The nature of finiteness

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1. What is finiteness?

Claim #1:

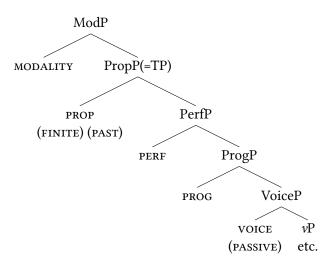
- Finiteness is a purely syntactic property, licensing case on the subject and agreement on the verb (Binnick 1991: 69, Jespersen 1924: 314).
- Finiteness itself has no inherent semantic content.

BUT:

• Certain semantic properties, such as the ability to have independent temporal interpretation, are frequently associated with it. Why?

Claim #2:

- Finiteness occupies a particular position relative to the position of the interpretable features of the clausal spine.
- Specifically, [FINITE] is a (usually optional) property of whichever syntactic head—usually T—carries the feature that makes a clause denote a proposition rather than a bare event.
- (1) The English clausal spine (specifiers omitted)



- The apparent semantic content associated with finiteness derives from its position in the clause structure.
- Though finite has no semantic content, it is a feature of the head that makes a clause propositional. All finite clauses therefore denote propositions. But at least in English, not all propositions are finite.
- (2) a. We understood [that Mary was doing her homework]. (finite proposition)
 - b. We understood [Mary to be doing her homework]. (nonfinite proposition)
 - Working hypothesis: A clause in which the subject is nominative (and the verb agrees with the subject) is finite.

2. Problem for today

- Crosslinguistically, several clausal constructions exhibit nominative case licensing and/or ϕ agreement, but differ from other clearly finite clauses in the same language.
- Cowper (in press) discusses five of these:

- Modern Greek *na*-subjunctive clauses

(Kyriakaki 2006)

- Personal infinitives in West Flemish

(Haegeman 1985)

- Turkish agreeing gerunds

(George & Kornfilt 1981)

- Inflected and personal infinitives in Romance null-subject languages

(Raposo 1987a,b, 1989; Pountain 1995; Quicoli 1996)

- Southern Calabrian *modo* clauses

(Ledgeway 1998)

Do these phenomena cast doubt on the two claims made above? I will argue that they do not.

3. Modern Greek na-subjunctives

- Greek has a construction called the *na*-subjunctive. *Na* precedes the verb; the verb appears in what looks like a perfective present form. Some are propositional, and some denote bare events.
- Propositional *na*-clauses have nominative subjects; non-propositional *na*-clauses have ECM subjects.
- All *na*-clauses have φ agreement between subject and verb
- Greek makes very limited use of infinitives.

(3) Greek (Kyriakaki 2006: 53)

a. Propositional *na*-clause, nominative embedded subject:

Perimene o ðimitris na erθi (alla ekane laθos). wait.past.3sg **the.nom Dimitris.nom** na come.pfv. 3sg but made mistake

'She expected that Dimitris would arrive, (but she was wrong).'

b. Bare eventive *na*-clause, accusative embedded subject:

Perimene to δ imitri na er θ i (#alla ekane la θ os). wait.pst.3sg the.Acc Dimitris.Acc NA come.pfv.3sg but made mistake

'She was waiting for Dimitris to arrive, (# but she was wrong).'

• Proposal:

- ϕ agreement in Greek is independent of finite. All Greek clauses exhibit ϕ agreement; so-called infinitives are not full clauses.
- The presence of finite is thus diagnosed by the presence of a nominative subject.
- As in English, FINITE in Greek is a dependent of PROPOSITION.
- Unlike English, in Greek finite is an *obligatory* dependent of Proposition.
- (3a) is finite; (3b) is nonfinite.

