

Subject marking and scrambling effects in Balkar nominalizations*

Tatiana Bondarenko

Lomonosov Moscow State University

1. Introduction

In this paper I analyze the nominative/genitive alternation of subject marking in Balkar nominalized clauses (NCs):

- (1) ustaz sabij-i / sabij-i-**ni** alma-si-n aša-ɣan-**i-n** ešit-ti¹
teacher child-3.**NOM**/ child-3-**GEN** apple-3-ACC eat-NMN-3-ACC hear-PST
‘The teacher heard that (someone’s) child had eaten (someone’s) apple.’

Despite the fact that there are no noticeable interpretative differences between the nominalizations with nominative and nominalizations with genitive subjects, there is clear evidence that these nominalizations involve different syntactic structures. One piece of evidence comes from the scrambling effects: it is possible to scramble direct objects of nominalizations with nominative subjects over the subject of nominalization (2) or over the matrix subject (3), but this kind of movement is impossible out of nominalizations with genitive subjects (4)-(5).

- (2) ustaz alma-si-n sabij-i aša-ɣan-**i-n** ešit-ti
teacher apple-3-ACC child-3-**NOM** eat-NMN-3-ACC hear-PST
‘The teacher heard that it was (someone’s) child that had eaten (someone’s) apple.’
- (3) alma-si-n ustaz sabij-i aša-ɣan-**i-n** ešit-ti
apple-3-ACC teacher child-3-**NOM** eat-NMN-3-ACC hear-PST
‘The teacher heard that it was (someone’s) child that had eaten (someone’s) apple.’

* I am grateful to the audience at the Workshop on Turkish, Turkic and the languages of Turkey (UMass, Amherst, November 21-22, 2015) for valuable discussion. Special thanks to the feedback of Sergei Tatevosov, Pavel Grashchenkov and all the other members of our Balkar seminars at Lomonosov Moscow State University. Most of all, I am indebted to Ekaterina Lyutikova whose comments and suggestions encouraged me to make considerable refinements to this paper. Data for this study have been collected during the fieldtrip to Verxnjaja Balkarija (Kabardino-Balkar Republic, Russian Federation) conducted by the Department of Theoretical and Applied Linguistics, Faculty of Philology, Lomonosov Moscow State University, in 2013. I would like to express deep gratitude to the native speakers of Balkar for their invaluable help. The study has been supported by Russian Science Foundation (grant # 16-18-02081).

¹ I use subject nouns in the possessive declension throughout the paper, because in the non-possessive declension the case markers of nominative and genitive coincide with accusative: genitive looks the same as marked accusative, and nominative looks the same as unmarked accusative.

- (4) *ustaz alma-si-n sabij-i-ni aša-kan-i-n ešit-ti
 teacher apple-3-ACC child-3-GEN eat-NMN-3-ACC hear-PST
 Expected interpretation: ‘The teacher heard that it was (someone’s) child
 that had eaten (someone’s) apple.’
- (5) *alma-si-n ustaz sabij-i-ni aša-kan-i-n ešit-ti
 apple-3-ACC teacher child-3-GEN eat-NMN-3-ACC hear-PST
 Expected interpretation: ‘The teacher heard that it was (someone’s) child
 that had eaten (someone’s) apple.’

In contrast to direct object scrambling, scrambling of subjects is allowed out of both types of nominalizations²:

- (6) sabij-i-ni fatima ata-si-ni mašina-si-n buz-kan-i-n bil-di
 child-3-GEN Fatima father-3-GEN car-3-ACC crash-NMN-3-ACC know-PST
 ‘Fatima found out that (someone’s) child smashed the father’s car.’
- (7) dušman-i ustaz šaxar-i-n cac-kan-i-n bil-di
 enemy-3.NOM teacher city-3-ACC destroy-NMN-3-ACC know-PST.3SG
 ‘A teacher found out that (someone’s) enemy destroyed (someone’s) city.’

