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Subject Case in Turkic Subordinate Clauses: Kazakh, Turkish and Tuvan¹

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1. Introduction

I will present data from Turkic subordinate clauses (Data with T=Turkish; see Appendix for Tuvan (TV), Kazakh (K) and Uzbek (U)²) to question and discuss the role of agreement and tense as a case licenser in Turkic languages. The crucial data refers to the subordinate clauses that are identical in terms of verbal inflectional morphology yet they differ minimally in terms of case on the subject. We observe Genitive in complement clauses and in some instances of adjunct clauses, and Nominative regularly on adjunct clauses. In previous work on the topic, it has been argued that Genitive and Nominative case on the subjects are licensed by phi feature: nominal agreement licenses Genitive and verbal agreement licenses Nominative (Kornfilt 1985, 2001 George and Kornfilt 1981, Hwang 1997). I will present evidence from a variety of Turkic languages suggesting that, contrary to this claim, both Subject-Nom and Subject-Gen clauses bear nominal agreement. Specifically, I will argue that sentential interrogative complements in Turkic are in fact nominal complements modified by relative clauses, and (following Lees (1965) and Kennely 1996) that declarative sentential complements are Complex NPs (i.e. complements of an optionally overt nominal head). I will argue that the null or lexical nominal head licenses Genitive case on the subject of RCs indirectly through a C-D Head Agreement. With regard to VP-adjunct clauses, I will try to show that they are CPs with

¹ I would like to thank Shigeru Miyagawa, Jon Nissenbaum, James Huang, Engin Sezer and the audiences at Harvard GSAS Syntax Workshop, and to the audience at NELS 32.

² Uzbek differs from Turkish and Tuvan in that Genitive subject is not observed in structures where we find Genitive in other Turkic languages. Nominative licensing in Uzbek is accounted for Turkic languages in general by regarding Mood/Mod to be the finiteness feature licensing Nominative rather Tense or Agr (Aygen in progress). Uzbek data is provided here for comparison. Tuvan and Kazakh data are based on my fieldwork in Central Asia. I would like to thank Balkiz Ozturk for providing the Uzbek data.

lexically filled heads; I will claim that Nominative case in those environments is licensed neither by Tense or Agreement features but via Finiteness feature of Modality (Aygen in progress).

Although the observation that complement clauses might be RCs (Hankemer 1972), and may be CNPs in some instances in Turkish is not a new one (cf. Lees 1965, Underhill 1972, Sezer 1991, Kennelly 1992, Kornfilt 2001, among others), these structures have been analyzed by analogy to possessive phrases with phi features *internal to the clause* responsible for case licensing on the subject. My analysis departs from this tradition in proposing different internal structures to these clauses independent of their external syntax, and accounting for case licensing independently of phi features.

1.1. Genitive vs. Nominative Subject: Data

Data in (1&2) illustrate Turkic subordinate clauses that have *identical* surface form, except for the case on the subject. (1) is a complement clause and its subject bears Genitive Case; the one in (2) is an adjunct clause and its subject bears Nominative Case. The verbal predicate in both clauses is identical in form, and it bears the perfect aspect morpheme -DIK³, and the nominal agreement morpheme.

Turkish

(1T) Ben-Ø [Ali-nin cam-I kir-dig-i zaman]i bil-iyor-du-m
 I-Nom -GEN glass-acc break-DIK-agr time-Acc know-prog-past-1sg
 'I knew when Ali broke the glass'
 [S-GEN Obj-acc V-DIK-AGR Noun]acc.....

(2T) Ben-Ø [Ali-Ø cam-I kir-dig-i zaman] gerceg-i bil-iyor-du-m.
 I-Nom -NOM glass-acc break-DIK-agr time truth-acc know-prog-
 past-1sg
 'I knew the truth when Ali broke the glass'
 [S-NOM Obj-acc V-DIK-AGR Noun].....

The structure in (1) is analyzed as a nominal (Factive-General Participle GNP) with roughly the following structure by Lees (1965):

(3)

		N	
	e		i
	NP		N

³ The morpheme -DIK is regarded a nominalizer by most linguists (Lees 1965 and subsequent work) whereas it is argued to be an inflectional morpheme by others: Kural (1993) defines it as Tense+Comp, Kennelly (1996) as Aspect. In either case, we would expect a uniform case on the subject in (1&2) if either [T] or [Agr] were licensing case on the subject, which is not the case. I will argue that it is a mood/aspect marker. Similar occurrences of an aspect marker in subordinate predicates are observed in Dagur & Mongolian. See section 3 for the discussion.