4. West Flemish personal infinitives

- They appear only in adjuncts with a preposition (4, 5).
- They can have independent temporal reference (5).
- They have no φ agreement, but do have nominative subjects.
- They denote propositions, not bare events.
- (4) (Haegeman 1985: 125)
 - a. Mee ik da te zeggen hee-se dat hus gekocht. with I that to say has-she that house bought 'Because of my saying that she has bought that house.'
 - b. Voor gie da te grygen go-je vele moeten veranderen. for you that to get go-you much must change 'In order to get that you'll have to change a lot.'
- (5) (Haegeman 1985: 131–132)
 - a. Mee ik da gisteren te zeggen hee-se dat hus gekocht. with I that yesterday to say has-she that house bought 'Because of my saying that yesterday she has bought that house.'
 - b. *mee ik da gisteren te zeggen goa-se dat hus kopen.*with I that yesterday to say goes-she that house buy
 'Because of my saying that yesterday, she will buy that house.'
 - c. Mee ik tnoaste joar weg te goan heen-k dat hus verkocht. with I next year away to go have-I that house sold 'Because of my going away next year, I have sold that house.'
 - They have more structure than plain infinitives with PRO subject, or ECM constructions: only personal infinitives can contain the focus marker *tet* (Haegeman 1985: 125–129).
- (6) Personal infinitive with *mee*, focus marker permitted:
 - a. mee Valère weg te goan with Valère away to go 'with Valère going away'
 - b. mee tet Valère weg te goan with Foc Valère away to go 'with Valère going away'
- (7) Plain infinitive with PRO subject, focus marker impossible:
 - a. dan-k proberen voor PRO weg te goan that-I try for PRO away to go 'that I try to go away'
 - b. * dan-k proberen voor-tet PRO weg te goan that-I try for-Foc PRO away to go

- (8) Plain ECM infinitive, focus marker impossible:
 - a. dan-k gisteren Valère zagen weggoan that-I yesterday Valère saw away-go
 'That I saw Valère leave yesterday'
 - b. * dan-k gisteren **tet** Valère zagen weggoan that-I yesterday FOC Valère saw away-go
 - Haegeman argues that personal infinitives are headed by a finite Comp that contains a +TENSE, -AGR Infl. *Mutatis mutandis*, it is this Comp that licenses nominative case on the subject.
 - More work is required to determine the arrangement of interpretable features in the West Flemish Infl/Comp system and whether the feature finite is actually involved in these constructions. However, nothing in the available data contradicts the assumption that finite is a dependent feature of proposition. As in Greek, it seems that finite is more closely connected to nominative case licensing than to φ agreement, since personal infinitives in West Flemish lack φ agreement altogether.

5. Turkish agreeing gerunds

- The gerund carries φ agreement with its subject.
- But the subject is genitive, not nominative.
- The gerund as a whole is case-marked like a nominal.
- In Turkish nominal possession, the possessum is marked with the ϕ -features of the possessor.
- (9) a. Finite clausal complements:

Ahmet [biz viski-yi iç-ti-k] san-ɨyor.
Ahmet we whiskey-ACC drink-PST-1PL believe-PRS

'Ahmet believes (that) we drank the whiskey.'

(George & Kornfilt 1981: 118)

b. Non-finite clausal complements:

Ahmet [biz-i viski-yi iç-ti] san-iyor.
Ahmet we-acc whiskey-acc drink-pst believe-prs

'Ahmet believes us to have drunk the whiskey.'

ibid.

(10) a. "Finite" gerunds:

(ben) [kiz-im-in viski-yi iç-me-sin]-e razi ol-du-m

I daughter-my-gen whiskey-ACC drink-ger-3sg-dat consent-pst-1sg

'I consented to my daughter's drinking the whiskey.'

ibid.

b. "Non-finite" gerunds:

(ben) [viski-yi iç-meg'-]e razɨ ol-du-m
I whiskey-ACC drink-GER-DAT consent-PST-1SG

'I consented to drink the whiskey.'

ibid.

George & Kornfilt call gerunds like (10a) finite. But crucially, an agreeing gerund can denote a bare event:

(11) a. *Çocuk-lar-in viski-yi iç-me-sin gör-ül-ecek bir manzara deg'il.* child-pl-gen whiskey-ACC drink-ger-3pl see-psv-ger one sight is-not

'The children drinking the whiskey is not a sight to be seen.'