The observed correlation between the subject marking in nominalizations and the extractability of direct objects suggests that there are some syntactic differences in the make-up of nominalizations with nominative and genitive subjects which underlie the alternation. This brings up the question of whether it is possible to account for the scrambling phenomena in Balkar nominalizations under the previously proposed theories of subject case licensing: subject case licensing dependent on tense ((Chomsky 1981), (Lytikova & Grashchenkov 2008)) and subject case licensing dependent on phi-feature agreement ((Chomsky 1995), (Kornfilt 1984), (Kornfilt 2003), (Miyagawa 2011))³. In section 2 of this paper I will address the question of whether subject case licensing in Balkar nominalizations is dependent on the functional categories of the tense-aspect domain, while in section 3 I will consider the question of whether the nominative/genitive alternation depends on the properties of agreement between nominalizations and their subjects.

Yet another issue is how other properties of these nominalizations are related to subject case licensing. I will present some properties that the two nominalizations have in common in section 2, while in section 4 I will address several properties with respect to which they differ. In section 4 I will argue that the differences between nominalizations with nominative subjects and nominalizations with genitive subjects in Balkar have a structural source: only the former nominalizations have a CP layer in their functional structure. I argue that this single structural difference explains all the different properties the two nominalizations exhibit: subject case, scrambling possibilities, number agreement, wh-words licensing and binding effects. In my analysis of Balkar nominalizations, I suggest that C (when it is present) licenses the nominative case on the subject, while D (in the absence of C) licenses the genitive case. In other words, while some languages have been shown to employ D-licensing (for example, Dagur: (Hale 2002)) or C-licensing (for example, Turkish: (Kornfilt 1984), (Kornfilt 2003)) in the embedded contexts, Balkar can employ both⁴.

² Both types of scrambling are driven by information structure. Interpretational effects associated with scrambling are irrelevant for the line of reasoning I develop below and will be ignored throughout the paper.

³ Whether the subject case is licensed by TAM features or by phi-features seems to be parameterized across languages ((Iatridou 1993), (Ura 2000), (Lavine & Freidin 2002)).

⁴ (Miyagawa 2011) proposes a similar analysis of nominative/genitive alternation in Japanese relative clauses (“ga/no Conversion”): C is responsible for nominative case licensing, and D – for genitive.

2. Does licensing of NOM/GEN depend on the functional categories of the tense-aspect domain?

There have been different views with respect to whether the functional categories of the tense-aspect domain play a role in licensing subject case (Chomsky 1981), (Kornfilt 2003), (Gülsat Aygen 2004). It is evident that in Balkar nominalizations tense is not related to licensing subject case, because nominalized clauses with nominative subjects and with genitive subjects don't differ in their (impoverished) tense specification. Both nominalizations have the same two allomorphs: 'riḡ' for future interpretation, 'ḡan' for non-future interpretation.

- (8) ol bala-si /bala-si-ni busaḡatda alma-si-n aṣa-ḡan-i-n ajt-a-di
 that child-3.NOM /child-GEN now apple-3-ACC eat-NMN-3-ACC say-IPFV-3SG
 'He is saying that (someone's) child is eating (someone's) apple now.'
- (9) ol bala-si /bala-si-ni tünene alma-si-n aṣa-ḡan-i-n ajt-a-di
 that child-3.NOM /child-GEN yesterday apple-3-ACC eat-NMN-3-ACC say-IPFV-3SG
 'He is saying that (someone's) child has eaten (someone's) apple yesterday.'
- (10) *ol bala-si /bala-si-ni tambla alma-si-n aṣa-ḡan-i-n ajt-xan-di
 that child-3.NOM /child-3-GEN tomorrow apple-3-ACC eat-NMN-3-ACC say-PFCT-3SG
- (11) ol bala-si /bala-si-ni tambla alma-si-n aṣa-riḡ-i-n ajt-xan-di
 that child-3.NOM /child-3-GEN tomorrow apple-3-ACC eat-NMN-3-ACC say-PFCT-3SG
 'He has said that (someone's) child will eat (someone's) apple tomorrow.'