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In subsequent work, this insight and approach has been adopted except for Kural (1993) who argued that these structures are finite CPs. As for the contrast in (1) & (2) observed by Sezer (1991)⁴ the difference between Nominative and Genitive subject case has been accounted for by the external syntax of these clauses (Kornfilt 2001).⁵ The analysis in this paper departs from Lees (1965) and Kornfilt (2001), and follows Kural (1993) and Aygen (2000a,b) in analyzing the predicates of subordinate structures like (1) & (2) *not* as “nominalized verbs” but as inflected predicates of a CP. My analysis is built on the insight of Lees (1965) and the analysis of Kennely (1996) as well as the subsequent work cited above in claiming an external nominal head, but differs crucially from them in terms of Genitive licensing and the internal structure of these clauses. I will argue against the claim that V raises to C in these structures⁶.

2. The Internal Structures of data (1) and (2)

Turkish has been argued to belong to the group of languages in which the phi features on Tense or Agreement license the case on the subject: in this approach verbal agreement licenses nominative and nominal agreement licenses genitive case (Kornfilt 1985, George and Kornfilt 1981, Hwang 1997). Such an approach predicts genitive case on the subject of structures like (1&2) since the predicate of both clauses in Turkish is marked with the Nominal Agreement that is supposed to license Genitive case but the prediction is not attested. On the contrary, the subject of (2) has Nominative case.

The Verb is argued to be at C in clausal structures in Turkish (Kural 1993). Genitive licensing in the structures under discussion is argued to correlate with V at C in nominalized clauses (Hiraiwa 2000 and Kornfilt 2001). The position of V in these structures is important in terms of distinguishing these so called “nominalized/non-finite” clauses from finite root clauses.

2.1. Is the Verb at C? Do Complement Clauses differ from ‘Finite Complements’ and Root Clauses in terms of P(ost)V(erbal)S(crambling)?

In order to understand the internal structure of (1) & (2), it is important to determine the position of the verb and the finiteness of (1). I will argue that we have no evidence to support the idea that V is at C neither to claim that the predicates of Complement Clauses are nominalized verbs rendering the structure an NP.

⁴ and later in Ozturk (1999), Kornfilt (2001).

⁵ Following Raposo (1987) and adopting Pesetsky (1982), Kornfilt (2001), argues that Agr can be licensed as a case marker either via co-indexation with an operator or via gamma-marking by a theta governor. She proposes that “a nominal indicative clause with its attached nominalized verb raises to C if C is strong” where C is strong only if it heads either theta governed CP, and/or a CP whose specifier position is occupied by an operator. Although her structure, a KP (Case Phrase), does not explicitly show if CP is a complement of KP, I assume it is, based on her assumption that V is at C.

⁶ V-T-C was first proposed by Kural (1993), and adopted in Aygen (2000a&b) Hiraiwa (2000).

First argument for V-T-C comes from NPI licensing by the Neg on the Verbal complex (4a&b) (Kural 1993):

- (4)a. Kimse-Ø gel-me-di
noone-NOM come-neg-past
'Noone came'
- b. *Kimse-Ø gel-di
noone-NOM come-past-agr

Note that this test only shows that the NPI subject is c-commanded by the verbal complex that bears the negative. Such a configuration does not suggest V at C.

Secondly, PVS is another test used in Turkish linguistics to determine the position of V because PVS is allowed as a CP adjunction in Turkish (Kural 1993, Aygen 2000a).

Consider (5), where PVS is allowed in a typical root CP:

- (5) Ahmet- Ø t_i git-ti okul-a_i
-nom go-past school-dat
'Ahmet went to school'

The idea is that only V at C would force clause internal arguments to be forced to adjoin to CP. In fact, V at a lower head could also be argued to allow CP adjunction, considering that (Aygen 2000b) CP adjunction is an adjunction to the head that selects the arguments when V is at T.

