

Finiteness, Case and Agreement

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1. Introduction

The core theoretical claim questioned in this paper is the exclusively [+Tense] oriented theory of Nominative case-licensing that parametrizes languages according to the feature on T, i.e.[+tense] or [+phi features/Agreement] (Chomsky 1981, 2001, George & Kornfilt 1981, Raposo 1987, among others). The core data to be analyzed is Turkish inflected embedded clauses with agreement and ECM with optional agreement: Nominative-Subject Complement Clause (Declarative) in (1a) and Accusative-Subject Complement Clause (Declarative) in (1b).

- (1) a. Ben-Ø [sen-Ø gel -di -n] san-dı-m.
I-Nom you-Nom come-Perf/Past-3sg think-Perf/Past-1 s
'I thought you came/have come'
- b. Ben-Ø [sen-i gel-di-(n)] san-dı-m.
I-Nom you-Acc come-Perf/Past-3sg think-Perf/Past-1 s
'I thought you came/have come'

Turkish has been argued to be a language like European Portuguese (Raposo 1987) in which not tense but agreement defines finiteness (George and Kornfilt 1981), and licenses nominative case. I argue that in Turkic languages and possibly in Romance Inflected Infinitives, the feature licensing Nominative Case is a *not* Agreement *per se* as claimed (Kornfilt 1984, 2002) but a complex feature consisting of a feature in the C(omp) system, i.e. mood, and a feature in the I(nfl)/T(ense) system, i.e. epistemic modality. The prediction of the proposed analysis is the *ECM Hypothesis*: lack of either one or both components of nominative case feature on I/T and C renders the structure non-finite. Non-nominative subject case, i.e. Accusative or Genitive, must then be licensed by the functional head available above the embedded clause: ν P or DP. This prediction is attested in English, European Portuguese, Catalan, and Greek, among others. The major theoretical implication of this study is un-coupling case and agreement.

Section (2) discusses the morpho-syntactic ingredients of nominative case; section (3) the syntactic mechanism of nominative-case licensing; section (4) extends this analysis to English subjunctives; section (5) presents the ECM hypothesis, and the languages where it is attested, and section (6) concludes the paper.

2. Ingredients of Nominative case

In this section, I will argue that nominative case requires the presence of certain syntactic features in the Infl and the Comp system within the clausal architecture. The Infl bears an epistemic modality feature rather than tense *per se*, and the Comp bears a mood feature.

2.1. The first piece of the puzzle: Epistemic modality in the Infl domain

Consider the Nominative/Accusative Alternation in (1). These Turkish Clauses are *minimally* different in terms of subject case yet otherwise identical in terms of the morphological form of the predicate. The availability of epistemic modal features present in the I/T system in Turkish enables the epistemic modal reading in nominative-subject construction (2) but not in accusative subject constructions (3)

- (1) Ben-Ø [Kürşat-Ø gel- **ebilir** -Ø] san-dı-m.
1) I-Nom Kürşat -Nom come **-mod** -3s think-Perf/Past-1s
2) i. 'I thought Kürşat could come' (that it is likely that he would come).
✓ *Epistemic*
3) ii. 'I thought Kürşat could = was able to come' ✓ *Deontic*

However, epistemic modal reading is not allowed in accusative-subject complements as observed in (3) below. The only available reading is a non-epistemic one:

- (1) *Ben-Ø [Kürşat-ı gel -**ebilir** -Ø] san-dı-m.
 1) I-Nom -Acc come -**mod** -3sg think-Perf/Past-1 s
 2) i. ‘* I thought Kürşat could come’ (that it is likely that he would come). *
Epistemic
 3) ii. ‘I thought Kürşat could = was able to come’ √ *Deontic*

Similar observation may be made in other Turkic languages: .i.e. Tuvan and Kazakh. In Tuvan, ECM construction allows deontic modality (4a) and does not allow epistemic modality (4b); whereas, Nom-Subj construction allows either one (4c):