In (8)-(9) it is shown that nominalizations with the 'ḡan' suffix are compatible with interpretations where the event described by the nominalization co-occurs or precedes the event described by the matrix verb. The ungrammaticality of (10) indicates that these nominalizations cannot describe an event that follows the event described by the matrix verb, while (11) shows that this interpretation obtains in nominalizations with the 'riḡ' suffix. As we see from (8)-(11), there are no differences between nominalizations with nominative subjects and nominalizations with genitive subjects with respect to availability of temporal interpretations; therefore, subject case licensing is not dependent on tense specification of the nominalized clause.

The two nominalizations have a number of other properties in common. They exhibit the full argument structure of the verb and do not display the transitivity restriction (which is present in structures with genitive subjects in Japanese (Harada 1971), (Watanabe 1996), (Miyagawa 2011)): overtly marked accusative object can intervene between the subject and the nominalized verb (1). Both nominalizations can include derivational morphemes; for example, passivized verbs can be nominalized:

- (12) fatima üj iṣle-n-gen-i-n bil-di
 Fatima house.NOM build-PASS-NMN-3-ACC know-PST
 'Fatima found out that a house has been built.'
- (13) fatima alim-ni üj-ü-nü iṣle-n-gen-i-n bil-di
 Fatima Alim-GEN house-POSS-GEN build-PASS-NMN-3-ACC know-PST
 'Fatima found out that Alim's house has been built.'

Moreover, both nominalizations can include negation in their functional make-up:

- (14) fatima sabij-i /sabij-i-ni alma-si-n aṣa-ma-ḡan-i-n eṣit-ti
 Fatima child-3.NOM /child-3-GEN apple-3-ACC eat-NEG-NMN-3-ACC hear-PST
 'Fatima heard that (someone's) child has not eaten (someone's) apple.'

The ability to host negation markers and to co-occur with temporal adverbs ((8)-(9), (11)) suggests that in both nominalizations the amount of structure that is nominalized is not smaller than TP. The only verbal morpheme that cannot occur in nominalizations is the question marker:

- (15) *fatima sabij-ler-i /sabij-ler-i-ni šaxar-ka bar-kan-mi-lar-i-n sor-du
 Fatima child-PL-3.NOM /child-PL-3-GEN city-DAT go-NMN-Q-PL-3-ACC ask-PST
 Expected reading: ‘Fatima asked whether (someone’s) children have gone to the city.’

In this section I have shown that nominalizations with nominative subjects and nominalizations with genitive subjects share a number of properties and are at least TP-level nominalizations. Most importantly, though, subject case marking of these nominalizations does not hinge upon their tense specification.

3. Does licensing of NOM/GEN depend on agreement?

A natural question then arises whether subject case licensing could be related to the differences in phi-feature agreement between subjects and corresponding nominalizations. At first sight, there does not seem to be any differences between the agreement with nominative and with genitive subjects: in both cases nominalizations display the same possessive markers that nouns in a possessive construction take⁵ (cf. (16) and (18), (17) and (19)).

- (16) tarix-**im** (17) bala-**biž**-ka
 story-1SG child-2PL-DAT
 ‘my story’ ‘to your (pl) chil
- (18) annja men /men-**ni** basta-**ni** aša-kan-**im**-mi bil-di
 mother 1SG.NOM /1SG-GEN porridge-ACC eat-NMN-1SG-ACC know-PST
 ‘The mother found out that I have eaten porridge.’
- (19) appa siz /siz-**ni** basta-**ni** aša-kan-**ibiž**-ka sejrinsin-di
 grandfather 2PL.NOM /2PL-GEN porridge-ACC eat-NMN-2PL-DAT be.surprised-PST
 ‘The grandfather was surprised that you (pl) have eaten porridge.’

