserted in the speech act corresponding to the utterance of (12), but is understood as the assertoric content of another speech event that is available in the context.¹³ We assume that the root infinitive gives rise to a presupposition that the proposition expressed by the root AcI is the assertoric content of some speech event in the context. This modal contextual dependency is reminiscent of *modal subordination* (Roberts, 1989), whereby a syntactically unembedded modal expression is interpreted within the scope of a modal operator in the previous textual discourse. Similar kinds of semantic subordination in report contexts are observed for the German report subjunctive (Fabricius-Hansen & Sæbø, 2004), as well as for the German modal *sollen* (Faller, 2017); see Solberg (2017) for a detailed semantic analysis of the Latin construction.

The argument from *enim* can be repeated with a number of other discourse particles, and it can also be made for discourse relations that arise in the absence of overt markers such as *enim*. The details would take us too far into theories of discourse structure, so let us just observe that in longer stretches of indirect discourse, we infer discourse relations between the propositions expressed in the AcIs, not between assertions of those propositions. Moreover, the inferred discourse relations are interpreted as parts of the report, not as parts of the main narration. That is, the narrator does not commit himself to these relations.

¹³In (12), the agent of the two speech events is the same, as this is a first person report ('I said ...'), but there are still two distinct events.

An analysis in terms of implicit embedding verbs will therefore get the discourse structure systematically wrong.

Rhetorical questions Questions in indirect speech are generally in the subjunctive. Latin grammars observe, however, that indirect rhetorical questions are usually not subjunctives. Instead they are reported as AcIs (see e.g. Kühner & Stegmann, 1914, 537–538). Such interrogative AcIs have the same relative tense interpretation as the non-interrogative AcIs discussed above. For example, the perfect infinitive in the reported rhetorical question in (15) is evaluated relative to the time of the patricians’ rage.

- (15) Quod ubi est Romam nuntiatum ... fremunt omnibus
 this.ACC when be.PRS.IND Rome.ACC announced rage.PRS.IND.3P all.ABL
 locis: ... num etiam in deos immortales inauspicatam legem
 places.ABL Q even in gods.ACC immortal.ACC ill-omened.ACC law.ACC
 valuisse?
 prevail.INF.PRF
 “When the news arrives to Rome, [the patricians] rage at every corner: ... Had the
 ill-omened law even prevailed against the immortal gods?” (Liv. 7.6.11)

However, the grammars also note (e.g. Kühner & Stegmann, 1914, 541) that this pattern is in fact only found in UID, i.e. questions that are not directly embedded under an interrogative predicate. Truly embedded (indirect) questions are in the subjunctive even when they are rhetorical (16).

- (16) (Sophocles’ sons try to get control of his property on the ground of imbecility. In court, he points to his latest work, *Oedipus at Colonus*.)
- tum senex dicitur ... recitasse iudicibus
 Then old.man.NOM say.PRS.3S.PASS recite.INF.PRF judges.DAT
 quaesisse-que num illud carmen desipientis videretur,
 ask.INF.PRF-and whether that poem.NOM imbecile.GEN seem.IPFV.PST.SBJV.3S
 ‘The old man is said to have read [his poem] to the judges and to have asked
 whether that poem seemed like the work of an imbecile.’ (Cic. Sen. 22)

This difference between the apparently unembedded, reported rhetorical question in (15)

and the clearly embedded rhetorical question in (16) means there must be some relevant syntactic difference. The obvious answer is to take the lack of embedding at face value.

5 Conclusion

We have shown that UID in Latin does in fact involve syntactically unembedded infinitives, i.e. non-finite root clauses, that are semantically interpreted through a pronominal-like dependent tense linked to a contextually available speech event.

There are parallels both on the semantic and the syntactic side. Semantically, we have already noted the similarities with modal subordination, in particular in reportative constructions (like the German subjunctive and reportative *sollen*). But these involve forms where there is no morphological or syntactic evidence for non-finiteness.

On the syntactic side, root infinitives are not unheard of elsewhere (see e.g. Grohmann & Etxepare 2003). However, they are associated with a range of non-assertoric meanings such as elliptical answers, jussives/hortatives, rhetorical questions and counterfactuals (Rizzi, 1993). By contrast, the Latin construction does express an assertion, although typically not one of the external speaker.

The interest of our construction is clear if we contrast it with the above-mentioned historical infinitive (6) that has occasionally figured in the literature on finiteness. As pointed out by Nikolaeva (2007a, 159), the infinitive in these structures licences a nominative subject, expresses a speaker assertion and has deictic past tense reference (which triggers past sequence of tense in the complement clause in (6)). We can add that it is a syntactically independent root clause. In short, “the only obvious indicator of nonfiniteness is morphology [vz. the lack of agreement] ” (Nikolaeva, 2007a, 159).

The situation with unembedded AcIs is exactly the opposite. These are also syntactically independent root clauses but unlike historical infinitives they do not license nominative subjects, do not express speaker assertions and do not have deictic time reference. In short,

they are truly non-finite root clauses. This is a finding that must be incorporated into current research on finiteness.

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