In Turkish linguistics, it has been observed that complement clauses do not allow PVS whereas finite embedded clauses and root clauses do. This observation has led an analysis where adjunction to complements is forbidden (Kural 1993). Both the observation and the analysis have overlooked Sezer (1978) which clearly describes the ungrammatical PVS instances. The restriction refers to a Relativized Minimality Effect (RME) that applies to all instances of scrambling and extraction (Aygen 2000b, Karimi 1998).⁷ Arguments bearing the same case morphology as the clause they are being post-posed from cannot be scrambled.⁸ RME may be observed below in (6&7). In (6), PVS is applied to the structure in (1), and in (7) to (2):

- (6) *Ben-Ø [Ali-nin t_i kir-dig-i zaman]i cam-i; bil-iyor-du-m
I-Nom -GEN break-DIK-agr time-Acc glass-acc know-prog-past-1sg
'I knew the time when Ali broke the glass'
- (7) Ben-Ø [Ali-Ø t_i kir-dig-i zaman] cam-i; gerceg-i
I-Nom -NOM break-DIK-agr time glass-acc truth-acc

⁷ See Aygen (2000a,b) for a discussion of the contrast between the availability of Gen-subject extraction and the unavailability of Nominative Subject extraction where RME is observed.

⁸ For similar *freezing* effects in Korean, and Hindi, see Lee (1991) and Han (1998).

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bil-iyor-du-m.
 know-prog-past-1sg
 'I knew the truth when Ali broke the glass'

Note that the scrambled argument is marked Accusative, so is the clause it is extracted from. (6) is an instance of RM violation. The subject that is marked Genitive is allowed to adjoin to the clause:

- (8) Ben-Ø [t_i cam-i kir-dig-i zaman]i Ali-nin_i bil-iyor-du-m
 I-Nom glass-acc break-DIK-agr time-Acc -GEN know-prog-past-1sg
 'I knew the time when Ali broke the glass'

An Accusative marked object may indeed be scrambled out of a complement clause if the clause is *not* marked Accusative:

- (9) Ben-Ø [Hasan-in t_i kir-dig-in]a cam-i_i inan-iyor-um.
 I-Nom -Gen break-asp-agr-Dat glass-Acc believe-prog-1sg
 'I believe that Hasan broke the glass)

Another argument on V movement in Turkish is based on accusative objects being licensed out of VP (Diesing 1991, Aygen 1999 among others). Former claims are based on the position of an object with respect to a manner adverb that marks the edge of a VP:

- (10) a. Nafe-Ø kitab-i hizli oku-du
 -NOM book-Acc fast read-past
 'Nafe read the book fast'
 b. *Nafe-Ø hizli kitab-i oku-du
 -NOM fast book-Acc read-past
 'Nafe read the book fast'

The data in (10) is misleading because *hizli/fast* is an adjective and becomes an adverb only when duplicated, in which case accusative object is licensed within the VP⁹:

- (11) a. Nafe-Ø kitab-i hizli hizli oku-du
 -NOM book-Acc fast fast read-past
 'Nafe read the book fast'

⁹ I would like to acknowledge Engin Uzun, who brought this into my attention.

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- b. Nafe-Ø hizli hizli kitab-i oku-du
 -NOM fast book-Acc read-past
 'Nafe read the book fast'

Further evidence from other Turkic languages that have auxiliary verbs, such as Tuvan, Kazakh and Uzbek, suggest an *in situ* verb (see Aygen in progress).

The data and analysis above suggests that

- (i) there is no difference in terms of PVS between complement clauses and root clauses; the same restriction, that of RME, applies everywhere in Turkish;
- (ii) The arguments based on NPI, PVS and object shift are not satisfactory in terms of justifying V at C.

Therefore, so far, we do not seem to have evidence that supports any kind of verb movement. Consequently, we do not have any evidence indicating that "a nominalized verb moves to C as Hiraiwa (2000) and Kornfilt (2001) assume and Kural (1993) argues.

2.2. CP versus NP

Following Lees (1965) and Kennely (1996), I will argue that the word *zaman/time* in (1) is a head noun. I will distinguish interrogative and declarative complement clauses based on evidence from Coordination test. I will further argue that *zaman/time* is a Complementizer in (2), and the structure of (2) is a CP¹⁰.