But while person agreement⁶ is the same in both nominalizations and is identical to the agreement in the nominal paradigm, there are peculiar differences in number agreement which are reflected in the use of

⁵ Whether “nominal” agreement markers (i) are completely distinct from verbal ones is an unsettled question. There are two verbal agreement paradigms in Balkar (ii); the 1st set of markers is used in the present and future tenses, perfect and habitual, while the 2nd one is used in the past tense, in conditionals and in imperative forms. Verbal agreement with 3 person subjects is optional both in terms of person agreement and number agreement.

i. *Nominal agreement markers*

	Sg	Pl
1	-(i)m	-(i)biž
2	-(i)ŋ	-(i)biž / -(i)giz
3	-(s)i	

ii. *Verbal agreement markers*

1 st set of verbal agreement markers			2 nd set of verbal agreement markers		
	Sg	Pl		Sg	Pl
1	-ma	-biž	1	-(i)m	-(i)q
2	-sa	-siz	2	-(i)ŋ	-(i)biž / -(i)giz
3	-(di)	-(di)-(la)	3	-(di)	-(di)-(la)

As can be observed from the tables ((i)-(ii)), 1Sg and 2 person markers of the nominal paradigm are identical to the markers of the 2nd set of verbal agreement markers, while 1Pl marker of the nominal paradigm is identical to the corresponding marker of the 1st set of verbal markers. The only marker in the nominal paradigm that does not have a verbal counterpart is 3rd person marker (‘(s)i’). Thus, it might be the case that agreement patterns of Balkar are best analyzed not in terms of verbal – vs – nominal split, but in some other manner.

⁶ Here by “person agreement” I mean agreement markers which are specified for person features (including cumulative 1PL and 2PL markers).

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third person plural marker ‘lar’. This marker occurs both on nouns and on verbs with the following difference: it conveys an interpretable number feature in the former case ((20)-(23)) and an uninterpretable number feature in the latter ((25)-(28)). I assume that nouns always bear an interpretable number feature; while the plural value of this feature is realized overtly by ‘lar’, the singular value has a null realization. I also assume that agreement between possessors and possessees is obligatory in Balkar: whenever a possessor is present, the possessee agrees with it. However, there is only one available morphological slot for realization of number features: the structure in (24), where one instance of lar denotes the plurality of a possessee while the other one is an agreement morphology triggered by the plurality of the possessor, is unavailable in Balkar, and, as far as I know, in other Turkic languages. Therefore, the two compete for the same morphological slot. When the plural marker occurs on possessees as in ((21),(23)), it denotes plurality of possessees and is never interpreted as denoting plurality of possessors. I suggest that this is the case because of the competition of the two number features, the interpretable number of the possessee and the uninterpretable number of the possessor for a single slot. The interpretable one wins and gets realized, as in (23).

- | | | | |
|------|--|---------------------------------|-----------------------------------|
| (20) | šabij-i-ni
child-3-GEN | kitab-ı
book-3 | <i>SG possessor, SG possessee</i> |
| | ‘child’s book’ | | |
| (21) | šabij-i-ni
child-3-GEN | kitab-lar-ı
book-PL-3 | <i>SG possessor, PL possessee</i> |
| | ‘child’s books’ | | |
| (22) | šabij-ler-i-ni
child-PL-3-GEN | kitab-ı
book-3 | <i>PL possessor, SG possessee</i> |
| | ‘children’s book’ | | |
| (23) | šabij-ler-i-ni
child-PL-3-GEN | kitab-lar-ı
book-PL-3 | <i>PL possessor, PL possessee</i> |
| | ‘children’s books’ /*‘children’s book’ | | |
| (24) | *šabij-ler-i-ni
child-PL-3-GEN | kitab-lar-lar-ı
book-PL-PL-3 | <i>PL possessor, PL possessee</i> |
| | ‘children’s books’ | | |

The plural marker (‘lar’) on verbs is a realization of an uninterpretable number feature (it does not denote plurality of events, (26)) which is valued through the Agree operation with the subject ((25)-(28)). Crucially, this type of agreement is optional: it can be absent on verb even when the subject displays plural marking (27).

