

# Finiteness and Pseudofiniteness<sup>1</sup>

Elizabeth Cowper, University of Toronto

## Abstract

I argue that finiteness is a purely syntactic property, licensing case on the subject and agreement on the verb. Semantic properties associated with finiteness follow from the position of FINITE in the geometry of clausal interpretable features. Considering possible counterexamples from Romance languages as well as West Flemish, modern Greek, and Turkish, I show that Romance personal and inflected infinitives are characterized by a *pseudofinite* Infl, available only in null-subject languages, which lacks FINITE, but bears an unvalued case feature. Pseudofinite clauses, including the Southern Calabrian *modo* construction, must be assigned case externally. West Flemish personal infinitives are finite, headed by a hybrid Comp/Infl head. Turkish agreeing gerunds have nominal syntax, and Greek subjunctive clauses are either finite or non-finite, depending on their case-assigning properties.

Keywords: Finiteness, feature geometry, case, agreement, clause structure

## 1 Introduction

The term “finite” has been used in grammatical literature for centuries, but its meaning is difficult to pin down. Even in recent generative linguistic literature, the term is used inconsistently. This paper adopts the traditional view that finiteness *per se* is a purely syntactic property, consisting of the ability to

---

<sup>1</sup>I am very grateful to Maria Kyriakaki, Gabriela Alboiu, and Hitay Ykseker for their help with the Greek, Romanian, and Turkish data discussed here, and to colleagues and students at the University of Toronto for many helpful discussions. The paper is much better than it would have been without their help and the insightful comments of an anonymous reviewer; all errors are mine alone.

license structural case in subject position and the possible presence of agreement marking on the verb. The semantic properties that finiteness seems to bring with it arise from the fact that the feature FINITE occupies a particular position in a network of dependency relations sometimes called a feature geometry (Sagey 1986, Avery 1996, Béjar & Hall 2000 Harley & Ritter 2002, Cowper 2005), in which the other features have semantic content. The implicational relations among the features give rise to the illusion that finiteness itself has semantic content. The empirical picture is further muddled by the existence of constructions that I characterize as pseudofinite. In a pseudofinite clause the verb licenses structural case on its subject, and may also bear agreement morphology, but the clause lacks the semantic properties implied by true finiteness.

## **2 Historical and Theoretical Context**

### *2.1 Finiteness in traditional grammar*

Traditional grammarians divided verb forms into two major classes: the so-called finite forms, including indicative, subjunctive, optative and imperative, and non-finite forms, including infinitives and participles. There were two main criteria underlying this distinction, neither of which can be characterized as semantic. These are, first, the verb's ability to appear as the main verb of a full, independent clause, and second, its ability to take personal endings (Binnick 1991: 69). According to Jespersen (1924), the first criterion is of paramount importance, although his discussion is undermined by the fact that he includes in the category of "independent sentence" elliptical utterances such as exclamations and answers to questions, some of which lack verbs altogether. As for personal endings, though Jespersen does not directly state that they are criterial in determining that a verb is finite, it is clear from his dis-

cussion of the English imperative that he regards the possibility of agreement marking as relevant to the finiteness of a verb form (Jespersen 1924: 314). He rejects the idea that English imperatives might be analyzed as infinitival, on the grounds that imperative verbs in Danish, German, French, Latin and Greek have personal endings. He concludes from this that imperatives are finite, and that the imperative is thus properly characterized as a mood. Similar connections between agreement marking and finiteness are found in Subirats-Rüggeberg's 1990 discussion of Thiébauld (1802), and in Dyscolus (1981), a second-century Greek grammar.

## 2.2 *Finiteness in Generative Grammar*

In the early years of generative grammar, mood was not much discussed; however, a standard view of infinitival clauses (Soames & Perlmutter 1979) was that an underlyingly finite clause took on infinitival form if the subject was removed, either by subject raising or by Equi-NP deletion. Implicit in this treatment is the assumption that a finite verb requires an overt subject, and that an overt subject requires a finite verb. While many authors in the past few decades have implicitly equated *finite* with *tensed*, George & Kornfilt (1981) show that in Turkish, both tensed and gerundive constructions exhibiting person agreement with their subjects constitute opaque domains. They argue that gerunds are nominal, and that the finiteness distinction is manifest both in nominals and in clauses. They entertain the hypothesis that finiteness can be equated with the presence of person agreement, but reject it on the grounds that languages with no morphological agreement can also exhibit a finiteness distinction.

More recent approaches that take nominative case and subject-verb agreement to be two manifestations of a single AGREE relation (e.g., Chomsky 1995, 2000, 2001; Schütze 1997; Pesetsky & Torrego 2001, 2004, 2007) can

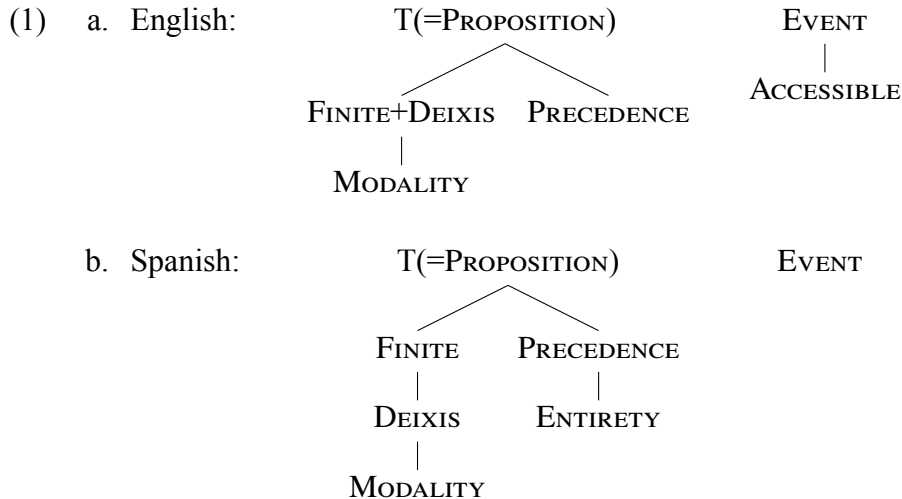
in principle equate finiteness with nominative case and subject agreement, even in languages that lack overt agreement marking. The connection between finiteness on the one hand, and case and agreement on the other, was also made explicit in the theory of Government and Binding, where nominative case is assigned to subject position by a [+TENSE] Infl. Only in finite clauses is Infl [+TENSE], and such an Infl contains a nominal element, AGR, which carries person and number features corresponding to those of the subject. Hornstein (1990: 146) notes that “matrix clauses must be finite,” and in later work (Hornstein 1995: 68) states that “nominative case is solely a function of whether Tns is finite.”

The linking of finiteness with the presence of Case and Agreement is undermined by the existence of so-called personal or inflected infinitives (Haegeman 1985; Raposo 1987a,b, 1989; Pountain 1995; Quicoli 1996), on the one hand, and apparently finite forms which bear agreement but fail to assign nominative case (Alexiadou & Anagnostopoulou 1999a,b, 2002), on the other. The challenge taken up in the present paper is to provide an account of these apparent counterexamples while nonetheless retaining the fundamental insight that the essence of finiteness is the ability to assign nominative case to a subject and to agree in person and number with that subject. To the extent that the term *tense* has to do with the semantic relation between the time associated with a clause and some other time such as the moment of speech, finiteness and tense should not be equated.

### 2.3 *Assumptions and Background*

Leaving the difficult cases aside for the moment, let us consider what features are found in Infl and how finiteness fits into the overall picture. I assume that functional categories are the projections of privative features that are grammatically active in a given language, and that these features are chosen from a set

made available by Universal Grammar (Chomsky 2000), and intrinsically organized into semantically determined dependency relations. These dependencies can be expressed in terms of a feature geometry, such as those proposed for pronouns by Harley & Ritter (2002) and for Infl in English and Spanish by Cowper (2005). Harbour & Elsholtz (2012) argue that feature geometries *per se* have no status in the grammar. To the extent that dependencies exist, they are due to semantic selection of one feature by another, and are thus intrinsic to the features themselves. I find their arguments generally persuasive, but there is one feature—FINITE—that appears to lack semantic content altogether, but nonetheless behaves as though it participates in dependency relations with other features of the Infl system, suggesting that the dependency structure may not be entirely redundant. The features and dependency relations of the English and Spanish Infl systems are shown in (1), adapted from Cowper (2005) following proposals by Cowper & Hall (2007) and Clarke (2013).<sup>2</sup>



The tree structures in (1) represent the dependency relations among the features, with a dominated feature dependent upon the feature that dominates it. All of the features dominated by T are dependent on the feature PROPOSITION, which distinguishes clauses denoting cognitively represented propo-

<sup>2</sup>MODALITY corresponds to Cowper’s (2005) IRREALIS, which characterizes English modal verbs and Spanish future and conditional tenses. ACCESSIBLE is Clarke’s 2013 refinement of Cowper’s 2005 INTERVAL, which characterizes imperfective viewpoint aspect, and is spelled out in English by the participial suffix *-ing*.

sitions from what Cowper (2005) calls bare events. A bare event, like the subordinate clauses in (2), must be sensorily perceived, while a propositional clause, like the ones in (3), can be cognitively evaluated as true or false.