2.2.1. The internal structure of data (1)

Evidence from coordination test in (7) indicates that the sentential subordinate clause in (1) in Turkish is indeed a Relative Clause since it can be coordinated by other Relative Clauses (7):

Coordination Test

- (7) Ben-Ø [Ali-nin git-tig-i zaman]i ve Hasan-in bin-dig-i ucag-i
 I-Nom -GEN go-DIK-agr time-Acc and -GEN get on-DIK-agr plane-acc

bil-iyor-du-m
 know-prog-past-1sg

'I knew the time when Ali went and the plane that Hasan got on'

¹⁰ Sezer (1991) identifies the word *zaman/when* in this construction as a "subordinating conjunction. The structure in (1) is argued to be analogous to Relative Clauses (Hankamer 1972, cit. in Sezer 1991)

*Subject Case in Turkic Subordinate Clauses: Kazakh, Turkish and Tuva***2.2.2. Complement types**

The question addressed in this section is: “Are all complement clauses with the verbal complex identical to that of (1) RCs in Turkish?” Note that a typical complement clause in Turkish has a surface form identical to that of a RC in (1) with its Genitive case on the subject and (DIK +AGR) on the verb; the only difference is that there is no overt nominal head following the clause. Compare (8) and (9) below where (8) is another example with the structure of an RC in (1) and (9) is a typical complement clause in Turkish:

- (8) Ben-Ø [Hasan-in Nafe-yi gor-dug-u zaman]i bil-iyor-um
 I-Nom -GEN -acc see-DIK-agr time-Acc know-prog-1sg
 ‘I knew the time when Hasan saw Nafe’
- (9) Ben- Ø Hasan-in Nafe-yi gor-dug-u]nu biliyorum
 I-Nom -GEN -acc see-DIK-agr-acc know-prog-1sg
 ‘I know that Hasan saw Nafe’

The canonical complement clause of the type in (9) is called the “factive complement” in Turkish and it allows a head noun “the fact/the claim” to be inserted into the head position:

- (10) Ben- Ø [Hasan-in gel-dig-i] gercegi-ni / iddia-si-ni bil-iyor-um
 I-Nom -GEN come-DIK-3agr fact-3agr-Acc/claim-3agr-acc know-prog-1s
 ‘I know the fact/the claim that Hasan came’

Apparently, the nature of heads allowed to be inserted, i.e. *fact/claim*, implies that the type of complement clauses with no head as in (8) might be noun complements as proposed by Lees (1965) and Kennely (1996)¹¹. Furthermore, both (8&9) allow objects in the subordinate clause indicating that there is no gap that would be expected in RCs.

Consequently, the structure of declarative and interrogative complement clauses differ in that the former is a CNP, whereas the latter a RC. They have either an overt or a null nominal head; the former allows nouns like *claim/fact* to be inserted and the latter has lexical heads with interrogative interpretation, such as *place/time* meaning *where/when*.

¹¹ Note that Lees (1965) analyzes these structures as (NP N) and Kennely (1996) as (IP N) where IP=Aspect, and Kornfilt (2001) as KP, where K=Case, Kural (1993) as CP with a lexically filled Comp.

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The structure of interrogative complements is that of a RC ¹²:

- (11) [_{XP}[Sbj-GEN OBJ t_i V+DIK+AGR_n] NP_i]

The structure of declarative complement clause is that of a noun complement:

- (12) [_{XP}[_{CP}Sbj-GEN OBJ V+DIK+AGR_n] Ø]

The analysis presented so far accounts for two observations:

- a. Genitive licensing on the subject via nominal head;
- b. arguably island property of these clauses for extraction/PVS¹³.

The Genitive case on the subject of the clause is now accountable by the null nominal head in (9) and the lexical noun in (1&8). In both structures, there is an external nominal head D which licenses the internal head C via AGREE to license genitive within the clause.

I would like to pose the question whether declarative and interrogative subordinate clauses of the two types above are the only environments where we may observe Genitive on the subject. Although we regularly observe Nominative case on the subjects of adjunct clauses in Turkic languages, some adjunct clauses have Genitive subjects. If selection by Verb is what determines the nominal nature of the selected C, how come we observe Genitive in adjunct clauses that are not selected by definition?¹⁴

2.2.3. Genitive in Adjunct Clauses

Adjunct clauses in Turkic languages regularly bear Nominative subjects, a generalization made on Turkish by Underhill (1972) and Hankemer (1972 and subsequent work on Turkish) and on Turkic by Aygen (in progress). There is a set of exceptions, one of which is given below¹⁵ (14). Compare (13) and (14): the morphological form of the verbal predicates within the adjunct clauses are identical except for the case on the subject, and the adjuncts mean different things:

- (13) [[Hasan -Ø anla-dığ-ın a göre] herkes anla-yacak].
 -NOM understand-DIK-agr-dat since everybody understand-fut
 'Since Hasan understood, everybody will'

¹² At this point of the discussion, I am not siding with any of the analyses of RCs in the literature in terms of whether it is a CP or a DP with a CP/IP embedding, because either analysis is compatible with the main claim of this article.