- | | | | | |
|------|---|------------------------|------------------------------------|----------------------------|
| (25) | šabij-i
child-3.NOM | tau-ƚa
mountain-DAT | örle-gen-di
climb-NMN-3SG | <i>SG subject, SG verb</i> |
| | ‘(Someone’s) child climbed the mountain.’ | | | |
| (26) | *šabij-i
child-3.NOM | tau-ƚa
mountain-DAT | örle-gen-di-le
climb-NMN-3SG-PL | <i>SG subject, PL verb</i> |
| | Expected reading: ‘(Someone’s) child climbed the mountain several times.’ | | | |
| (27) | šabij-ler-i
child-PL-3.NOM | tau-ƚa
mountain-DAT | örle-gen-di
climb-NMN-3SG | <i>PL subject, SG verb</i> |
| | ‘(Someone’s) children climbed the mountain.’ | | | |

- (28) *šabij-ler-i* *tau-ka* *örle-gen-di-le* *PL subject, PL verb*
 child-**PL**-3.NOM mountain-DAT climb-NMN-3SG-**PL**
 ‘(Someone’s) children climbed the mountain.’

Clausal nominalizations are not expected to have interpretable number features (Alexiadou et al. 2010)⁷, and this is borne out by both Balkar nominalizations: they cannot denote plurality of events when they receive plural marking ((30), (34)). But the two nominalizations differ with respect to the optionality of number agreement. The number agreement (‘lar’) in nominalizations with nominative subjects follows the verbal pattern in ((25)-(28)): the uninterpretable number feature (number of the nominalization’s subject) is optionally realized on the nominalization ((29)-(32)):

- (29) *men a-ni sabij-i tau-ka örle-gen-i-n bil-di-m*
 1SG that-GEN child-3.NOM mountain-DAT climb-NMN-3-ACC know-PST-1SG
 I ‘I found out that his child climbed the mountain.’
- (30) **men a-ni sabij-i tau-ka örle-gen-ler-i-n bil-di-m*
 1SG that-GEN child-3.NOM mountain-DAT climb-NMN-**PL**-3-ACC know-PST-1SG
 Expected reading: ‘I found out that his child climbed the mountain several times.’
- (31) *men a-ni sabij-ler-i tau-ka örle-gen-i-n bil-di-m*
 1SG that-GEN child-**PL**-3.NOM mountain-DAT climb-NMN-3-ACC know-PST-1SG
 ‘I found out that his children climbed the mountain.’
- (32) *men a-ni sabij-ler-i tau-ka örle-gen-ler-i-n bil-di-m*
 1SG that-GEN child-**PL**-3.NOM mountain-DAT climb-NMN-**PL**-3-ACC know-PST-1SG
 ‘I found out that his children climbed the mountain.’

The number agreement in nominalizations with genitive subjects ((33)-(36)) shows a different pattern: the number feature on these nominalizations is still uninterpretable (34), but agreement is obligatory and the agreement marker cannot be omitted (35).

- (33) *ustaz sabij-i-ni bir zat da oqu-ma-kan-i-n bil-di*
 teacher child-3-GEN one.thing.NOT read-NEG-NMN-3-ACC know-PST
 ‘The teacher found out that (someone’s) child hasn’t read anything.’
- (34) **ustaz sabij-i-ni bir zat da oqu-ma-kan-lar-i-n bil-di*
 teacher child-3-GEN one.thing.NOT read-NEG-NMN-**PL**-3-ACC know-PST
- (35) **ustaz sabij-ler-i-ni bir zat da oqu-ma-kan-i-n bil-di*
 teacher child-**PL**-3-GEN one.thing.NOT read-NEG-NMN-3-ACC know-PST
- (36) *ustaz sabij-ler-i-ni bir zat da oqu-ma-kan-lar-i-n bil-di*
 teacher child-**PL**-3-GEN one.thing.NOT read-NEG-NMN-**PL**-3-ACC know-PST
 ‘The teacher found out that (someone’s) children haven’t read anything.’