- (2) a. We saw the [car hit the lamppost].  
b. We heard [the children playing next door].  
c. \*We saw [two plus two equal four].
- (3) a. We know [the car to have hit the lamppost].  
b. We believe [the children to be playing next door].  
c. We proved [two plus two to equal four].

The features dependent upon *PROPOSITION* thus appear only in clauses denoting propositions in the sense just described. The feature *ACCESSIBLE* in (1a) is a dependent of *EVENT*. In other words, the presence of *ACCESSIBLE* in *Infl* entails the presence of *EVENT*. A clause with *EVENT* in *Infl* is interpreted as eventive; in the absence of *EVENT* the clause receives a stative interpretation. If *ACCESSIBLE* is present, the internal structure of the event denoted by the clause is visible; this characterizes what is traditionally called imperfective viewpoint aspect (Comrie 1976). In the absence of *ACCESSIBLE*, the event denoted by the clause is an unanalysed whole, with no linguistically accessible internal structure, giving perfective viewpoint aspect. The semantic representation of a dependent feature is thus stated in terms of the semantic representation of its dominating feature, making the dependent feature uninterpretable in the absence of the dominating feature. For example, *PRECEDENCE* specifies that a moment associated with the event or state denoted by the clause must precede the temporal anchor of the clause. The definition of *PRECEDENCE* thus involves existential quantification over moments. The dependent feature *ENTIRETY* replaces this existential quantifier with a universal quantifier, with the effect of requiring all the moments associated with the event or state to

precede the temporal anchor of the clause. Without PRECEDENCE, ENTIRETY cannot compose semantically with the rest of the sentence. Similar intrinsic dependencies hold from ACCESSIBLE to EVENT, from MODALITY to DEIXIS, and from DEIXIS to PROPOSITION. These features are discussed in some detail in Cowper (2005).

The only feature whose position in the dependency structure is not determined by intrinsic entailment relations is FINITE. Kyriakaki (2006) argues that whereas in English, all finite clauses are semantically propositional, in modern Greek, not only propositional clauses, but also clauses denoting bare events, are finite. She claims that while in English, FINITE is a dependent of PROPOSITION, in modern Greek, PROPOSITION is a dependent of FINITE. I return to the position of FINITE in Greek in Section 4.

The illusion that finiteness *per se* has semantic content thus arises from its position in the network of dependency relations among interpretable features. In at least English, French, and Spanish, a finite clause is necessarily a proposition, rather than a bare event or state, and a deictic clause is necessarily finite. However, there is no particular semantic content that can be associated with the feature FINITE itself. This can be seen in the sentences in (4), which illustrate what is often called the obviation effect in Romance languages (Luján 1999, Roussou 2001, Bélanger 2002). The sentence in (4a), with an infinitival complement clause, expresses exactly the same meaning as the ungrammatical (4b), which has a finite complement. When the subjects of the two clauses differ, as in (4c), the lower subject must check case, and the finite construction is required for purely syntactic reasons. There is no semantic difference in the content of Infl between (4a) and (4c).

- (4) a. Marie veut            partir    maintenant.  
       Marie want.PRS.3SG leave.INF now  
       ‘Marie wants to leave now.’

- b. \*Marie<sub>i</sub> veut qu' elle<sub>i</sub> parte maintenant.  
 Marie want.PRS.3SG that she leave.SBJV.3SG now  
 'Marie wants to leave now.'
- c. Marie veut que Paul parte maintenant.  
 Marie want.PRS.3SG that Paul leave.SBJV.3S now  
 'Marie wants Paul to leave now.'

As stated above, the featural analysis of Infl is set within the theory of Distributed Morphology (Halle & Marantz 1993), and more generally within the Minimalist Program (Chomsky 2000). We therefore distinguish the formal features themselves from the Lexical Items (LIs) that participate in the narrow syntactic computation, and from the Vocabulary Items (VIs) that are inserted postsyntactically to spell out the features of each syntactic head. The dependency structures in (1) represent the features of Infl in English and Spanish, and the entailment relations among them. Languages vary in which features they make use of, whether or not features are bundled together into LIs, which features can project as syntactic heads, and how the various heads are ultimately spelled out by VIs. For example, as argued in Cowper (2005), Spanish but not English uses ENTIRETY, while English but not Spanish uses ACCESSIBLE. The two languages also differ in how the features are bundled into LIs. In Present-Day English, FINITE is grouped into a single LI with DEIXIS, essentially eliminating any systematic distinction between indicative and subjunctive clauses,<sup>3</sup> while in Spanish (and also in French), FINITE may appear without DEIXIS.

As for VIs, forms traditionally called indicative typically spell out DEIXIS, with indicative past tenses also spelling out PRECEDENCE, and in some languages ENTIRETY as well. MODALITY is spelled out by English modals and by future tense forms in languages that have a morphological future, with the conditional in such languages spelling out both MODALITY and PRECEDENCE.

<sup>3</sup>For some speakers, there is a vestigial subjunctive in English; this will be set aside for the purposes of this paper.



The fact that MODALITY entails DEIXIS, and thus by implication FINITE, accounts for the fact that English modals are always finite, and that there seem to be no future or conditional infinitives crosslinguistically. Clauses with PROPOSITION but without FINITE typically take infinitival form, as do many non-propositional clauses. Finite clauses without DEIXIS are generally called subjunctive: they internally license nominative subjects, and exhibit agreement marking. This view of finiteness and the subjunctive is consistent with observations made by many authors. The lack of DEIXIS captures the observation that the subjunctive may lack independent time reference (Farkas 1982), or may express a point of view other than that of the speaker (Jespersen 1924: 319). The claim that the subjunctive differs from non-finite propositional clauses only in the syntactic properties of case and agreement can be taken as the basis of the frequent observation (Poplack 1991; Mailhac 2000 and references cited there) that the subjunctive sometimes carries no meaning.

### **3 Personal and inflected infinitives: Case and agreement without finiteness?**

If we take as a working assumption that the core properties of FINITE are nominative Case checking and  $\phi$ -feature agreement between Infl and the argument that checks nominative Case, and further assume that FINITE is in general a dependent of PROPOSITION, there are two main classes of possible counterexamples that must be dealt with. In this section, I discuss personal and inflected infinitives, in which nominative case and  $\phi$ -feature checking seem to be present, but on a verb form that would otherwise be treated as infinitival and which can describe a bare event rather than a proposition. In the next section, I turn to the case of Greek, where verb forms that appear to be fully finite can sometime head clauses that denote bare events, and where nominative case checking is sometimes absent.

Personal and inflected infinitives occur in various languages, as discussed by Haegeman (1985), Raposo (1987a), Raposo (1989), Pountain (1995), Ledgeway (1998), and Sitaridou (2009). Ledgeway, among others, makes a distinction between the personal infinitive, which has no overt agreement marking but takes an overt nominative subject, and the inflected infinitive, which both has morphological agreement and takes an overt nominative subject. For the purposes of this discussion, we adopt these terms.

### 3.1 *Personal Infinitives*

Haegeman (1985) discusses personal infinitives in West Flemish. These constructions, like the one shown in (5) below, appear only in adjuncts with a preposition such as *mee* ‘with,’ *voor* ‘for,’ and *deur* ‘by.’

(5) West Flemish ( (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.’

Haegeman assumes that Infl is specified for the features  $[\pm\text{TENSE}, \pm\text{AGR}]$ . Ordinary finite clauses are  $[+\text{TENSE}, +\text{AGR}]$ , and ordinary infinitives  $[-\text{TENSE}, -\text{AGR}]$ . She assumes that Portuguese inflected infinitives, to be discussed below, are  $-\text{Tense}, +\text{AGR}]$ , and claims that the West Flemish personal infinitives are  $[+\text{TENSE}, -\text{AGR}]$ . As expected from a clause with a  $[+\text{TENSE}]$  Infl, these clauses can have independent temporal reference, as shown in (6).

(6) West Flemish (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.’