¹³ "Arguably" island effects because, as we have seen in 1.2, clause external scrambling of both the subject and the object are allowed in these structures with the general restriction imposed by RME. The island effect is used as a loose term to refer to the unavailability of PVS.

¹⁴ See Kornfilt (2001) that accounts for genitive by Agreement licensed to license genitive by virtue of being theta governed or an operator at Spec CP.

¹⁵ See Sezer 1991, Ozturk 1999, Kornfilt 2001 for similar data and discussion.

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- (14) [[Hasan-ın anla-dığ-ına göre] üç kişi gel-ecek.
 -GEN understand-DIK-agr-Dat based on three person come-fut
 ‘Based on (the fact that) Hasan understood, three people are going to come’

Generally *gore/since;based on* is analyzed as a Postposition in both structures. What we need to see is the internal structure of these subordinate clauses:

- Are both subordinate clauses (DIK clauses) in (13) and (14) selected by the postposition? If so, how come we do not have Genitive on the subject of (13)?
- If they are not selected by a Postposition, that is, if *gore* is not a Postposition but a Complementizer as its English counterpart *since/based on* is, how come we do not observe Nominative on the subject as is the case on all adjunct clauses?

Considering that (14) is identical in form to complement clauses discussed above, I will we can account for the contrast in (13&14) and the one in (1&2) in a unified analysis: *gore/based on* is a Postposition in (14) and selects a null nominal head but it is a Complementizer in (13). The same analysis goes for *zaman/time* in data (2); it is a Comp in data (2).

Insertion of a head noun to (15 &16) is a valid test for the prediction of the analysis presented: (14) does allow a head noun *sey/thing* to be inserted, indicating that it is not a CP (16), whereas, (13) does not allow a noun in the head position, (15). Since (13) does not have the typical indication of an RC, i.e. Genitive on the subject, this result is not surprising.

Adjunct-Nom

- (15)a *[[Hasan -Ø anla-dığ-ı] sey-e göre] herkes anla-yacak.
 -NOM understand-DIK-agr **thing-dat** since everybody understand-fut

Adjunct-Gen

- (16) [[Hasan-ın anla-dığ-ı] sey-e göre] üç kişi gel-ecek.
 -GEN understand-DIK-agr **thing-Dat** based on 3 person come-fut
 ‘Based on what/the thing Hasan understood, three people are going to come’

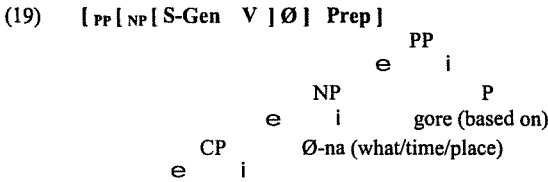
Another test for the prediction of this analysis is the insertion of an object into the subordinate clauses in (13) and (14): (13), being a CP, is (in 17), and (14), being a RC, is not (18) expected to allow an object:

- (17) [[Hasan -Ø haber-i anla-dığ-ın-a göre] herkes anla-yacak.
 -NOM news-acc understand-DIK-agr-Dat since e.o. understand-fut
 ‘Since Hasan understood the news everybody will’

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- (18) *[[Hasan-in haber-i anla-dığ-ın]a göre] üç kişi gel-ecek.
 -GEN news-acc understand-DIK-agr-Dat based on 3 person come-fut
 ‘*Based on what Hasan understood the news, three people are going to come’

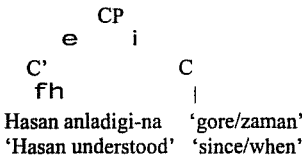
The ungrammaticality of (18) is due to the attempt to fill the obligatory gap position in a RC, which is a Free Relative in this case. Apparently, the structure of the adjunct clause with Gen (14,16,18) is the following:



Hasan-in _ anladigi (Hasan understood)

Adjunct-NOM in (13,15,17) is a CP with the following structure in (20):

- (20) [CP S-Nom V Comp].