- (1) a. Amur [Çeçen-**ni** kel-ir ujurług] dep podaan.
 1) Amur Çeçen-**acc** come-aor deontic postp. thought
 2) ‘Amur thought Çeçen had to come’ √ *Deontic*
 3) b.*Amur [Çeçen-**ni** kel-ir çadavas] dep podaan.
 4) Amur Çeçen-**acc** come-aor epistemic postp. thought
 5) Intended: ‘Amur thought that it was possible that Çeçen would come.’ * *Epistemic*
 6) c.Amur [Çeçen kel-ir ujurług/ çadavas] dep podaan.
 7) Amur Çeçen-nom come-aor deon/epistemic postp.thought
 8) i. Amur thought that Çeçen had to come. √ *Deontic*
 9) ii. Amur thought that Çeçen could come. √ *Epistemic*

In Kazakh, Nominative-subject construction *does* and Accusative-subject construction does *not* allow an epistemic reading in (5a,b):

- (1) a. Men señ kel-e al-a-dı de-p oyla-dı-m.
 1) I-Nom you-Nom come-Mod aux-Mod-perf Comp think-Per-1.
 2) ‘I thought Kürşat could come’ √ *Deontic* / √ *Epistemic*
 3) b. Men sen-i kel-e al-a-dı de-p oyla-dı-m.
 4) I-Nom you-Acc come-Mod aux-Mod-PerComp think-Per-1sg.
 5) ‘I thought Kürşat could come’ √ *Deontic* / * *Epistemic*

Based on the evidence from Turkic languages above, I propose that Epistemic Modality is involved in nominative case licensing at I(nfl).

2.2. The second piece of the puzzle: Agreement as Mood in the C-domain

The distribution of Turkic Subject-Verb Agreement paradigms that vary with the *mood* of the clause, illustrated in (6) indicates that agreement morphology distinguishes clauses in terms of the presence/absence and the type mood.

(1) Agreement Paradigm in Turkic:

1) Turkish

Agr	Person	Mood ₁	Mood ₂	Mood ₃ -Substantive	No Mood/Pos
Singular	1 st	-(I)m	-(e)yim	-(y)Im	-(I)m
	2 nd	- n	-(esin)	-sIn	-(sI)n
	3 rd	- Ø	-(e)	- Ø	-(s)I
Plural	1 st	- k	-elim	-(y)Iz	-mIz
	2 nd	- nIz	-(es)in	-sInIz	-nIz

	3 rd	- lAr	-(e)lAr	-lAr	-lArI
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I refuse the previous classification in Turkish linguistics (Kornfilt 1984, and subsequent work) on the following grounds: Research is primarily focused on Modern Turkish *only*: the paradigm in (I) has been called the ‘verbal paradigm’ although it appears on declarative substantives in some dialects as well as on conditional substantives as well as in (7c); paradigm (II) in (7d) is omitted from previous work; and (III) and (IV) have been collapsed into a ‘nominal paradigm’. Such a classification has previously provided the basis for the claim that Agreement is the sole case licenser. However, in the Turkish examples (7) below, it is clearly observed that these paradigms correspond to mood types:

- (1) Turkish
- 1) a. Biz gel-di-k Mood
I-declarative -verbal
- 2) We come-past-1pl
- 3) ‘We came/have come’
- 4) b. Biz iyi-yiz /iyi-yik Mood I–declarative-substantive
We fine-1pl
- 5) ‘We are fine.’
- 6) ‘We are fine.’
- 7) c. Biz gel-se-k /iyi-yse-k Mood II-conditional
We come-cond-1pl fine-cond/1pl
- 8) ‘If we come, ...’
- 9) ‘If we come, ...’
- 10) d. Biz gel-elim Mood II -optative
We come-1pl
- 11) ‘Let us come.’
- 12) ‘Let us come.’
- 13) e. Biz-im ev-imiz No Mood –possessive [phrasal]
We-gen house-1pl pos
- 14) ‘Our house’
- 15) ‘Our house’
- 16) f. Biz-im gel-dig-imiz No Mood [clausal]
We-gen come-asp-1pl
- 17) ‘[the fact/the time] That we came/have come’
- 18) ‘[the fact/the time] That we came/have come’
- 19)

In the proposed classification, the paradigm in (I) is not restricted to verbal predicates, and it *does* appear with substantive predicates at least in the conditional as shown in (II); paradigm (II) marks a different mood; the paradigm (III) and (IV) differ in terms of the structures they occur in: (III) occurs in clausal and (IV) in phrasal constructions. Other Turkic languages, e.g. Kazakh, Tuvan, Kazan Tatar, Azerbeidjani, Turkmen, Kirghiz, Altay to name a few.