For Haegeman, the ability of this [+TENSE, –AGR] Infl to assign nominative case comes from the fact that it is a constituent of Comp, and a Comp containing such an Infl is “in some sense finite” (Haegeman 1985: 129). She proposes that the prepositions *mee*, *voor*, and *deur* select this type of Comp, and being case-assigners themselves, transmit their case-assigning property to Infl in Comp. She notes that it is Infl, and not the governing preposition, that assigns case to the subject of the infinitive; the prepositions in question normally govern accusative case, and these subjects are uniformly nominative. Essentially, her idea amounts to saying that the relation between the embedded Infl and the case-assigning preposition activates the case-assigning properties of Infl, despite the fact that Infl does not bear the feature [+AGR].

Personal infinitives are also found in Romanian, as shown in (7). Like the personal infinitive in West Flemish, the Romanian personal infinitive appears in adjuncts governed by a preposition, and takes a nominative subject. The Romanian construction differs from the one found in West Flemish in that in Romanian, as in personal infinitives in Romance languages generally, the subject must follow the verb.

(7) Romanian (Alboiu & Motapanyane 2000: 39)

- a. Am plecat [înainte de [(*\*pe*-Ion Maria) a-l săruta  
have.1SG left before of PE-Ion Maria to-him kiss.INF  
(Maria pe Ion)]]  
Maria PE Ion

‘I left before Mary kissed John.’

- b. *Îi ținea la ușă [pentru a avea tu/\*tine timp să strângi vasele].*  
 them kept.3SG at door for to have you.NOM/\*ACC time SA  
 pick dishes.the  
 ‘He was keeping them at the door [for you to have time to pick up the dishes].’

### 3.2 *Inflected Infinitives*

Raposo’s (1987a) analysis of the Portuguese inflected infinitive, illustrated in (8), is very similar to Haegeman’s (1985) treatment of the West Flemish personal infinitive.

- (8) 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)

Raposo assumes that the feature [+AGR] alone is insufficient for Infl to assign nominative case to its subject, and concludes, based on a detailed discussion of the various contexts in which the inflected infinitive appears, that “a tenseless Infl positively specified for AGR can assign nominative Case to a lexical subject only if it is itself specified for Case” (Raposo 1987a: 107). In addition, Raposo correlates the possibility of personal and inflected infinitives with the fact that Portuguese is a null-subject language. Following Chomsky (1982), he assumes that only in null-subject languages can Infl be specified for Case.

### 3.3 Prepositional infinitives

Raposo (1989) analyzes a different sort of inflected infinitive in Portuguese, which he calls the Prepositional Infinitive Construction. This construction differs from the one illustrated in (8) in several ways. First, it has a preposition between what looks like the subject and the verb, as shown in (9).

- (9) Eu vi os meninos **a** lerem esse livro.  
I saw the children **to** read.INF.3PL that book  
'I saw the children reading that book.' (Raposo 1989: 277)

Second, the preposition in some cases makes a clearly aspectual contribution, as shown by the difference in meaning between (9) above and (10) below.

- (10) Eu vi os meninos lerem o livro.  
I saw the children read.INF.3PL the book  
'I saw the children read the book.' (Raposo 1989: 279)

Third, the subject cannot be nominative if the infinitival clause is governed by a case-assigner, as shown in (11).

- (11) \* Eu vi [eles a trabalharem].  
I saw they to work.INF.3PL  
'I saw they working.' (Raposo 1989: 288)

In fact, in (12a) the subject is cliticized to, and thus arguably checks case with, the matrix verb. In (12b), the subject is oblique, suggesting that its case is valued by the preposition *con*.

- (12) a. Os actores<sub>i</sub> viram-nos<sub>j/\*i</sub> [ec<sub>j</sub> 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)

Fourth, the construction can appear on its own in sentences like (13).

Under these circumstances the subject is, surprisingly, nominative.

- (13) Eles a fumarem        marijuana! Que horror!  
      they to smoke.INF.3PL marijuana what horror  
      ‘They smoking marijuana! How awful!’ (Raposo 1989: 289)

Raposo notes, however, that Portuguese has small clauses similar to (13), such as (14), in which the subject also bears nominative case, and suggests that in these instances nominative case is assigned by default.

- (14) [Ele um imbecil]? Não acho!  
      he an idiot? not think.PRS.1SG  
      ‘Him an idiot? I don’t think so!’ (Raposo 1989: 290)

Raposo argues that prepositional infinitives have a small clause structure, headed by the preposition *a*, whose predicate is a plain infinitival. The overt subject appears in the small clause subject position, and the infinitival subject is an empty category. The preposition is responsible for the agreement on the infinitival and for the case-licensing of the phonologically null infinitival subject, while the overt nominal preceding *a* either receives its case from an external case-licenser, or surfaces as nominative by default.

If Raposo is correct, then the inner layer of the prepositional infinitive can, at least partly, be assimilated to the inflected infinitive construction, in that Infl is in the domain of a case-assigning preposition, and thus acquires the ability to agree with its subject.

Ledgeway (1998) gives an overview of personal and inflected infinitives in various Romance languages, including several spoken in southern Italy, Sicily and Sardinia, as well as Spanish, Portuguese and Romanian. His

main goal is to argue that a particular construction in Southern Calabrian, superficially almost identical to the present indicative, is actually an inflected infinitive. We will turn to this construction later, but for the moment simply note that all the other examples cited by Ledgeway are amenable to analysis in terms similar to those proposed by Raposo and Haegeman, namely that personal and inflected infinitives arise only when Infl is specified for case. Ledgeway claims that the subject of a personal infinitive is always postverbal, whereas an inflected infinitive can normally have its subject either before or after the verb. While this is essentially true for the Romance cases, the West Flemish personal infinitive always takes a preverbal subject, as seen above. This difference in word order will be set aside; I assume that it can be derived from independent differences between Germanic and Romance clause structure.

#### 4 Greek Subjunctives: $\phi$ -Agreement without nominative case?

Like other languages of the Balkan *Sprachbund*, Greek makes very little use of truly infinitival verb forms. The so-called subjunctive tense form in Greek, as discussed by Alexiadou & Anagnostopoulou (1999b) and Alexiadou & Anagnostopoulou (2002), appears in a wide range of constructions with diverse syntactic properties. Sometimes, a subjunctive clause is clearly finite, denoting a proposition and checking both  $\phi$ -features and nominative case, as shown in (15).

- (15) Elpizo            i            Maria na aporripsi        tin        prosfora.  
       hope.1SG.PRS the.NOM Maria NA reject.PFV.3SG the.ACC offer  
       ‘I hope Maria will reject the offer.’ (Kyriakaki 2006: 55)

Sometimes, as discussed by Kyriakaki (2006), the same subjunctive form, with full  $\phi$  agreement, is used in clauses that denote not propositions,

but bare events. When that happens, however, the subject, if overt, does not bear nominative case. In (16), the contrast between propositional and bare eventive subjunctives is particularly salient.

(16) Greek (Kyriakaki 2006: 53)

- a. Perimene o ðimitris na erøi (alla ekane laeos).  
 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. Perimene to ðimitri na erøi (#alla ekane laeos).  
 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.’

The two sentences have the same matrix verb *perimene*, which is interpreted as *expect* when its complement is propositional (16a), but as *wait for* when its complement denotes a bare event (16b). Interestingly, in the latter case, the subject of the subjunctive clause is not nominative, but accusative; in fact this is the only morphological difference between the two sentences.

Alexiadou & Anagnostopoulou (1999b: 16,17) argue that the *na*-subjunctive construction is also used in control constructions, as shown in (17), and in raising constructions, as in (18).

(17) Control:

- a. O Petros kseri na kolibai.  
 The Peter know.3SG NA swim.3SG  
 ‘Peter knows how to swim.’
- b. Ego ksero na kolibo.  
 I know.1SG NA swim.1SG  
 ‘I know how to swim.’



(18) Raising:

Ta peðia arxisan na trexoun.  
the.PL children.NOM start.PST.3PL NA run.3PL

‘The children started to run.’

It seems that in Greek subjunctive clauses marked by *na*, nominative subjects appear only when the clause is clearly finite; i.e., when it denotes a proposition, but that  $\phi$ -feature agreement is consistently present, whether the clause denotes a proposition or a bare event. This pattern calls into question whether nominative case and  $\phi$ -feature checking with Infl are indeed two sides of the same coin.

## 5 A proposal: Pseudofiniteness

In this section, I explore the idea that the Case and  $\phi$ -feature checking properties of Infl, normally determined by the presence or absence of FINITE, can be activated in the absence of FINITE. This seems to happen when a) Infl itself Agrees with a case-checking head, and b) null subjects are possible in the language. Essentially, a non-finite Infl acquires the properties associated with the FINITE feature during the course of the syntactic computation. I will refer to this situation as *Pseudofiniteness*.