The main claim that *zaman/time;when* is a Complementizer in Nom-Subject constructions, and a head noun in Gen-Subject constructions is clearly attested in Tuvan. In Modern Turkish, the word for time and when is homophonous, whereas Tuvan uses a synonymous yet different word when it is a Complementizer: in Tuvan (1) below the complementizer is *uye/when* and the head noun is *waqit/time*, both meaning time.

- (1TV) Men- Ø [Ali-ning ket-ip qal-ğan waqıt-in-]nı bil-ip ture-di-m
 I- NOM -GEN go-conv stay-perf time-agr-acc know-conv prog-past-1s agr
 ‘I knew when Ali went’
 [S-GEN V-V-Perf Noun-agr]acc.....
 (2TV) Men- Ø [Ali- Ø ket-ip qal-ğan üye-de] shIn-nı bil-ip-ture-di-m
 I-NOM - NOM go-conv stay-perf- time-adv truth-acc know-conv- prog-past-
 1s agr

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'I knew truth when Ali got married'
 [S-NOM V-V-Perf Noun] adv.....

Another evidence for time being a noun in (1) and a Comp in (2) is that the noun time in (1) allows an adjective but the one in (2) does not:

(1T) Ben-Ø [Ali-nin cam-I kir-dig-i tehlikeli zaman]i bil-iyor-du-m
 I-Nom -GEN glass-acc break-DIK-agr dangerous time-Acc know-prog-past1
 'I knew the dangerous time Ali broke the glass'
 [S-GEN Obj-acc V-DIK-AGR Adj Noun]acc.....

(2T) *Ben-Ø [Ali-Ø cam-I kir-dig-i tehlikeli zaman] gerceg-i
 I-Nom -NOM glass-acc break-DIK-agr dangerous time truth-acc
 bil-iyor-du-m.
 know-prog-past-1sg
 '*I knew the truth dangerous when Ali broke the glass'
 *..... [S-NOM Obj-acc V-DIK-AGR AdjNoun].....

3. Turkic languages and Dagur

I have identified the internal structure of the following subordinate clauses in Turkic so far:

- (a) Relative Clauses and CNPs- given in (i&ii);
 (b) Free Relatives selected by adjunct Postpositions- given in (iii)
 (c) Adjunct clauses as CPs- given in (iv)

- (i) [NP[_{CP}Sbj-GEN OBJ t_i V+DIK+AGR_n] NP_i] RC-Comp of a Verb
 (ii) [NP[_{CP}Sbj-GEN OBJ V+DIK+AGR_n] Ø] CNP-Comp of a Verb
 (iii) [PP [NP [_{CP} S-Gen V] Ø] Prep] RC-Comp of an Adjunct P
 (iv) [_{CP}Sbj-NOM OBJ V+DIK+AGR_n Comp] Adjunct CP

The identification of sentential complements as RCs and CNPs and the analysis that Genitive is licensed by the external nominal head via C/D AGREE in Turkic accounts for an Altaic language Dagur (Hale 2001). In Dagur, Tuvan and Kazakh RCs (See Appendix for Kazakh and Tuvan data), there is no agreement on the verbal complex but there is a Genitive on the head noun as well as the subject. The minimal difference between Turkic and Dagur is that the Gen licenser head noun also bears an overt morphology for nominal agreement.

- (21) [[mini au-sen] biteg-min²] adig sain
 1sg Gen buy-Perf book-1sAGR very good
 'The book I bought is very good'

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In headless RCs, the agr *min^y* on the head noun appears attached to the verbal complex just like in Turkish:

- (22) [mini oo-yig] - min^y ar^yg^y.
 1sGen drink-Imperf-1sgAGR wine
 'What I drank is wine'

Either the null head or the verbal complex bears the agreement morphology. Instances such as (21) above in Dagur suggest that it is attached to the null head in Dagur, to the verbal complex in Turkic.

In terms of the verbal form, remember that Turkish has –DİK that is argued to be a nominalizer by some linguists (Lees 1965, Underhill 1962, among others), and an inflectional morpheme by others (Kural 1993, Kennely 1996, Aygen 2000a,b), and analyzed as Tense+Comp (Kural 1993). It occurs in adjunct clauses as well as complements (Kural 1993). Note that in Dagur, the Perfective suffix, the only inflectional morphology (tense/aspect function as Hale states it) on the verb is also observed in root clauses as well as subordinate clauses:

- (23) [tere yau-sen-ii] ʃii uʃi-sen- ʃii yee. (Martin 1961:44 cited by Hale)
 3sNom go-Perf-acc2sNom see-Perf-2s Q
 'Did you see him leave?'

