

Diagnosing Finiteness in Embedded Nominalised Clauses*

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This paper focuses on a range of dependent clause types from Finnish, Saami and Turkish in order to evaluate a claim by Kornfilt (2007) that embedded nominalised clauses may be finite. The morphology of these languages allow embedded clauses to host affixes drawn from nominal agreement paradigms and others which signal temporal relationships relative to the main clause event. Drawing on proposals by Bianchi (2003), Adger (2007) and Holmberg & Platzack (1995), it is argued that embedded nominalised clauses fail to display the properties expected of finite clauses if tense and agreement are the categories which license a projection of finiteness (Fin⁰). The evidence presented here suggests that the nominalised clauses in question do not meet the relevant criteria for finiteness.

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1 Introduction

The nature of finiteness is one of the most controversial issues in linguistic theory. While there is broad agreement that finiteness is a property of clauses rather than, for instance, lexical verbs, no real consensus exists in the literature about the best way to characterise it. Across various theoretical frameworks it has been linked to a cluster of properties including clausal independence, nominative case, tense, overt/referential clausal subjects, agreement, factivity and independent binding domains (Nikolaeva 2007).

Within generative approaches, finiteness is normally either taken to be a syntactic primitive, perhaps associated with a particular feature specification in the C domain, or as an epiphenomenon which falls out of other properties of the grammar. The question remains whether it is indeed possible to come up with a discrete, binary approach to finiteness that captures the cross-linguistic data. This paper will evaluate a recent proposal by Kornfilt (2007) by looking at data from Finnish, Saami and Turkish to argue that in line with traditional grammars, embedded nominalised clauses in these languages are not finite.

2 Diagnosing Finiteness

Perhaps the most straightforward diagnostic for identifying finiteness is clausal independence: main clauses tend to host those features associated with finiteness, e.g. tense, agreement, referential subjects and so on. However, it has long been noted that quite a few types of independent clause violate this generalisation, including imperatives,

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subjunctives, and hortatives (Nikolaeva 2007). This then raises an important question: given that many independent clauses fail to meet the basic criteria for finiteness, is it ever possible for a *dependent* clause to be finite?

One strand of research which sidesteps the dependent/independent clause issue are a set of proposals which invoke criteria related to tense semantics. Holmberg & Platzack (1995) and Hornstein (1990) link finiteness to Reichenbachian speech time, i.e. the time of the utterance (S); according to these proposals, the temporal structure of non-finite forms lacks reference to the speech point S. Bianchi (2003) provides a useful characterisation of finiteness along these lines, arguing that it is embedded as a functional head in the C domain (2003:7):

- (1) a. A finite verb form can encode the relation of E/R to S, *at least in main clauses*.
b. A non-finite form does not encode any relation to S.
- (2) The Speech time S is syntactically represented in [+finite] Fin⁰, the lowest head of the Complementizer system interfacing with the inflectional structure (Rizzi 1997).

According to this proposal, the speech event is the centre of deixis, which specifies the speaker (first person), the addressee (2nd person), and the space and time of the utterance (Reichenbachian Speech time S). Nominative case in a finite clause is linked to person features in Agr⁰. Tense, then, is seen by many as a key diagnostic for finiteness.

Several recent proposals (Adger 2007, Kornfilt 2007) further emphasise the syntactic category of agreement (Agr) as the key feature for licensing finiteness, encoded in the projection of Fin⁰:

- (3) [Force [(Topic*) [(Focus) [Fin [... Tense VP]]]]] (Rizzi 1997)

In Adger (2007), different permutations of C and Fin and their features for T and Agr are shown to yield attested ECM, control and raising infinitive data in several languages. For Adger and Kornfilt, the projection of Agr is a second key diagnostic for finiteness.