The distribution of the agreement paradigms in terms of the type of clauses they appear in imply that agreement at a clausal level marks *mood*. The choice of Agreement Paradigm is dependent on the mood feature of a clause. If agreement marks mood and mood is a feature on C, we would expect to find agreement morphology on overt C’s. Tuvan data in (8) illustrates the morphological manifestation of agreement as mood on a lexical Complementizer *užurumda* ‘because’.

- (1) Men oray kel-gen užur-**um**-da , ava -m čedir
udu-vaan.
- 1) I-Nom late come-Per because-**1sg**-adv mother-1 sleep-neg-Perf-1
- 2) ‘Because I arrived so late, my mother couldn’t fall asleep.’

2.3. The proposal

The distributional properties of Nominative Case and Mood/Epistemic Modality, and the distribution of Agreement paradigms as an indication of presence/absence of Mood in Turkic languages suggest (9):

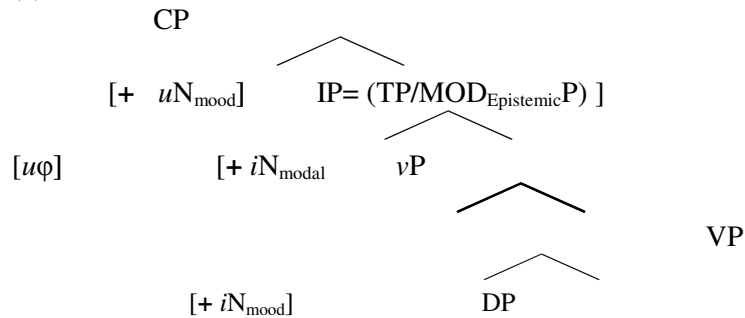
- (1) Nominative Case is licensed by a complex feature consisting of *Mood* (Comp domain) and *Epistemic Modality* (Infl domain).

1)

I propose that *Mood* is a syntactic nominative case feature on the head of the clause (Comp). Semantically it serves to distinguish the clauses in terms of the attitude someone has toward what it expresses. *Epistemic Modality* is an Infl feature in Turkic languages.

The syntactic configuration of relevant functional heads in a clause is given in (10):

(1)



1)

Embedded imperatives give us a good testing ground for the proposed analysis. In (11a), regardless of the presence of agreement within the lower clause, either nominative or accusative case is allowed. In (11b), lack of agreement is out with the ECM subject:

- (1) a. Ben [o-Ø /on-u gel-sin] iste-di-m
 1) I-Nom s/he-nom / s/he-acc come-3s want-perf/past-1sg.
 2) 'I wanted him/her to come.'
- 3) b. *Ben [on-u gel] iste-di-m
 4) I-Nom s/he-acc come want-perf/past-1sg.
 5) Intended meaning: 'I wanted him/her to come.'

Previous analyses that attribute Accusative-subject structures to the lack of agreement cannot account for the contrast in (11). For the proposed analysis, however, it is the lack of either one or both ingredients of nominative case that allows Acc-subject constructions. Acc-subject structures do not bear epistemic modality, which is attested in (12) below:

- (1) a. Ben [o-Ø gel-ebil-sin] iste-di-m
 1) I-Nom s/he-nom come-mod-agr want-perf/past-1sg.
 2) 'I wanted (it to be possible that)s/he to come'
- 3) b. * Ben [on-u gel-ebil-sin] iste-di-m.
 4) I-Nom s/he-acc come- mod-agr want-perf/past-1sg.
 5) i.* 'I wanted (it to be possible that)s/he to come'
 6) ii. 'I wanted her/him to be able to come'

In the proposed analysis, it is the lack of Epistemic modality that allows Acc-subject. Crucially, Imperative refers not only to the mood but particularly to the illocutionary force of the proposition, that does not necessitate the presence of modality, whereas other mood categories (subjunctive, declarative, etc) are semantically dependent on the presence of modality (Kamp 1981, Heim 1982). This unique property of the Imperative allows a structure with no modality, regardless of the presence of a Mood feature; hence the Acc-subject .