### 5.1 *The source of pseudofiniteness in Romance languages*

Personal and inflected infinitives in Romance languages exhibit Case and Agreement properties by virtue of a) a relation they bear to a higher case-checking element and b) some property that characterizes Infl only in null-subject languages. The higher case-checking element can be a verb, as in (19a), a preposition, as in (19b), or a matrix Infl, as in (19c).

(19) a. Portuguese: (Ledgeway 1998: 10)

O João lamenta [eles terem gastado esse  
 the John regret.PRS.3SG they have.INF.3PL spend.PTCP that  
 dinheiro para nada].  
 money for nothing

‘John regrets their having spent that money for nothing.’

b. Old Italian: (Ledgeway 1998: 3)

Una giovane, senza [vederla egli], passò.  
 a youth.F without see.INF.her he pass.PST.3SG

‘A young lady went by without his seeing her.’

c. Portuguese: (Raposo 1989: 283)

É difícil [os meninos trabalharem].  
 be.PRS.3SG difficult the children work.INF.3PL

‘It is difficult for the children to work.’

Following Raposo, I assume that what makes Infl accessible to the higher case-marking element is that either it heads a projection in the search space of the case-checker, or it has moved to the head of such a projection.<sup>4</sup>

In (19a), then, the embedded Infl heads an IP in direct object position. In (19b), it has moved to the head of the CP complement of the preposition, and in (19c) it heads the associate of a null expletive in subject position. The question that arises, under minimalist assumptions, is how an Agree relation can be established between the case-checking head (henceforth the probe) and the constituent headed by Infl. On standard assumptions, the case-checker bears uninterpretable  $\phi$ -features, and will match an active goal that also bears  $\phi$ -features. Normally, what makes the goal active is an uninterpretable unvalued Case feature. Recall Raposo’s observation that personal/inflected infinitives are restricted to null-subject languages, and his assumption that only in these languages can Infl be specified for Case. Under the minimalist program, this amounts to saying that in null-subject languages, Infl can bear the sort of unin-

<sup>4</sup>Kornfilt (2001a) argues, on the basis of Turkish, that the case-assigning ability of Agr in non-finite constructions can be activated (her term is “unlocked”) if Agr is indexed in one of several ways: by  $\phi$ -marking, by  $\theta$ -marking, or by being coindexed with an operator.

interpretable case feature normally borne by nominals. Suppose that this feature is optionally added to Infl in the numeration, independently of the feature FINITE. If Infl is finite, then the feature will be valued and deleted by FINITE. If Infl is non-finite, then the derivation will crash unless the case feature enters into an Agree relation with a probe. Once the Agree relation is established, two things happen. First, the uninterpretable case feature is deleted, and second, Infl acquires the ability to check nominative case on a subject (always), and to spell out  $\phi$ -feature agreement on the infinitival verb (depending on the morphological resources of the language).

### 5.2 *Apparent pseudofiniteness in West Flemish*

I have proposed that in Romance languages, both the null-subject property and the possibility of pseudofiniteness arise from the fact that Infl can bear an uninterpretable case feature. This correlation does not hold in West Flemish, and a different account is thus required.

In fact, there are systematic differences between the West Flemish personal infinitives described by Haegeman and those found in Romance languages. While there is no evidence that, apart from their ability to license nominative case and bear agreement, personal and inflected infinitives in Romance have any more structure than do plain infinitives, the West Flemish personal infinitives seem to have a projection that plain infinitives lack. Haegeman (1985: 125–129) discusses the focus marker *tet*, which may appear in finite clauses and in personal infinitives, but which cannot appear in plain infinitives, as shown in (20)-(22).

(20) Plain infinitive with PRO subject:

- a. dan-k proberen voor PRO weg te gaan  
 that-I try for PRO away to go  
 ‘that I try to go away’

- b. \* dan-k proberen vor-tet PRO weg te goan  
that-I try for-FOC PRO away to go

(21) Plain ECM infinitive:

- 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

(22) Personal infinitive with *mee*:

- 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'

Haegeman places *tet* in Comp, and following Koopman (1984) and Platzack (1983), assumes that Comp may also itself contain Infl. For her, Comp in a personal infinitive is, in fact, finite. In addition to the possible presence of *tet*, personal infinitives are semantically different from plain infinitives, in that personal infinitives always denote propositions. Plain infinitives can denote bare events, as seen in (21a). In addition, as we saw in (5), personal infinitives are always able to take their own temporal modifiers, and are thus temporally independent of the matrix clause containing them. The possibility arises, then, that personal infinitives in West Flemish are properly finite, rather than pseudofinite; i.e., that they are headed by an Infl bearing the feature FINITE.

### 5.3 Pseudofiniteness and Finiteness: a comparison

Given the dependency structure in (1), we must now ask what it means for a non-finite Infl to acquire case-assigning and agreement properties. Is the

FINITE feature activated in such a way as to bring with it the feature(s) that dominate it in the dependency structure, or are the case and agreement properties added in such a way as not to alter the feature structure of Infl?

The only feature whose presence is entailed by the presence of FINITE is PROPOSITION. Truly finite clauses always denote propositions, as opposed to bare events, as shown in (23) below. In (23a), the verb *saw* refers to a direct, visual perception of an event, while in (23b) it refers to a cognitive realization of a proposition.

- (23) a. We saw [the children eat(ing) the cookies].  
 b. We sat [(that) the children were eating the cookies].

The question, then, is whether personal/inflected infinitives can ever denote bare events. If they can, then the superficial properties of finiteness are present, but Infl has not thereby become fully finite.

The Portuguese examples in (24) contain inflected infinitives denoting bare events.

- (24) a. eu vi os meninos lerem o livro.  
 I saw the children read.INF.3PL the book  
 ‘I saw the children read the book.’ (Raposo 1989: 279)
- b. Eu vi [eles trabalharem].  
 I saw they.NOM work.INF.3PL  
 ‘I saw them work.’ (ibid: 288)
- c. Os actores<sub>i</sub> viram [eles<sub>\*i/j</sub> representarem a  
 The actors saw they (≠ the actors) represent.INF.3PL the  
 cena].  
 scene  
 ‘The actors saw them represent the scene.’ (ibid: 302)
- d. [os meninos a dormirem] é/\*são um espectáculo  
 the children to sleep.INF.3PL be.PRES.3SG/\*3PL a spectacle  
 lindíssimo.  
 beautiful.SUPERL

‘The children sleeping is/\*are a beautiful sight.’ (ibid: 282)

I therefore conclude that true finiteness and pseudofiniteness differ, not only in their provenance, but also in their representations. A truly finite clause is headed by Infl containing the feature FINITE, the presence of which entails the presence of the feature PROPOSITION, while a pseudofinite clause is headed by an Infl which has acquired the Case- and  $\phi$ -checking properties of FINITE, without the feature itself.

Following this line of thought, we are led to conclude that the West Flemish personal infinitive is a truly finite, rather than a pseudofinite, construction. While this resolves the difficulty caused by the fact that West Flemish is not a null-subject language, it raises another question. Why, if these personal infinitives are truly finite, are they restricted, like the pseudofinite constructions in Portuguese, to case-marked contexts? A truly finite Infl should inherently have the ability to license nominative case on its subject. In addition, it should not appear with the infinitival marker *te* ‘to’.

Haegeman (1985) adopts a version of the idea of Platzack (1983) that Comp and Infl may form a single projection, and suggests that in personal infinitives, Infl appears in Comp, rather than heading a separate projection below Comp. This approach provides another means by which the inflectional head of the clause might come to bear an uninterpretable case feature, assuming that Comp, but not Infl alone, can be argumental and thus potentially case-marked. Just as Infl in a null-subject language has nominal properties that make it able to carry an uninterpretable case feature, an Infl in Comp in West Flemish can do the same thing. Under the current approach, then, West Flemish would have a hybrid Comp/Infl head, bearing both the feature FINITE and an uninterpretable Case feature. Assuming that this close connection between Infl and Comp characterizes V2 languages, we would not expect to find the

West Flemish sort of personal infinitives in English.

#### 5.4 *Pseudofiniteness and syntactic operations*

Quicoli (1996) discusses inflected infinitives in Portuguese, and shows that they differ systematically from non-inflected infinitives with respect to various types of movement from the embedded subject position. Whereas A-movement (including ECM) is generally possible with plain infinitives and impossible with inflected infinitives and finite clauses, A'-movement is impossible with plain infinitives and possible with inflected infinitives and finite clauses. These phenomena are illustrated in (25)–(29).