3 Nominalised embedded clauses in Finnish, Saami and Turkish

The proposals summarised above collectively draw together a useful set of criteria for identifying finite clauses, and evidence in support of them is mainly drawn from infinitives in Indo-European languages. However, the picture is less clear in languages with richer systems of verbal morphology and agreement, for example Finno-Ugric and Turkic languages. In these languages, embedded nominalised clauses may be adverbial or selected as complements by certain verbs – normally, verbs of thinking, perception (*dicendi*), and speaking (*sentendi*), etc. In both language families, a range of these clauses share very similar morphological properties: they host some form of nominalising morphology; the clause itself may be case marked by an affix which arguably heads KP or CP; and they display genitive subjects with full person and/or number agreement drawn from a distinct nominal paradigm. Ouhalla (1991) observes the parallels between nominal agreement (or possessive affixes, here glossed as Px) and verbal agreement across the Finno-Ugric and Turkic language families. He argues that nominal agreement is an instantiation of the functional head Agr, and that nominalised clauses headed by Px agreement share a parallel structure with tensed sentences headed by verbal Agr (see

Toivonen 2000 for a detailed analysis of the syntax of Finnish Pxes). Kornfilt (2007) argues that a subset of these nominalised clauses in Turkish are, in fact finite. Examples for Turkish are given in (4) and (5) below, where the embedded factive nominal clauses (glossed FN) host inflection for 2s Px agreement:

- (4) *[Sen-in sınav-ı geç-eceğ-in]-i* *bili-iyor-um / bili-iyor-du-m*
 2s-GEN test-ACC pass-FUTFN-PX2SG-ACC know-PROG-1SG/know-PROG-PAST-1SG
 ‘I know/knew (that) you would/will pass the test’
- (5) *[Sen-in sınav-ı geç-tiğ-in]-i* *bili-iyor-um / bili-iyor-du-m*
 2s-GEN test-ACC pass-FN-PX2SG-ACC know-PROG-1SG/know-PROG-PAST-1SG
 ‘I know/knew (that) you passed the test’

Kornfilt notes that Turkish factive nominal clauses which host productive agreement morphology display different syntactic properties from other related constructions, and argues that they are finite according to three main diagnostics.¹ Firstly, she shows that they are opaque as binding domains for anaphoric pronouns. Secondly, she claims that clauses like (4) and (5) are *temporally independent* from the matrix, which relates to the tense-based proposals mentioned above (Hornstein 1990, Bianchi 2003 and Holmberg & Platzack 1995). In the above examples, the temporal reference of the embedded clause is morphologically specified independently from that of the main clause. This she interprets to be a realisation of Tense, although she acknowledges that its features in embedded clauses are impoverished. Kornfilt attributes the finite properties of these clauses to the fact that they contain features for Agr, assumed to be hosted by a projection of Fin.

Finnish and Saami have a range of constructions which are morphologically nearly identical to the Turkish clauses analysed by Kornfilt, and like them license genitive subjects.² One type of Finnish clauses, like the Turkish examples above, occur as complements to a set of matrix verbs (6-7)(Karlsson 1999:201-2), while the other type are syntactically adjuncts (8-9):

- (6) *Näe-n [Kalle-n itke-vä-n] / [Kalle-n itke-nee-n].*
 see-1S Kalle-GEN cry-VA-n / Kalle-GEN cry-NEE-n
 ‘I see that Kalle is / has been crying.’

¹ The third diagnostic is that they licence negative polarity items (NPIs), a language-specific feature of Turkish which is not relevant to the current discussion.

² Nominative subjects are another standard criterion for finiteness in the literature, but this is often seen as case reflex of finite Agr. Kornfilt makes an interesting point about the status of genitive subjects in Turkish with respect to finiteness: “...genitive subject Case can also be an expression of finiteness, however defined, as long as it can be shown that such genitive case is indeed licensed clause-internally (i.e. in similar ways to nominative), and that the genitive is dependent on the inflection of the predicate within that clause...the realisation of this syntactic subject Case as either nominative or genitive depends on the categorial features of the predicate inflection (as either verbal or nominal, respectively) and does not affect the issue of finiteness” (Kornfilt 2007:307). Consistent with this analysis for Turkish, genitive case in Finnish has been shown to be structurally licensed clause-internally (Vainikka 1989) and is a reflex of a particular clausal inflection, namely Px agreement. It could therefore be argued that a lack of nominative case in these clauses in Finnish and Saami is not problematic for a finite analysis.

- (7) *Kalle huomasi [itke-vä-nsä] / [itke-nee-nsä].*
 Kalle noticed.3SG cry-VA-PX3 / cry-NEE-PX3
 ‘Kalle noticed that he was crying/ that he had cried.’
- (8) [*Mikko-n tull-essa kotiin*] *oli-n nukkumassa.*
 Mikko-GEN come-ESSA home was-1SG asleep
 ‘As Mikko came home I was sleeping.’
- (9) *Minä lähdi-n [sinu-n tiska-ttu-a-si].*
 I left-1S you-GEN wash up-TTUA-PX3
 ‘I left after you had washed up.’