3. The syntax of nominative-case and “finiteness”

The syntactic mechanism of Nominative case licensing in English-type languages is either head movement, e.g. T-to-C, or overt phrasal movement of the subject phrase à la Pesetsky and Torrego (2001). Unless there is an EPP type strong feature such as a Wh-feature or Counterfactual feature on Comp (as in Inverted conditionals discussed in Aygen 2003), there is no overt movement to C. The EPP feature on Infl motivates the phrasal movement of the subject DP. In Turkic-type languages, where there is no T-to-C, Agree is the relevant mechanism. The EPP feature on Infl motivates the overt phrasal A-movement of *any* argument as observed in clause internal scrambling, which is *not* a nominative licensing movement (Aygen 2000, Miyagawa 2003). This analysis is further supported by the arguments in Butler (2003) who argues that a higher Epistemic Modality head is what creates a phase.

4. Can this analysis be extended to other languages?

English subjunctives with Nominative subject regardless of their [-Tense/-Agr] nature refute the previous Tense/Agr based analysis. The proposed analysis predicts the nominative-case subject in the presence of Mood and Modal features in English subjunctives.

(1) I insist that she be on time.

1)

Secondly, the distribution of complementizers *that* and *for* clearly show that subjunctives are finite clauses just like any other tensed-complement clause. *That* introduces finite clauses, whereas *for* introduces non-finite ones (Chomsky and Lasnik 1977). Subjunctives in English always take *that*, never *for*:

(1) *I insist for she be on time.

1)

Thirdly, subjunctives behave like any other tensed-clause in terms of anaphor binding (Hwang 1997). Anaphors are not allowed in the subjects of finite clauses (Tensed-S Condition in Chomsky 1973, and NIC in Chomsky 1980). Compare (15a-b):

(1) a. *The guys_i told that each other_i went to the party.

1) b. *The guys_i insisted that each other_i go to the party.

2)

Finally, Island effects in tensed finite clauses and present subjunctives are identical. The identical effects of extraction out of a tensed clause and a subjunctive clause are given in (16-17).

(1) a. What_i did you think (that) she cut t_i ?

1) ?Who did you think that cut the cake?

2) c. Who did you think cut the cake?

3) d. *How did you think Sue cut the cake?

(1) a. What_i did you insist that she cut t_i ?

1) b. ?Who did you insist that cut the cake?

2) c. Who did you insist cut the cake?

b. *How did you insist that she cut the cake?

In brief, the syntactic similarities between tensed clauses and subjunctives in English suggests that the same feature, plausibly *mood* and *modality* might be responsible for Nominative Case as well as other syntactic behavior patterns that have been attributed to tensed finite clauses.

Inflected Infinitives with Nominative Subject in Catalan that are [-T/+Agr] is another problem for previous analyses. In Catalan (Piccolo 1984, cited by Iatridou 1993) there is a [-T/+Agr] combination in the *subjunctive*, where +Agr is argued to be the Nominative licenser:

(1) vols que els nens/ec mengin patates

1) want/2sg that the children/NOM eat potatoes

2) ‘You want that the children eat potatoes’

Whereas, according to the proposed analysis, the embedded clause with the nominative subject is [+mood], therefore [+NOM] in the C domain, and [+modal] by virtue of occurring within the modal

domain of the higher verb ‘want’, therefore [+Modal] in the I(nfl) domain. There is no need to resort to the presence of Agreement to account for Nominative licensing.

5. Prediction of the proposed analysis: the ECM Hypothesis

Prediction of the proposed Nominative Case feature is the following: If Nominative case licensing feature is a complex feature consisting of a *mood* feature and a *modality* feature on C and I, absence of one of these features is predicted to make the structure an ECM:

- (1) Languages allow only the structure bearing the available features in ECM constructions. Either one or both of the functional categories, Comp and Infl that bear the nominative feature, i.e. Mood and modality need to be empty with respect to the Nominative case feature in their ECM constructions.

1)

The prediction of (19) is attested in Greek, European Portuguese, and English. Iatridou (1993) discusses Agreement as a possible case licenser in Greek and shows that it is not possible. Consider (20) and (21) below:

- (1) *vlepo* to Kosta na tiganizi psaria

1) see DET Kosta/ACC fries fish

2) ‘I see Kostas fry fish.’