A-movement from embedded subject position:

(25) Subject raising

a. Plain infinitive:

Os embaixadores parecem ter chegado a um  
the ambassadors seem.PRS.3PL have.INF reach.PTCP to an  
acordo.  
agreement

‘The ambassadors seem to have reached an agreement.’ (Quicoli  
1996: 57)

b. Inflected infinitive:

\*Os embaixadores parecem terem chegado a um  
the ambassadors seem.PRS.3PL have.INF.3PL reach.PTCP to an  
acordo.  
agreement

‘The ambassadors seem to have reached an agreement.’ (ibid.)

c. Finite clause:

\*Os embaixadores parecem que chegarem a um  
the ambassadors seem.PRS.3PL that reach.PST.3PL to an  
acordo.  
agreement

‘The ambassadors seem that [they] reached an agreement.’ (ibid)

(26) ECM/Object clitic placement

a. Plain infinitive:

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)

b. Inflected infinitive:

\*José nos viu sairmos da casa.  
José us see.PST.3SG leave.INF.1PL of.the house

‘José saw us leave the house.’ (ibid.)

(27) Passive

a. Plain infinitive:

Os soldados foram vistos cair.  
the soldiers be.PST.3PL see.PTCP.PL fall.INF

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

b. Inflected infinitive:

\*Os soldados foram vistos caírem.  
the soldiers be.PST.3PL see.PTCP.PL fall.INF.3PL

‘The soldiers were seen to fall.’ (ibid.)

A’ movement from embedded subject position:

(28) Wh-Movement

a. Plain infinitive:

\*Que jogadores você lamenta ter abandonado a  
which players you regret have.INF abandon.PTCP the  
equipe?  
team

‘Which players do you regret to have abandoned the team?’ (Quicoli  
1996: 56)



- b. Que jogadores você lamenta terem abandonado a  
 which players you regret have.INF.3PL abandon.PTCP the  
 equipe?  
 team  
 ‘Which players do you regret to have abandoned the team?’ (ibid.)
- c. Finite clause:  
 Que jogadores você lamenta que tenham abandonado  
 which players you regret that have.PRS.3PL abandon.PTCP  
 a equipe?  
 the team  
 ‘Which players do you regret that [they] have abandoned the team?’  
 (ibid.)

(29) Topicalization

- a. Plain infinitive:  
 \*As estrelas parecia sorrir.  
 the stars seem.PST.3SG smile.INF  
 ‘The stars, it seemed to smile.’ (Quicoli 1996: 62)
- b. inflected infinitive:  
 As estrelas parecia sorrirem  
 the stars seem.PST.3SG smile.INF.3PL  
 ‘The stars, it seemed to smile.’ (ibid.)
- c. Finite clause:  
 As estrelas parecia que sorriam.  
 the stars seem.PST.3SG that smile.PST.3PL  
 ‘The stars, it seemed that [they] smiled.’ (ibid.)

Quicoli’s analysis of the phenomena exemplified above is based on the assumption that, in inflected infinitives, Infl contains AGR. Following Chomsky (1981), AGR is an accessible SUBJECT for the purposes of the Binding Theory. When the movement leaves an NP-trace, as in (25)-(27), the presence of AGR in Infl makes the lower clause the binding domain for the trace, and the sentence is ruled out by Condition A. When the movement is to an A’-position, as in (28) and (29), the inflected infinitive is well-formed due to the fact that

the trace is case-marked. The plain infinitive in such cases is ruled out by the Case Filter.

These examples are straightforwardly accounted for under the current approach as well. Let us consider (28) and (29) first. In the (b) and (c) examples, the uninterpretable case feature on the embedded subject is valued and deleted by the embedded Infl. In the truly finite (c) examples this is routine; in the pseudofinite (b) examples the valuing/deletion happens as a consequence of the fact that the embedded Infl bears an uninterpretable case feature of its own. This case feature enters into an Agree relation with a higher case-assigner and, on being checked, gives Infl the ability to value and delete the case feature on its subject. In the (a) examples, however, the uninterpretable case feature on the embedded subject cannot be deleted, because the embedded Infl has no case feature and thus does not acquire the ability to check case on its subject. The subject then undergoes *A'*-movement to the matrix spec/CP, and ultimately its unchecked uninterpretable case feature causes the derivation to crash.

Exactly the opposite situation holds in (25)–(27). Here, the higher clause contains a case-assigning probe that requires an active DP with which to Agree. In the plain infinitive (a) examples, the embedded subject has an uninterpretable case feature and is thus visible to the probe from the higher clause. In the (b) and (c) examples, however, the uninterpretable case feature is deleted within the lower clause, and thus the embedded subject is not visible to the probe. When the embedded clause is finite, as in (25c), the embedded subject has its case valued by the FINITE feature on the embedded Infl. When the embedded clause is pseudofinite, as in the (b) examples, the embedded Infl itself has an uninterpretable case feature that satisfies the probe. The embedded subject then has its case valued by the embedded Infl, and no Agree relation can arise between the higher probe and the embedded subject. Thus

the higher probe cannot exhibit  $\phi$ -feature agreement with the embedded subject, and the embedded subject can neither bear the case assigned by the higher probe, nor move to the specifier position associated with it. If, on the other hand, the probe were to bypass the embedded Infl and target the embedded subject, then the uninterpretable case feature on the embedded Infl would not be deleted and the derivation would crash.

## 6 Pseudofiniteness in Southern Calabrian

Let us now turn to the intriguing case of the Southern Calabrian *modo* construction. Ledgeway (1998) argues, at length and in considerable detail, that the distribution of this construction is identical to that of the personal/inflected infinitives in other Italian dialects, most particularly Old Neapolitan.

What makes this construction unusual, for an inflected infinitive, is that the verb forms are identical to those of the present indicative. The differences between the *modo* construction and the present indicative are as follows. First, the *modo* construction has a special particle, historically derived from the Latin word *modo*. Ledgeway shows that this morpheme is not a complementizer—it can co-occur with *wh*-phrases, unlike the ordinary complementizer, as in (30), and it appears to the right of the subject and the negative marker, as shown in (31).

- (30) a. Si sapiti            chi (\*ca) mi        fici        a mia  
       if know.PRS.2SG what (\*that) me.ACC do.PST.3SG to me  
       ‘If you knew what (\*that) he did to me’ (Ledgeway 1998: 28)
- b. E’            ‘na città, comu ma    vi        dicu,        antica  
       be.PRS.3SG a.F city how MODO YOU.P say.PRES.1S old.F  
       e...moderna.  
       and...modern.F  
       ‘It’s a city, how can it put it, old and ...modern.’ (ibid.: 29)

- c. Non avia            chimmu    mangia.  
not have.IPFV.3SG what.MODO eat.PRS.3SG  
'He had nothing to eat.' (ibid.: 29)
- d. 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.' (ibid.: 30)
- (31) a. Ma jeu nommu mi tradu        rispundia.  
but I not.MODO REFL.1 betray.PRS.1SG answer.PST.1SG  
'But so that I would not betray myself, I replied.' (ibid.: 24)
- b. Vogghiu lu diavulu mu ti mangia!  
want.PRS.1SG the devil MODO you.ACC eat.PRS.3SG  
'I wish that the devil [should] eat you up!' (ibid.: 24)

Second, the present indicative proper is temporally deictic, and alternates with other tenses like past and future. The *modo* construction is temporally transparent, with its time reference entirely determined by that of the matrix clause. No tense forms other than the present can appear in a *modo* clause, regardless of the time reference of that clause, as seen in (32).

- (32) a. Conditional > Present
- vollaria        ['u cangiu        misterì].  
want.COND.1SG MODO change.PRS.1SG job  
'I should like to change trade.' (Ledgeway 1998: 34)
- b. Preterite > Present
- Vozza        [ma sapa        sulu cui ci fà  
want.PST.3SG MODO know.PRS.3SG only who there do.PRS.3SG  
'a sfumatura a li parmari.  
the trimming to the.PL palm.tree.PL  
'He wanted to know who trimmed the palm trees.' (ibid.)
- c. Imperfect > Present
- M'havia        scordatu c'havia        ['u  
refl.1SG.have.IPFV.1SG forget.PTCP that.have.IPFV.1SG MODO  
viu        a unu].  
see.PRS.1SG to one

‘I had forgotten that I had to see someone.’ (ibid.)

Also, the *modo* construction appears with complementizers that in other Romance languages take only infinitival clauses, such as *mbeci* ‘instead of’ (33), and it cannot appear with complementizers that typically take only finite clauses, such as *nzina* ‘until’, *ntramentri* ‘while’ and *cu tutti* ‘although’ as in (34).