Like the Turkish clauses, the embedded clauses in the Finnish examples (6-9) show “temporal independence” from the matrix; the participial forms –VA and –NEE in (6) and (7) are morphologically marked to signal that the embedded event has taken place either in the nonpast or past relative to the main clause event. The Finnish temporal adjunct clause also signals a similar temporal relation; –ESSA in (8) encodes simultaneity with the main clause event, while –TTUA (9) signals that the embedded event occurred prior to the main clause event.

The Saami languages also have a morphologically similar construction, which appears to be the only nominalised verbal form which can host possessive affixes. (10) is an Inari Saami example, while (11) is from North Saami (Ylikoski 2009:38):

- (10) [*Lávludijn-is*] *tuábtár lái vaibám.*
 sing.IGER-PX3 doctor.NOM was.3SG tired
 ‘While singing, the doctor was tired.’
- (11) *Piera dagai ribkekos-a [vuola juga-dettiin(-is)].*
 Piera make.PST.3SG crime-GEN/ACC beer.GEN/ACC drink-GER(-PX3SG)
 ‘Piera committed a crime while drinking beer.’

These adverbial clauses may occur with possessive affix (Px) agreement as shown in these examples. The Saami nominalised clauses in (10) and (11) encode a temporal relation of simultaneity between main and embedded clause events (Olthuis 2000). Their properties with respect to agreement will be discussed further in Section 5.

4 The role of Tense

Given the proposed links between finiteness and tense by Holmberg & Platzack (1995) and Bianchi (2003), the question remains as to what extent the Finnish, Saami and Turkish clauses are temporally independent in the sense that they encode a relation to Reichenbach’s speech time *S*. Going back to Turkish, it can be observed that these embedded clauses do not in fact signal tense independent from the main clause: (12) entails that the watermelon has been eaten, despite the fact that the embedded clause is morphologically marked for future tense:

- (12) [*Sen-in karpuz-u yi-yeceğ-in*]-i *bili-iyor-du-m / gör-dü-m*
 2sg-GEN w'melon-ACC eat-FUTFN-PX2SG-ACC know-PROG-PAST-1SG/see-PAST-1SG
 'I knew/saw that you were going to eat the watermelon.'

This suggests that the temporal reference of the embedded clause is anchored to that of the main clause, not to speech point S.

Finnish temporal adjuncts do not display genuine temporal independence, either. (13a) and (14a) below, where the matrix verbs are inflected for past tense, entail that the speaker's hair has already been washed, while (13b) and (14b), where the matrix verbs are in the nonpast tense, do not:

- (13) a. [*Pest-essä-ni suibku-ssa hiuksi-a-ni*] *lauloi-n Hämähämähäkkiä.*
 Wash-ESSA-PX1 shower-in hair-PART-PX1 sang-1SG ItsyBitsySpider
 'While washing my hair in the shower I sang Itsy bitsy spider.'
 b. [*Pest-essä-ni suibku-ssa hiuksi-a-ni*] *laula-n Hämähämähäkkiä.*
 Wash-ESSA-PX1 shower-in hair-PART-PX1 sing-1SG ItsyBitsySpider
 'While washing my hair in the shower I (will) sing Itsy Bitsy Spider.'
- (14) a. [*Pes-tyä-ni suibku-ssa hiukse-ni*] *lauloi-n Hämähämähäkkiä.*
 Wash-TTUA-PX1 shower-in hair.ACC-PX1 sang-1SG ItsyBitsySpider
 'After I washed my hair I sang Itsy Bitsy Spider.'
 b. [*Pes-tyä-ni suibku-ssa hiukse-ni*] *laula-n Hämähämähäkkiä.*
 Wash-TTUA-PX1 shower-in hair.ACC-PX1 sing-1SG ItsyBitsySpider
 'After washing my hair I (will) sing Itsy Bitsy Spider.'

This again suggests that the "tense" of the embedded clause is anchored to the event in the main clause, not to the speech point S. If Bianchi (2003), Holmberg & Platzack (1995) and others are on the right track, then neither the Turkish nor the Finnish nominalised clauses encode tense features that are anchored to S, and this means that [+finite] Fin⁰ is not syntactically represented in these clauses. The relationship between finiteness and agreement will be examined next in more detail.