(Hitay Yükseker, p.c.)

b. Çocuk-lar-in bahçe-de oyna-ma-sin-i duy-du-k child-pl-gen garden-loc play-ger-3pl-acc hear-pst-1pl

'We heard the children playing in the garden.'

(Hitay Yükseker, p.c.)

Conclusion: Turkish agreeing gerunds are ordinary (if complex) nominal constructions that exhibit the regular nominal properties of genitive case licensing and agreement. They are thus no more finite than an ordinary possessed nominal.

6. Interim conclusion

- Finite is a (possibly optional) dependent of the feature Proposition.
- Clauses bearing this feature must refer to propositions, not bare events.
- Finite assigns nominative case to the clausal subject, and may trigger φ agreement on the verb.
- φ agreement may arise for other reasons (EPP checking, possessive agreement in nominals, etc.
- Some languages have more agreement than others.
- A nominative subject seems to be the best indicator that a clause is finite.

7. Portuguese infinitives

- Portuguese has inflected infinitives that carry ϕ agreement with the subject, and whose subjects are nominative (12) (Raposo 1987a, 1989).
- They can only appear in a case-marked position (Raposo 1987a). This is reminiscent of the West Flemish personal infinitive, which actually has finite as a feature of C.
- BUT: these inflected infinitives with nominative subjects can denote not only propositions (12) but also bare events (13).
- Two possibilities:
 - A nominative subject is not always a sufficient condition for saying a clause is finite.
 OR
 - FINITE is not, in fact, a dependent of PROPOSITION.
- Claim: A nominative subject is not always a sufficient condition for saying a clause is finite.

7.1 Inflected infinitives

- (12) Inflected infinitive, nominative subject, proposition
 - a. Despois de eles chegarem viram as ruínas. after of they.nom arrive.inf.3pl see.pst.3pl the ruins 'After they arrived, they saw the ruins.' (Ledgeway (1998): 7)
 - b. Eu lamento os deputados terem trabalhado pouco.
 - I regret.prs.1sg the deputies have.inf.3pl work.ptcp little
 - 'I regret (that) the deputies have worked little.' (Raposo 1987a: 87)
- (13) Inflected infinitive, nominative subject, bare event
 - a. Eu vi [eles trabalharem].
 - I saw they.nom work.inf.3pl
 - 'I saw them work.' (Raposo 1989: 288)
 - b. Os $actores_i$ viram [$eles_{*i/j}$ representarem a cena]. The actors saw they.nom (\neq the actors) represent.inf.3pl the scene
 - 'The actors saw them represent the scene.' (ibid: 302)
 - Are Portuguese inflected infinitives actually finite, like Greek propositional *na*-subjunctive clauses and West Flemish personal infinitives? If they are, then:

- Why is the verb form infinitival? Portuguese has both indicative and subjunctive finite verb forms. In Greek, the inflectional morphology in the *na*-subjunctive is identical to what's found in the present indicative and the future.
- Why is the construction restricted to appearing only in case-marked contexts? What role does the external case-marker play in making the construction possible?
- Why can they denote bare events?
- Or, are they non-finite, like Greek bare-event *na*-subjunctive clauses? If they are, then
 - Where does the nominative case come from?
- A bit of context: There are two more infinitival constructions in Portuguese.

7.2 Prepositional inflected infinitives

- The subject receives the case assigned by the external case assigner, if there is one; if the subject is a pronoun and the external case assigner is a verb, the subject can cliticize to the verb. If the clause is embedded, the subject cannot be nominative (14).
- The preposition *a* appears between the subject, if any, and the infinitival verb (14,15).
- The infinitive agrees with the φ -features of the subject (14,15).
- When embedded, the infinitive denotes a bare event (14).
- (14) Prepositional inflected infinitive, ECM subject, bare event:
 - a. Os $actores_i\ viram-nos_{j/*i}\ [ec_j\ a\ representarem\ a\ cena]$ the actors saw-them EC to represent.3PL the scene

'The actors saw them representing the scene.'