Apparently, the same inflectional morphology appears in finite and subordinate contexts in Dagur and, hence, it cannot be the inflectional projection that licenses case on the subject; it is the nominal head, that also bears the overt morphology that licenses the Genitive. Therefore, the nominal agreement can be an overt realization of the function of the head noun not the actual licenser *per se*. Furthermore, Dagur data cannot be accounted for analyses excluding an external nominal head (Hiraiwa 2000).

4. Genitive and the Existential Complements

Following is data from Turkish to test the predictions of the analysis presented in this paper and some other analyses. Consider the data in (25), in which the embedded predicate of *is* is identical to those observed in the constructions we have discussed so far:

- (24) Bahçe-de kedi-Ø var
 Garden-loc cat-NOM ex-subj
 'There is a cat in the garden'

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- (25) Hasan-Ø [bahce-de kedi-Ø ol-duğ-un]ju söyle-di.¹⁶
 -NOM garden-loc cat-NOM be-asp-agr-acc tell-past
 ‘Hasan told that there is a cat in the garden’

4.1. Kornfilt (2001)

Kornfilt (2001) posits two conditions for Agreement to license genitive on the subject (following Raposo (1987) and adopting Pesetsky (1982) : “Agr can be licensed as a case marker either via co-indexation with an operator or via gamma-marking by a theta governor.”

To put it briefly, Genitive is licensed by Agreement

- (i) that occurs in a complement position and/or
- (ii) that occurs in a clause with an operator.

Data (25) satisfies both of these conditions; however, case on the subject of (25) is not *Genitive*.

4.2. Hiraiwa (2000)

According to Hiraiwa (2001), the predicate in the embedded existential is an adnominal amalgamate C-T-V and it is expected to license Genitive case on the subject without an external nominal head, or a D layer. His prediction is not attested, either, since we observe Nominative instead of genitive on the subject of the embedded existential in (25).

4.3. Proposed analysis

The analysis proposed in this paper predicts genitive case on the subject only when there is a null/overt nominal head external to the clause. It predicts the structure to allow the insertion of a head noun in genitive subject clauses (27) and the structure in (25) to be ungrammatical when a head noun is inserted (26). (26&27) below attests this prediction.

- (26) Hasan-Ø [bahce-de kedi-Ø *ol-duğ-u] haber/gerçeğ-in]i soyle-di.
 -NOM garden-loc cat-NOM be-asp-agr news/fact-agr-acc tell-past

intended reading: ‘Hasan told the news/fact that there is a cat in the garden’

- (27) Hasan-Ø [bahce-de kedi-nin ol-dug-u] haber/gerceg-in]i soyle-di.
 -NOM garden-loc cat-GEN be-asp-agr news/fact-agr-acc tell-past
 ‘Hasan told that the cat is in the garden= it is the cat that is in the garden’

¹⁶ This data is observed in Nilsson (1991) for a discussion on the pragmatics of Case.

5. Conclusion

To conclude, in Altaic languages (Turkic and Dagur), the genitive case on the subject of interrogative subordinate clauses, which are either RCs or CNPs, is licensed by the highest maximal projection C that has nominal features by virtue of C-D AGREE with the external nominal head. Agreement as a functional head or a morpheme is NOT the licenser of subject case *per se*.

In adjunct clauses, we observe the same verbal morphology and consequently same inflectional heads within the internal structure of the subordinate close as complement CPs, however, C is lexically filled by a Complementizer. For a discussion of Nominative licensing in adjuncts and root clauses (see Aygen in progress).

In terms of clausal architecture of Turkic languages, I have argued against the claims based on difference between complement clauses and finite clauses in terms of PVS, and argued that restriction on PVS are due to a Relativized Minimality Effect. I have further argued that there is no substantial evidence to support verb movement, yet the occurrence of auxiliary verbs in many Turkic languages, and lack of object shift are suggestive of an *in situ* verb.