- (33) a. E di notti vai facendu ‘u spirdu casa casa, mbeci  
and of night go.PRS.2SG do.GER the spirit house house instead  
**mu** ti curchi e **mu** ti levi prestu  
MODO you lie.PRS.2SG and MODO REFL.2 get.up.PRS. 2SG early  
a matina  
the morning

‘And at night time you go around haunting the houses, instead of going to bed and getting up early in the morning.’

cf. \*E di notti vai facendu ‘u spirdu casa casa, mbeci **chi** ti curchi e **chi** ti levi prestu a matina. (Ledgeway 1998: 37)

- b. Imbeci **ma** jamu avanti, jamu arretu.  
instead MODO go.PRS.1PL forwards go.PRS.1PL backwards  
‘Instead of going forwards, we’re going backwards.’

cf. \*Imbecia **chi** jamu avanti, jamu arretu. (ibid)

- (34) a. Girdàvamu nzina **cchi** non venìa a maschera.  
shout.IPFV.1PL until that not come.IPFV.3SG the usherette  
‘We shouted until the usherette came.’

cf. \*Girdàvamu nzina non **ma** vena a maschera. (Ledgeway 1998: 36)

- b. Ntramentri **chi** jeu travagghiava, iddhu si ripusava.  
in.while that I work.IPFV.1SG he REFL.3 rest.PRS.3SG  
‘While I was working, he was resting.’

cf. \*Ntramenti jeu **mi** travvaghgiu, iddhu si ripusava. (ibid.)

- c. Cu tuttu **chi** chiuvia, nisciu mi zzappa  
with all that rain.IPFV.3SG go.out.PST.3SG MODO dig.PRS.3SG

l'ortu.  
 the.garden  
 'Although it was raining, he went out to dig the garden.'  
 cf. \*Cu tuttu **mi** chiuvi, nisciu mi zzappa l'ortu. (ibid.)

Ledgeway proposes that the *modo* construction is, in fact, an inflected infinitive, and that the present indicative paradigm encodes only agreement, not tense. It is of interest that Southern Calabrian makes very little use of the ordinary infinitive, reserving it for complements of modals. In fact, in contexts that trigger obviation in many Romance languages—complements to volitional verbs—these dialects use the *modo* construction even when the subjects are coreferential, as shown in (35).

- (35) a. Vollarìa [‘u cangiu misterì].  
 want.COND.1SG MODO change.PRS.1SG job  
 ‘I should like to change trade.’ (Ledgeway 1998: 34)
- b. Vozza [ma sapa sulu cui ci fà  
 want.PST.3SG MODO know.PRS.3SG only who there do.PRS. 3SG  
 ‘a sfumatura a li parmari]  
 the trimming to the.PL palm.tree.PL  
 ‘He wanted to know who trims the palm trees.’ (ibid.)
- c. Eu vogghiu [mi ti pagu]  
 I want.PRS.1SG MODO you pay.PRS.1SG  
 ‘I want to pay you.’ (ibid.: 44)

One difference between the *modo* construction and the Old Neapolitan inflected infinitive construction is that in Old Neapolitan, the inflected infinitive always appears with a case-assigning element immediately governing it, just like the personal/inflected infinitives in Portuguese and West Flemish discussed above. In contrast, the *modo* construction does not invariably have a case-assigning element governing it. However, it is entirely possible that the *modo* element itself provides a case specification for the Infl in the *modo* clause. Suppose that is the case. Then the *modo* construction is, like personal

and inflected infinitives in other languages, not finite but rather pseudofinite. We thus expect that we might find *modo* clauses denoting bare events rather than propositions, and indeed we do, as shown in (36).

- (36) a. ‘Ncumincia ma vi sàgghia ‘u sangu a ‘lu  
 begin.PRS.3SG MODO YOU.PL.DAT rise.PRS.3SG the blood to the  
 cerbeddhu.  
 brain  
 ‘Your blood begins to flow to your brain.’ (Ledgeway 1998: 25)
- b. 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)
- c. Li fazzu mu stannu tranquilli.  
 them.M.PL make.PRS.1SG MODO stay.PRS.3PL calm.M.PL  
 ‘I’ll make them relax.’ (ibid.: 40)
- d. Ti faci mu ti passa ‘u malucori.  
 you make.PRS.3SG MODO YOU.DAT go.away.PRS.3SG the sorrow.  
 ‘It will make your pain go away.’ (ibid.: 40)

I thus conclude that the Southern Calabrian *modo* construction is pseudofinite, and that the fact that it has nominative subjects and  $\phi$ -feature agreement is due to the fact that its Infl is specified for case, just like personal and inflected infinitives in West Flemish and Portuguese. The question, then, is why the Southern Calabrian pseudofinite forms are morphophonologically indistinguishable from finite forms, while in the other languages, there is a special inflected infinitival form. More generally, how is the derivationally created pseudofinite Infl morphologically realized? Clearly the so-called present indicative forms cannot be represented as spelling out either DEIXIS or FINITE. If we assume, with Ledgeway and many other authors, that present is not featurally marked, but is the default interpretation of an unmarked tense, then it could be that what “present tense” morphology spells out is simply  $\phi$ .

## 7 Greek again

Let us return now to the question of the Greek subjunctive with *na*. We saw that while the verb in such a clause always exhibits  $\phi$ -agreement with the subject, the subject bears nominative case only if the clause is propositional. This pattern is different both from the situation with Portuguese inflected infinitives, and from the superficially quite similar situation in Southern Calabrian just discussed. In those languages, nominative case can appear on the subjects of non-propositional clauses, and we concluded that such clauses were pseudofinite rather than truly finite.

The simplest analysis of the propositional *na*- subjunctive clauses in Greek is to say that they are both propositional and truly finite; in other words, Infl in such a clause bears both PROPOSITION and FINITE, like subjunctive clauses in French and many other languages. An overt subject in such a clause checks nominative Case, as the result of checking  $\phi$ -features with a finite Infl.

This approach leaves several cases unaccounted for, examples of which are given in (37), and which could, in principle, be treated as pseudofinite.

- (37) a. Bare eventive complements with accusative subjects:

Perimene to ðimitri na erθi.  
wait.PST.3SG the.ACC Dimitris.ACC NA come.PFV.3SG

‘She was waiting for Dimitris to arrive.’ (Kyriakaki 2006: 53)

- b. Obligatory control clauses:

Ego ksero na kolibo.  
I know.1SG NA swim.1SG

‘I know how to swim.’ (Alexiadou & Anagnostopoulou 2002: 16)

- c. Raising clauses:

Ta peðia arxisan na trexoun.  
the.PL child.PL.NOM start.PST.3PL NA run.3PL

‘The children started to run.’ (ibid.: 17)



However, these clauses lack one of the two defining characteristics of pseudofiniteness: Case on the subject is not checked internally to the clause. In (37a), the accusative case on the subject of the embedded clause can be attributed to a checking relation with the higher verb, while in (37b) and (37c), the subject position of the lower clause arguably checks no case at all. Ideally, then, we should treat these clauses as straightforwardly nonfinite.

This result is entirely consonant with Alexiadou & Anagnostopoulou's 1999b proposal that in Greek,  $\phi$ -feature agreement on the verb is not necessarily the result of a Case-related probe in Infl. Rather, they claim that it also happens whenever a subject checks Infl's EPP feature. This means that in Greek—and perhaps also in other Balkan languages that putatively lack infinitives—the presence of  $\phi$ -agreement on the verb is completely independent of whether that verb is finite.

## 8 Turkish Gerunds: case and agreement without finiteness

Let us now return to the Turkish constructions discussed by George & Kornfilt (1981). They divide Turkish complement clauses into two types: direct complements, as in (38), and gerunds, as in (39). The (a) examples have overt, internally case-marked subjects and exhibit  $\phi$ -feature agreement, while the (b) examples have neither of these properties.

(38) Direct complements:

- a. Ahmet [biz viski-yi iç-ti-k] san-iyor.  
 Ahmet we whiskey-ACC drink-PST-1PL believe-PRS  
 'Ahmet believes (that) we drank the whiskey.' (George & Kornfilt 1981: 118)
- b. 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.)

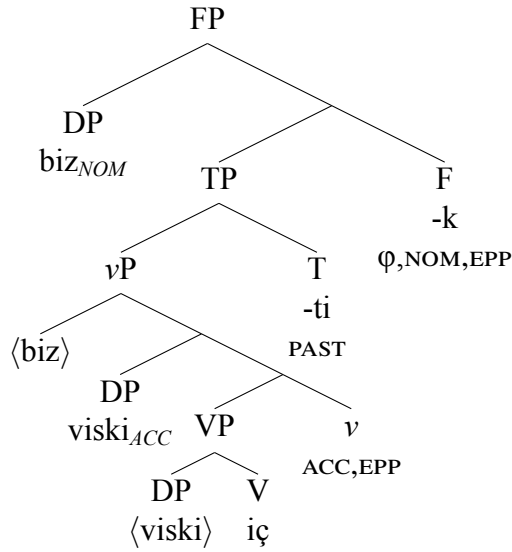
(39) Gerunds:

- a. (ben) [kiz-im-in viski-yi iç-me-sin]-e  
I daughter-my-GEN whiskey-ACC drink-GER-3SG-DAT  
razi ol-du-m  
consent-PST-1SG  
'I consented to my daughter's drinking the whiskey.' (ibid.)
- b. (ben) [viski-yi iç-meg'-]e razi ol-du-m  
I whiskey-ACC drink-GER-DAT consent-PST-1SG  
'I consented to drink the whiskey.' (ibid.)