(Raposo 1989: 290)

- b. Eu sonhei con [tigo a entrares na minha casa].
 - I dreamed with you.obl to enter.inf.2sg in.the my house

'I dreamed about you entering my house.'

(Raposo 1989: 290)

- BUT: prepositional inflected infinitives need not be embedded. If they aren't (15), then:
 - They are propositional.
 - The subject is nominative.
- (15) Matrix prepositional inflected infinitive, nominative subject, proposition:

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Eles a fumarem marijuana! Que horror! they to smoke.INF.3PL marijuana what horror
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'They smoking marijuana! How awful!'

(Raposo 1989: 289)

- Interestingly, there are also matrix propositional small clauses with nominative subjects (16).
- (16) Matrix small clause, nominative subject, proposition:

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[Ele um imbecil]? Não acho!
he an idiot? not think.prs.1sg
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'Him an idiot? I don't think so!'

(Raposo 1989: 290)

• With prepositional inflected infinitives, nominative subjects are possible only when the clause is propositional. This lines up with our interim conclusions.

7.3 Plain infinitives

- The subject does not receive case within the infinitive, but from an external case assigner, frequently via A-movement.
- The infinitive does not agree with the ϕ -features of the subject. If agreement is marked, the sentences in (17) become ungrammatical.

(17) a. Subject raising:

Os embaixadores parecem ter chegado a um acordo. the ambassadors seem.prs.3pl have.inf reach.ptcp to an agreement

'The ambassadors seem to have reached an agreement.'

b. Passive

Os soldados foram vistos cair. the soldiers be.pst.3pl see.ptcp.pl fall.inf

"The soldiers were seen to fall." (Quicoli 1996: 69)

(Quicoli 1996: 57)

c. ECM/Object clitic placement:

*José nos viu sair da casa.*José us see.pst.3sg leave.inf of.the house

'José saw us leave the house.' (Quicoli 1996: 68)

- These infinitivals seem to be straightforwardly nonfinite. They have neither nominative subjects nor ϕ agreement. They can denote either propositions (17a,17b) or bare events (17c).
- Neither prepositional inflected infinitives nor plain infinitives give any reason to doubt our interim conclusion that only propositional clauses can be finite, and that nominative subjects generally appear only in clauses bearing the feature finite.
- Whatever is going on with the inflected infinitives in section 7.1, it cannot be due to a major difference between Portuguese and the other languages in how finite works.

Raposo's (1987a,1989) account of non-prepositional inflected infinitives:

- Plain infinitives are [-Tense, -AGR]
- Inflected infinitives are [-Tense, +AGR].
- Infl [-Tense, +AGR] can assign Nominative case to the subject only if it is itself specified for case.
- Infl can be specified for case only in null-subject languages.

Ouestions:

- What is the content of the features [±Tense, ±AGR]? They are more descriptive than principled.
- How does checking case with an oblique or accusative case-assigner permit Infl to assign nominative case to its subject?

8. Proposal

- Nominative case is indeed a better diagnostic for finite than ϕ agreement on the verb.
- Finite is indeed a (usually) optional dependent of proposition; only propositional clauses are finite. In general, clauses with internally licensed nominative subjects can denote only propositions, not bare events.

BUT:

- In null-subject languages, the feature FINITE and the nominative case property are separated, and can appear independently on Infl (in the spirit of Raposo 1987a, 1989).
- Any Infl—finite or nonfinite—can thus carry a nominative case feature, similar to the case features that appear on nominals. Infl in these languages thus shares some properties with nominals (Alexiadou & Anagnostopoulou 1999).
- If present, the feature finite activates the nominative case feature, which can then be assigned to an overt subject in [Spec,IP]. This is what happens in ordinary finite clauses.
- When the nominative case feature appears on a nonfinite Infl, then:
 - If IP is in a case-marked position, the nominative case feature of Infl can be activated, and Infl can assign nominative case to a subject in [Spec,IP] even in the absence of FINITE.
 - If IP is not in a case-marked position, the derivation crashes because the nominative case feature is unchecked.
- An Infl with an activated Nominative case feature, but without the feature finite, is what I call a *Pseudofinite* Infl. Pseudofinite Infl can appear only when Nominative case and Finite are dissociated, thus only in null-subject languages.
- The primary diagnostic of a pseudofinite clause is the possible co-occurrence of a nominative subject (Infl has a nominative case feature) and a bare-event interpretation (Infl does *not* have the feature PROPOSITION, and thus *cannot* have the feature FINITE).