What might be the reason for the difference in number agreement between the two nominalizations? I propose that nominalizations with nominative subjects display verbal number agreement, while nominalizations with genitive subjects exhibit nominal number agreement which is the same as in (20)-(23). As suggested above, in nominal possessor constructions agreement is obligatory, but the morphological component chooses to realize interpretable number features of possessees instead of the uninterpretable features of possessors. Since clausal nominalizations do not have interpretable number features, we expect uninterpretable number features to realize if the agreement is nominal. And that is

⁷ (Alexiadou et al. 2010) observe that nominalizations which have verbal projections above AspP cannot have interpretable number: it is not possible for them to denote plurality of events.

exactly what we see in nominalizations with genitive subjects ((33)-(36)). On the other hand, number agreement between subjects and verbs is optional (27), and we expect to see the same optionality of subject-nominalization agreement if it is verbal. As I have demonstrated (31), this expectation is borne out for nominalizations with nominative subjects.

In this section I have shown that the two nominalizations differ with respect to agreement with their subjects: while nominalizations with nominative subjects display verbal number agreement, nominalizations with genitive subjects exhibit nominal number agreement with a minor reservation that they do not have their own interpretable number. However, this difference on its own is not sufficient to explain the scrambling possibilities we observed in the first section: different agreement will not derive the scrambling effects if the left periphery of two nominalized clauses is identical. In the next section I will relate the difference in number agreement to scrambling effects and other properties which distinguish the two nominalizations from each other.

4. C-licensing – vs – D-licensing, agreement and scrambling effects

The idea that phi-feature agreement occurs at a phase level (CP, vP, DP⁸), ((Chomsky 2005), (Boeckx 2003), (Miyagawa 2005)), naturally explains why D and C become the locus of subject case licensing (Miyagawa 2011): the phi-features are only introduced into the derivation by these phase. Both D-licensing ((Saito 1983), (Hale 2002), (Miyagawa 1993), (Miyagawa 2008), (Miyagawa 2011)) and C-licensing ((Watanabe 1996), (Hiraiwa 2001), (Kornfilt 2003), (Kornfilt 2008)) have been proposed as the mechanisms of licensing subjects in embedded contexts; and C-licensing has been proposed for licensing both nominative and genitive subjects ((Watanabe 1996), (Hiraiwa 2001)). In this section I will argue that Balkar employs C-licensing in nominalizations with nominative subjects and D-licensing in nominalizations with genitive subjects, and that this difference can explain the other properties in which the two nominalizations differ.

I propose that nominalizations with nominative subjects are nominalized CPs, while nominalizations with genitive subjects are DPs without the C projection in their functional make-up (D immediately takes TP as its complement). This is supported by several similarities between CPs and nominalizations with nominative subjects on one hand, and between DP⁹s and nominalizations with genitive subjects on the other hand. First, scrambling of direct objects out of CPs ((36)-(37)) is possible just like in nominalizations with nominative subjects ((2)-(3)), and unlike nominalizations with genitive subjects ((4)-(5)):

- (37) ustaz **a-ni** **surat-i-n** sabij-i išle-gen-di dep ojala-di
 teacher **that-GEN** **picture-3-ACC** child-3.NOM draw-NMN-3S COMP think-PST
 ‘The teacher thought that it was (someone’s) CHILD that drew his picture.’
- (38) **a-ni** **surat-i-n** ustaz sabij-i išle-gen-di dep ojala-di
that-GEN **picture-3-ACC** teacher child-3.NOM draw-NMN-3SG COMP think-PST
 ‘The teacher thought that it was (someone’s) CHILD that drew his picture.’