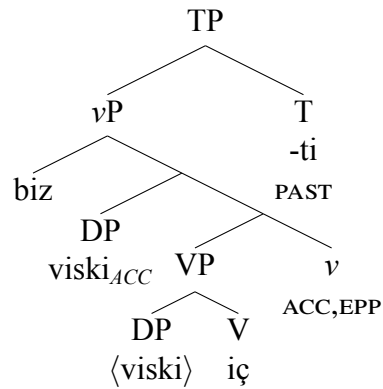
George & Kornfilt (1981) characterize the (a) examples as finite, and the (b) examples as non-finite. However, they also argue at length that gerunds are nominal, rather than purely clausal. Gerunds can themselves bear overt case, such as the dative marking on the gerunds in (39). They can appear in all positions in which ordinary nominals appear, and they are inflected with nominal morphology. Thus, the subject of a gerund is genitive, like the possessor in a nominal, and the agreement affixes are the same as those found in the possessive construction. We have provisionally defined finiteness as the ability to check nominative case and trigger  $\phi$ -agreement; let us now consider where constructions like (39a) fit in.

Following George and Kornfilt, and updating their analysis where necessary, the embedded clauses/gerunds in (38) and (39) have the structures in (40) and (41). I have provisionally used the generic term FP for the projection headed by case and agreement features in finite clauses.

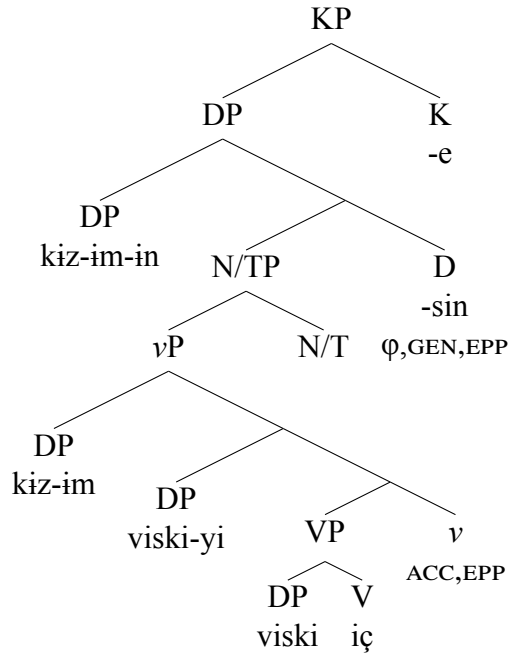
- (40) a. [biz viski-yi iç-ti-k]  
we whiskey-ACC drink-PST-1PL  
'(Ahmet believes that) we drank the whiskey.'



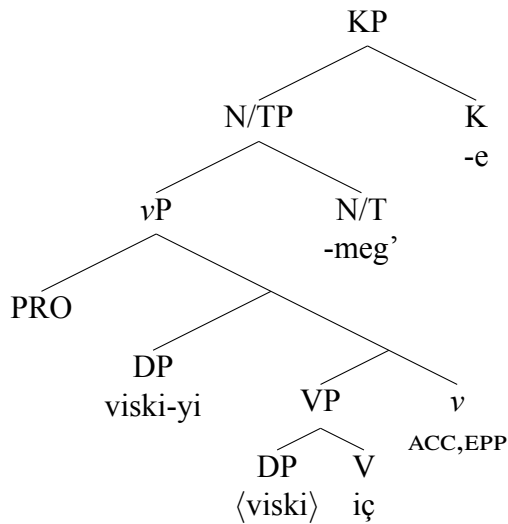
- b. [biz-i viski-yi iç-ti]  
 we-ACC whiskey-ACC drink-PST  
 ‘(Ahmet believes) us to have drunk the whiskey.’



- (41) a. [kız-im-in viski-yi iç-me-sin]-e  
 daughter-my-GEN whiskey-ACC drink-GER-3SG-DAT  
 ‘(I consented) to my daughter’s drinking the whiskey.’



- b. [viski-yi iç-meg’-]e  
 whiskey-ACC drink-GER-DAT  
 ‘(I consented) to drink the whiskey.’



In Turkish, there are clear parallels to be drawn between the clausal projection, labelled FP in (40a), and the nominal projection, labelled DP in (41a). Both of these functional heads license  $\phi$ -feature agreement on the head and structural case on the specifier. These are the properties labelled *finiteness* by George & Kornfilt (1981), and called AGR by people working on Turkish

syntax since then (see also Kornfilt 2001a,b). I have labelled the gerundive projection N/T, to reflect its hybrid role as an element encoding both nominal category and, in some cases, something like tense ( $\pm$ FUTURE, according to George & Kornfilt). Its parallel in the clausal system is T, which would host the feature PRECEDENCE from the dependency structure in (1).

Let us assume, uncontroversially, that clauses such as the complement clause in (38a) are finite, and that the complements in (38b) and (39b) are non-finite. The question then is whether (39a) should be treated as nonfinite, finite, or possibly pseudofinite. As before, we assume that if a clause denotes a bare event, it cannot be truly finite. The sentences in (42) contain gerundive clauses with casemarked subjects and  $\phi$ -feature agreement, but which denote bare events.

- (42) a. Çocuk-lar-ın viski-yi iç-me-sin gör-ül-ecek bir  
 child-PL-GEN whiskey-ACC drink-GER-3PL see-PSV-GER one  
 manzara deg'il.  
 sight is-not  
 'The children drinking the whiskey is not a sight to be seen.'

(Hitay Yüksekler, p.c.)

- b. Çocuk-lar-ın 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 Yüksekler, p.c.)

The fact that so-called finite gerunds can refer to bare events eliminates the possibility that they are truly finite. Given our characterization of pseudofiniteness, and the idea that finiteness might cut across the nominal/sentential distinction, we might be led to look for an external case-assigner that would perhaps be activating the case-assigning ability of the D-head in (40b), (41b) and (42). However, it is important to note that the DP dominating the construction itself bears case—the case valued by whatever checks it. It is thus unlikely

that an analysis along the lines proposed for pseudofinite clauses in Romance can be pursued here. In addition, as Kornfilt (2001a) notes, these clauses are not, in fact, restricted to case-marked contexts. I therefore conclude that the Turkish agreeing gerunds are not, in fact, either finite or pseudofinite. Rather, they simply exhibit ordinary possessive nominal behaviour: genitive case on their subjects and possessive agreement on their heads.

## 9 Conclusion

I have shown that the traditional understanding of finiteness, namely that it consists of the ability to assign structural (nominative) case to a subject, and the possibility of having  $\phi$ -feature agreement encoded on the verb, is essentially correct. Finiteness is thus a purely syntactic property, but one which forms part of a dependency structure that encodes the syntactic and semantic properties of Infl. It thus exhibits certain partial correlations with semantic properties such as deixis, and the proposition/event distinction. All truly finite clauses are propositional, though not all propositions are finite, and all temporally deictic clauses are finite, though not all finite clauses are temporally deictic.

We have also seen a set of constructions that have the superficial properties normally associated with finiteness, but which differ systematically from finite clauses. Infl in these clauses, which we call pseudofinite, acquires the ability to value nominative case and bear  $\phi$ -feature agreement during the course of the syntactic computation. Pseudofiniteness is triggered by the presence of an uninterpretable case feature on a nonfinite Infl, an option available only in null-subject languages.

Not all constituents whose heads lack FINITE but nonetheless exhibit  $\phi$ -agreement with their specifiers are pseudofinite, however. We saw that in

Greek, non-finite Infl checks  $\phi$ -features, but not nominative case, as a reflex of EPP-checking, and that Turkish gerunds that agree with a genitive specifier have the ordinary syntax of possessive nominals. It remains to be seen whether there is a property analogous to pseudofiniteness in the nominal system cross-linguistically.

We also saw that not every instance of nominative case is the result of valuation by a  $\phi$ -probe in a finite or pseudofinite Infl. Sometimes, as argued by Raposo (1989), nominative case arises by default.

The main theoretical question arising from this discussion is whether FINITE, as the only purely syntactic feature in the dependency structure of Infl, forces us to conclude, contra Harbour & Elsholtz (2012), that interpretable formal features must indeed be extrinsically arranged in a feature geometry that is not simply a convenient depiction of relations that can be derived from the semantics of the various features. Ideally, it should be possible to make the position of FINITE in the dependency structure follow from something else—perhaps from some constraint on how the features must map to syntactic projections. But that answer must await further work.