- (1) *elpizo* o Kostas na tiganizi psaria

1) hope DET Kostas/NOM fries fish

2) ‘I hope Kostas fries fish’

If Kostas were replaced by *ta pedhial* the children, the embedded verb would bear 3rd person plural form *tiganizun*, and this holds for both (20) and (21). This casts doubt on the possibility that [+Agr] is a case licenser. Based on the ungrammaticality of insertion of a past tense morpheme to (20&21) Iatridou (1993) argues that [+T] is a case licenser:

- (1) **idha/vlepo* ton Kosta na tighanize psaria

1) (I) saw/see Kosta/ACC fried fish

- (1) *elpizo* o Kostas na tiganise psaria

1) hope Kostas/NOM fried/3sg/past fish

2) ‘I hope Kostas fried fish’

The presence of past tense is not the only parameter that is different in (22): the matrix verb ‘hope’ is the one that introduces possible worlds, i.e. one that creates a modal context for the Nominative to be licensed. In European Portuguese, we observe that [-indicative] subordinate contexts are non-finite unless there is a modal: nominative subject prepositional constructions (PICs) occur as root clauses and complements of volitional predicates, two environments where the presence of mood is required: [+/-indicative] in root clauses and [+indicative] in subordinate ones. In [-Indicative] clauses, the structure becomes an ECM complement.

- (1) Eu vi-os_i [ec_i a trabalhar(em)]

1) I saw them Prep working

2) ‘I saw them working.’

- (1) Eu quero [os meninos a trabalharem ja]

1) I want the children Prep working now.

2) ‘I want the children to work now.’

Note that the accusative subject occurs within the domain of a non-modal matrix verb, ‘see’, whereas, the nominative subject complement clause in (25) is within the domain of a modal verb, ‘want’; and the contrast in (24) and (25) is similar to the Modern Greek data in (24) and (25) above because the same contrast is discussed with the

same ECM predicates. This contrast is predicted by the ECM Hypothesis and is identical to (1a & b) in Turkish. The example in (24) lacks the modal context provided by the verb ‘want’ in (25), hence the ECM in (24).

Furthermore, the optionality of Agr in (25) is similar to Turkish ECMs: they may mark the *optionality* of mood in the absence of modality. The syntactic distribution of PICs in European Portuguese indicate that they are possible within a [-Indicative/+ Conditional/Subjunctive] Mood, that is, in structures where C is –NOM, and cannot license Nominative subject; hence, they become ECM constructions. I-to-C is not triggered because Infl does not have a +NOM feature.

The lack of modality in ECM constructions is observed in English, as well (26):

- (1) a. I consider/assume him to be/ to have been absent
 - 1) I consider/assume him to be/ to have been going to the party.
 - 2) c. * I consider/assume him to have to be absent/to be able to go to the party.
 - 3)

There is also a category of ECM selecting verbs that provide an epistemic modal domain in English, i.e. *believe*. In this type of verbs, lack of agreement, i.e. mood would account for the lack of Nominative case.

- (1) a. believe-class (consider, assume)
 - 1) I believe this hypothesis to be true.
 - 2) b. hate- class (wish, desire, want)
 - 3) I hope for Robin to come early
 - 4)

Believe-class ECM predicates attribute epistemic statements as prepositional attitudes [+epistemic] (28) and they are incompatible with *for* [which would indicate the presence of Mood]:

- (1) a. I believe this axiom to be necessarily true.
 - 1) b. I believe/assume/consider (*for) John to be dangerous.

Want-class ECM predicates, on the other hand, allow *for*:

- (1) I hate for you to be unhappy

There are two types of ECMs in English, neither of which is specified both for mood and epistemic modality, which is predicted by the proposed analysis:

- (1) a. believe-class [+epistemic] [- mood].
 - 1) b. hate-class [+mood] not for [-epistemic]

6. Conclusion and theoretical implications

The major theoretical implication of this analysis is that it excludes Tense vs. Agreement based distinction among various constructions within languages and among languages. It also supports the *uncoupling* of Case and Agreement in DP complements (Aygen 2002, in review). It provides a uniform account of Nominative Case in both declarative and subjunctive clauses. Including C [Mood] as well as the I [Modality/Tense] system into the Nominative licensing operations simplifies the theory for languages where T-to-C (Pesetsky and Torrego 2001) or Agr-to-C (Raposo 1987, 1989) is argued to be the syntactic operation. For Turkic languages where there is no T-to-C, licensing is an Agree operation. The requirement of Epistemic Modality and mood as syntactic features to license Nominative Case in Turkic languages seems to be promising to account for other languages, particularly Romance languages with inflected Infinitives.

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