9. Another case of pseudofiniteness: Southern Calabrian modo clauses

- Special morpheme моро appears below С (18а).
- Verb form is identical to the ordinary present indicative: *jamu* in both clauses in (18b).
- But interpretation is different: temporally transparent. (18a, 18d). Only the present tense can be used in a *modo* clause.
- Modo clauses can appear in contexts where ordinary finite clauses cannot (18b).
- Modo clauses cannot appear in contexts requiring a finite clause (18c).
- Southern Calabrian, like Greek, makes very limited use of the infinitive. The MODO construction is used in obligatory-control contexts where other Romance languages use the plain infinitive (18d).
- (18) a. Dumandaru si **mmi** ponnu aiutari a nui. ask.pst.3pl if **modo** can.prs.3pl help.inf to us

'They asked if they could help us.'

(Ledgeway 1998: 30)

- b. i. *Imbecia* ma jamu *avanti*, jamu *arretu*. instead MODO go.PRS.1PL forwards go.PRS.1PL backwards 'Instead of going forwards, we're going backwards.'
 - ii. * Imbecia chi jamu avanti, jamu arretu.
 instead that go.PRS.1PL forwards go.PRS.1PL backwards

'Instead that we are going forwards, we are going backwards.'

(ibid: 37)

- c. i. Ntramentri chi jeu travagghiava, iddhu si ripusava.
 in.while that I work.ipfv.1sg he refl.3 rest.ipfv.3sg
 'While I was working, he was resting.'
 - ii. * Ntramenti jeu mi travvagghiu, iddhu si ripusava. in.while I MODO work.prs.1sg he refl.3 rest.1pfv.3sg 'While I MODO work, he was resting.'

(ibid.: 36)

d. vollarïa ['u cangiu misteri].
want.cond.1sg modo change.prs.1sg job
'I should like to change trade.'

(ibid.: 34)

Ledgeway's account:

- The MODO construction is an inflected infinitive, like the Portuguese one.
- The present tense verb expresses only agreement, not tense.
- The MODO element itself provides the case-licensing that permits Infl to assign nominative case to the subject.

Finite or pseudofinite?

- Restriction to contexts permitting a nonfinite clause suggests pseudofinite.
- Can Modo clauses denote bare events? If so, then pseudofinite.
- (19) a. Bare eventive complement of aspectual verb:

'Ncumincia ma vi sàgghia 'u sangu a 'lu cerbeddhu. begin.prs.3sg моро you.pl.dat rise.prs.3sg the blood to the brain

'Your blood begins to flow to your brain.'

(Ledgeway 1998: 25)

b. Bare eventive complement of causative verb:

Tu fai mi ndi mangia tri parti iddu. you make.prs.3sg modo part eat.prs.3sg three parts he

'You make him eat three parts of it.'

(ibid.: 39)

10. Conclusion and open questions

- Finite is an optional syntactic feature of the head bearing the interpretable feature proposition.
- Finite includes nominative case and unvalued ϕ , but either, and sometimes both, of these components can arise by other means.
- In some languages, unvalued φ in Infl is associated with the EPP feature (Greek).
- In (some) null-subject languages, nominative case and finite are dissociated. If nominative case appears without finite, then it can be activated by another case assigner, producing a pseudofinite clause. If finite appears without nominative case, the derivation crashes.

Questions:

- Do all null-subject languages exhibit pseudofiniteness, as Portuguese and Southern Calabrian do? (E.g., Italian verb-initial infinitive clauses with nominative subjects, other similar constructions discussed by Szabolcsi 2009).
- Exactly what does it mean to "activate" a case feature? In other words, what remains in finite in null-subject languages like Portuguese and Southern Calabrian?

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