## References

- Alboiu, Gabriela & Virginia Motapanyane. 2000. The generative approach to Romanian grammar: an overview. In *Comparative Studies in Romanian Syntax*, Virginia Motapanyane, ed., 1–48. New York: Elsevier.
- Alexiadou, Artemis & Elena Anagnostopoulou. 1999a. Epp without Spec,IP. In *Specifiers: Minimalist Approaches*, David Adger, Susan Pintzuk, Bernadette Plunkett, & George Tsoulas, eds., 93–109. Oxford: Oxford University Press.
- Alexiadou, Artemis & Elena Anagnostopoulou. 1999b. Raising without in-

- finitives and the nature of agreement. In *WCCFL 18 Proceedings*, Sonya Bird, Andrew Carnie, Jason D. Haugen, & Peter Norquest, eds., 14–26. Somerville, MA: Cascadilla Press.
- Alexiadou, Artemis & Elena Anagnostopoulou. 2002. Raising without infinitives and the role of agreement. In *Dimensions of Movement: From Features to Remnants*, Artemis Alexiadou, Elena Anagnostopoulou, Sjef Barbiers, & Hans-Martin Gaertner, eds., 17–30. Amsterdam: John Benjamins.
- Avery, J. Peter. 1996. The representation of voicing contrasts. Ph.D. thesis, University of Toronto.
- Béjar, Susana & Daniel Currie Hall. 2000. Marking markedness: The underlying order of diagonal syncretisms. In *Proceedings of ESCOL 99*, 1–12.
- Bélanger, Suzanne. 2002. A derivational relationship: the subjunctive-infinitive alternation in french. Ms., University of Toronto.
- Binnick, Robert I. 1991. *Time and the Verb*. Oxford: Oxford University Press.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris Publications.
- Chomsky, Noam. 1982. *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by Step*, Roger Martin, David Michaels, & Juan Uriagereka, eds., 89–155. Cambridge, MA: MIT Press.



- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A Life in Language*, Michael Kenstowicz, ed., 1–52. Cambridge, MA: MIT Press.
- Clarke, Sarah. 2013. Aspectual scope and contrast in English and Japanese. Ph.D. thesis, University of Toronto.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Cowper, Elizabeth. 2005. The geometry of interpretable features: Infl in English and Spanish. *Language* 81(1): 10–46.
- Cowper, Elizabeth & Daniel Currie Hall. 2007. The morphosyntactic manifestations of modality. In *Proceedings of the 2007 CLA*, Milica Radišić, ed. Canadian Linguistic Association.
- Dyscolus, Apollonius. 1981. *The Syntax of Apollonius Dyscolus*. Amsterdam: Benjamins.
- Farkas, Donka F. 1982. Intensionality and Romance subjunctive relatives. Ph.D. thesis, University of Chicago.
- George, Leland & Jaklin Kornfilt. 1981. Finiteness and boundedness in Turkish. In *Binding and Filtering*, Frank Heny, ed., 105–127. London: Croom Helm.
- Haegeman, Liliane. 1985. INFL, COMP and nominative case assignment in Flemish infinitivals. In *Features and Projections*, Peter Muysken & Henk van Riemsdijk, eds., 123–137. Dordrecht: Foris.
- Halle, Morris & Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, Kenneth Hale & Samuel Jay Keyser, eds., 111–176. Cambridge, MA: MIT Press.
- Harbour, Daniel & Christian Elsholtz. 2012. Feature geometry: Self-

- destructured. Ms., Queen Mary University of London and Technische Universität Graz.
- Harley, Heidi & Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78(3): 482–526.
- Hornstein, Norbert. 1990. *As Time Goes By*. Cambridge, MA: MIT Press.
- Hornstein, Norbert. 1995. *Logical Form: From GB to Minimalism*. Oxford: Blackwells.
- Jespersen, Otto. 1924. *The Philosophy of Grammar*. London: Allen and Unwin Ltd.
- Koopman, Hilda. 1984. *The Syntax of Verbs*. Dordrecht: Foris Publications.
- Kornfilt, Jaklin. 2001a. Case and agreement: Morphology and its syntactic effects in Turkish. Paper presented at the 23rd Annual Meeting of the Linguistics Society of Germany.
- Kornfilt, Jaklin. 2001b. Subjects and their case in Turkish/Turkic embeddings. Paper presented at the Workshop on Altaic Languages, MIT.
- Kyriakaki, Maria. 2006. The geometry of tense, mood and aspect in Greek. M.A. thesis, University of Toronto.
- Ledgeway, Adam. 1998. Variation in the Romance Infinitive: The case of the Southern Calabrian inflected infinitive. *Transactions of the Philological Society* 96(1): 1–61.
- Luján, Marta. 1999. A unified approach to control and obviation. In *Grammatical Analyses in Basque and Romance Linguistics*, Jon A. Franco, Alazne Landa, & Juan Martin, eds., 105–130. Amsterdam/Philadelphia: John Benjamins.

- Mailhac, Jean-Pierre. 2000. Sens, choix et subjonctif. *French Language Studies* 10: 229–244.
- Pesetsky, David & Esther Torrego. 2001. T-to-C movement: Causes and consequences. In *Ken Hale: A Life in Language*, Michael Kenstowicz, ed., 355–426. Cambridge, MA: MIT Press.
- Pesetsky, David & Esther Torrego. 2004. Tense, case, and the nature of syntactic categories. In *The Syntax of Time*, Jacqueline Guéron & Jacqueline Lecarme, eds., 495–537. Cambridge, MA: MIT Press.
- Pesetsky, David & Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation: In Honor of Joseph Emonds*, Simin Karimi, Vida Samiian, & Wendy K. Wilkins, eds., 262–294. Amsterdam/Philadelphia: John Benjamins.
- Platzack, Christer. 1983. Germanic word order and the Comp/Infl parameter. *Working Papers in Scandinavian Syntax (Trondheim)* 2.
- Poplack, Shana. 1991. The inherent variability of the French subjunctive. In *Theoretical Analyses in Romance Linguistics: Selected Papers from the Nineteenth Linguistic Symposium on Romance Languages*, Christiane Laeuffer & Terrell A. Morgan, eds., 235–263. Amsterdam/Philadelphia: Benjamins.
- Pountain, Christopher J. 1995. Infinitives with overt subjects: A pragmatic approach. In *Portuguese, Brazilian and African Studies: Studies Presented to Clive Willis on his Retirement*, Tom Earle & Nigel Griffin, eds., 11–25. Warminster: Aris and Phillips.
- Quicoli, A. Carlos. 1996. Inflection and parametric variation: Portuguese vs.

- Spanish. In *Current Issues in Comparative Grammar*, Robert Freidin, ed., 46–80. Dordrecht: Kluwer Academic Publishers.
- Raposo, Eduardo. 1987a. Case theory and Infl-to-Comp: The inflected infinitive in European Portuguese. *Linguistic Inquiry* 18: 85–109.
- Raposo, Eduardo. 1987b. Romance infinitival clauses and case theory. In *Studies in Romance Languages*, Carol Neidle & Rafael A. Nuñez Cedeño, eds., 237–249. Dordrecht: Foris Publications.
- Raposo, Eduardo. 1989. Prepositional infinitival constructions in European Portuguese. In *The Null Subject Parameter*, Osvaldo Jaeggli & Kenneth J. Safir, eds., 277–305. Dordrecht: Kluwer.
- Roussou, Anna. 2001. Control and raising in and out of subjunctive complements. In *Comparative Syntax of the Balkan Languages*, María Luisa Rivero & Anna Ralli, eds., 74–104. Oxford University Press.
- Sagey, Elizabeth. 1986. The representation of features and relations in non-linear phonology. Ph.D. thesis, Massachusetts Institute of Technology.
- Schütze, Carson T. 1997. INFL in child and adult language: Agreement, case, and licensing. Ph.D. thesis, Massachusetts Institute of Technology.
- Sitaridou, Ioanna. 2009. On the emergence of personal infinitives in the history of Spanish. *Diachronica* 26(1): 36–64.
- Soames, Scott & David M. Perlmutter. 1979. *Syntactic Argumentation and The Structure of English*. Berkeley: University of California Press.
- Subirats-Rüggeberg, Carlos. 1990. The relation between infinitival and sentential complements in traditional grammar. *Lingvisticæ Investigationes* 14(1): 81–93.
- Thiébauld, Dieudonné. 1802. *Grammaire philosophique, ou la métaphysique*,

*la logique, et la grammaire réunies en un seul corps de doctrine.* Stuttgart-  
Bad Cannstatt: Friedrich Frommann.