6. Appendix:

Data from Turkic languages other than Modern Turkish (K=Kazakh, TV=Tuvan, U=Uzbek):

Kazakh

- (1K) Men- Ø [Ali-nin aynek-ti sindir-gan waqit-in]in bil-ip-jatre-di-m
 I-Nom -GEN glass-acc break-perf¹⁷ time-agr-acc know-conv-prog-past-1sg
 'I knew when Ali broke the glass'
 [[S-GEN Obj-acc V-Perf] Noun-agr]acc.....
- (2K) Men- Ø [Ali- Ø aynek-ti sindir-gan- waqit]da shIn-In bil-ip-jatre-di-m
 I-Nom -NOM glass-acc break-perf time-loc truth-acc know-conv-prog-
 past-1sagr
 'I knew the truth when Ali broke the glass'
 [S-GEN Obj-acc V-Perf Noun]adv.....
- (13K) Hasan- Ø tüsin-gesin ärkim tüsin-e-di
 I-Nom understand-perf-agr since everybody understand-asp-past
 'Since Hasan understood, everybody will'
 [S-NOM V-Perf].....

¹⁷ -gan in Kazakh, Tuvan and Uzbek Verbal complexes is a similar morpheme to -DIK in Turkish in that it is interpreted as perfect/past and observed in RCs.

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- (14K) Hasan-ning tūsin-gen-i-ne qaray ūş kisi kel-eken
 -Gen understand-perf-agr-dat based on 3 person com-fut
 ‘Based on what Hasan understood, three people will come’
 [S-GEN V-Perf-agr-dat Comp].....
- (17K) Hasan- Ø xabar-dı tūsin-gesin ārkim/bāri tūsin-eken
 -Nom news-acc understand since everybody understand-fut
 ‘Since Hasan understood the news, everybody will understand’
 [S-NOM Obj-acc V-Perf- Comp].....
- (18K) *Hasan-nın xabar-dı tūsin-gen-i-ne qaray ūş kisi kel-eken
 -Gen news-acc understand-perf-agr-dat based on 3 person com-fut
 ‘*Based on what Hasan understood the news, three people will come’
 * [S-GEN Obj-acc V-Perf-agr-dat Comp].....

Tuvan

- (1TV) Men- Ø [Ali-ning ket-ip qal-ğan waqıt-in-]nı bil-ip tur e-di-m
 I- NOM -GEN go-conv stay-perf time-agr-acc know-conv prog-past-1s agr
 ‘I knew when Ali went’
 [S-GEN V-V-Perf Noun-agr]acc.....
- (2TV) Men- Ø [Ali- Ø ket-ip qal-ğan üye-de] shIn-nı bil-ip-ture-di-m
 I-NOM - NOM go-conv stay-perf- time-adv truth-acc know-conv- prog-past-
 1sagr
 ‘I knew truth when Ali got married’
 [S-NOM V-V-Perf Noun]adv.....
- (9TV) Men - Ø [Hasan-ning ayt-qan-ı]na sen-di-m
 I-NOM -GEN say-perf-agr-dat believe-past-1sagr
 ‘I believed what Hasan said’
 [S-GEN V-Perf-agr-dat].....
- (13TV) Hasan- Ø pil-ip qal-gan-da, şuptuzu pil-ip qal-ar.
 -NOM know stay-perf-adv everybody know-conv stay-fut
 ‘Since Hasan knows, everybody will know’
 [S-NOM V-V-Perf-adv].....

Uzbek

- (1U) Men- Ø [Ali- Ø oyna-ni sindir-gan vokt]ni bil-yap-ti-man
 I -Nom -Nom glass-acc break-perf time-acc know-prog-past-1s agr
 ‘I know the time when Ali broke the window’

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..... [S-NOM Obj-acc V-V-Perf Noun]acc.....

- (2U) Men- Ø [Ali- Ø oyna-ni sindir-gan-da hakikot]ni bil-yap-ti-man
 I -Nom -Nom glass-acc break-perf-adv truth-acc know-prog-past-1s agr
 'I know the truth, when Ali broke the window'

..... [S-NOM Obj-acc V-V-Perf-adv].....

- (9U) Men- Ø [Ali- Ø bor-gan-lig-i]ni bil-yap-ti-man
 I-Nom -Nom come-perf-nomin-3 s agr-acc know-prog-past-1s agr
 'I know that Ali came'

..... [S-NOM V-V-Perf -Nominalizer-agr]acc.....

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