5 Anaphoric binding domains and the role of Agreement

Another important piece of evidence Kornfilt presents in favour of her finiteness analysis for nominalised clauses in Turkish is that they appear to be opaque for anaphoric binding. In embedded nominalised clauses with full agreement morphology (15a), anaphoric binding is disallowed across the clause boundary. Grammaticality improves in a related construction which hosts default Agr (15b). Standard Binding Theory predicts that anaphors cannot be bound across a [+finite] clause boundary, so this contrast is to be expected if Turkish clauses like (15a) are indeed finite (Kornfilt 2007:321):

- (15) a. **Biz [birbir-imiz-in sınav-ı geç-ti-imiz]-i san-ıyor-du-k*
 We each.other-1PL-GEN test-ACC pass-FN-PX1PL-ACC believe-PROG-PAST-1PL
 Intended: 'We believed that each other passed the exam'

- b. *?Biž_i [birbir-imiz-in_i snav-*t* geč-tiğ-in]-*i* san-tyor-du-*k*³*
 We each.other-1PL-GEN test-ACC pass-FN-PX3S-ACC believe-PROG-PAST-1PL
 ‘We believed that each other passed the exam.’

Kornfilt uses this contrast as support for her proposal that Agreement is the primary category in determining finiteness. However, the same diagnostic test yields different results for Finnish. Two types of element arguably have the status of anaphoric pronouns in Finnish: third person Px agreement affixes (Vainikka 1989) and the overt pronominal reflexives *itse* ‘self’ and *toinen toisensa* ‘each other.’ Both complement clauses (16) and adjunct clauses (17) allow binding of both types of element into the clausal object⁴ position:

- (16) a. *He olettavat / uskovat [suostu-va-nsa ehdotukse-en].*
 they expect.3PL / believe.3PL agree-VA-PX3 proposal-to
 ‘They_i expect/believe they_i will agree to the proposal.’
 b. *He olettavat / uskovat [suostu-va-nsa toinen toiste-nsa ehdotuksi-in].*
 they expect.3PL/believe.3PL agree-VA-PX3 each other-PX3 proposals-to
 ‘They expect/believe to agree to each other’s proposals.’
- (17) *[Pest-essä-än itse-ä-än suibku-ssa] Pekka laulo-i Hämähämähäkkiä.*
 Wash-ESSA-PX3 self-PART-px3 shower-in Pekka sang-3SG ItsyBitsySpider
 ‘While washing himself in the shower Pekka sang Itsy Bitsy Spider’

In Inari Saami, Px agreement appears to be similarly anaphoric in embedded nominalised clauses; in (18a), no clause-internal antecedent is available to bind the third person Px affix *-is* and the structure is ungrammatical. Example (18b) shows that as in Finnish, the Px anaphor may be bound by a clause-external antecedent:

- (18) a. **[Lávludijn-is] mun lam / lijjim vaibám.*
 sing.IGER-PX3 I.NOM am / was.1SG tired
 ‘While he/she was singing, I am/was tired.’
 b. *[Lávludijn-is] tuáhtár lái vaibám.*
 sing.IGER-PX3 doctor.NOM was.3SG tired
 ‘While singing, the doctor was tired.’

More research is needed to identify the relevant binding properties for reflexive and reciprocal pronouns in Saami. However, taken together, the examples in (16-18) suggest that embedded nominalised clauses in Finnish and Saami fail Kornfilt’s anaphoric binding diagnostic test for finiteness. The most straightforward explanation for the grammaticality of these examples is that while these clauses display morphological agreement in the form of Pxes, nominal Agr does not license a projection of Fin: these clauses are not finite.

³ It is worth noting that Kornfilt judges this sentence as marginal (?) rather than fully grammatical. My informants, however, accept it as grammatical.

⁴ These elements are disallowed in subject position; thanks to an anonymous reviewer for pointing this out.

6 Conclusion

Kornfilt's (2007) proposals raise interesting questions about the nature of finiteness in languages with rich agreement and temporal/tense morphology in embedded clauses. However, the evidence from Saami and Finnish, and to a lesser extent Turkish, suggests that (a) these clauses do not encode genuine tense relative to the speech point S; and that (b) nominal Agr in these languages does not necessarily correlate with other features of finiteness, for example anaphoric binding domains. The most straightforward analysis appears to be that in line with traditional grammars, embedded nominalised clauses in Finnish and Saami (and probably Turkish as well) are non-finite.

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