Nominalizations with genitive subjects behave like DPs with respect to scrambling. No material can be extracted from DPs apart from the genitive possessor ((39)-(40)); the genitive possessor can be scrambled out and, for example, become separated from the possessee noun by clausal material, e.g., by the temporal adverb of the clause (41).

- (39) *sejir sabij-i-ni kitab-i
 interesting child-3-GEN book-3.NOM
 Expected reading: ‘child’s interesting book’

⁸ I assume that DP is also a phase. See ((Chomsky 2001), (Svenonius 2004), (Dikken 2007), (Ott 2009)) for the relevant discussion.

⁹ I assume the Universal-DP Hypothesis that implies that DPs are present in all languages, but that not all noun phrases are DPs within the languages (Pereltsvaig 2007), (Lyutikova & Pereltsvaig 2015).

- (40) *sabij-i-ni* *sejir* *kitab-i*
 child-3-GEN interesting book-3.NOM
 ‘child’s interesting book’
- (41) *alim* *sabij-ler-i-ni* ***tünene*** *kitab-i-n* *tas* *et-gen-di*
 Alim child-PL-3-GEN **yesterday** book-3-ACC lost do-PFCT-3SG
 ‘Alim lost the children’s book yesterday.’

The pattern we observe with DPs is identical to that of nominalizations with genitive subjects ((4)-(6)): only genitive subjects can be extracted out of nominalizations (6); no other material can scramble out ((4)-(5)).

Second, both nominalizations with nominative subjects and CPs can host *wh*-words in their structure which are licensed by the question marker on the matrix predicate¹⁰; attempts to license *wh*-words inside nominalizations with genitive subjects lead to ungrammaticality (44).

- (42) *ustaz* *sabij-i* ***ne-ni*** *buz-du* *dep* *bil-di-mi*
 teacher child-3.NOM **what-ACC** break-PST COMP know-PST-Q
 ‘About what thing did the teacher find out that (someone’s) child broke it?’
- (43) *ustaz* *sabij-i* ***ne-ni*** *buz-ɣan-i-n* *bil-di-mi*
 teacher child-3.NOM **what-ACC** break-NMN-3-ACC know-PST-Q
 ‘About what thing did the teacher find out that (someone’s) child broke it?’
- (44) **ustaz* *sabij-i-ni* ***ne-ni*** *buz-ɣan-i-n* *bil-di-mi*
 teacher child-3.GEN **what-ACC** break-NMN-3-ACC know-PST-Q

Third, both CPs and nominalizations with nominative subjects constitute the same binding domain with respect to binding of reflexives, which is different from the binding domain of nominalizations with genitive subjects. There is a reflexive pronoun ‘*kesi*’ which can participate in long-distance binding relations and be bound by the subject of a matrix clause. While CPs and nominalizations with nominative subjects are transparent for the binding of the simple reflexive ‘*kesi*’ (it can be bound by the subject of the matrix clause), ((45)-(46)), nominalizations with genitive subjects do not allow the material inside them to participate in long-distance binding relations (the simple reflexive cannot be bound by the matrix subject) ((47)):

- (45) *ustaz* *soxta-si* *kesi-n* *işle-gen-di* *dep* *ojla-di*
 teacher student-3.NOM self-ACC draw-NMN-3SG COMP think-PST
 ‘The teacher_i thought that his student_k drew himself_k.’ – OK
 ‘The teacher_i thought that his student_k drew himself_i.’ – **OK**
- (46) *ustaz* *soxta-si* *kesi-n* *işle-gen-i-n* *ojla-di*
 teacher student-3.NOM self-ACC draw-NMN-3-ACC think-PST
 ‘The teacher_i thought that his student_k drew himself_k.’ – OK
 ‘The teacher_i thought that his student_k drew himself_i.’ – **OK**
- (47) *ustaz* *soxta-si-ni* *kesi-n* *işle-gen-i-n* *ojla-di*
 teacher student-3-GEN self-ACC draw-NMN-3-ACC think-PST
 ‘The teacher_i thought that his student_k drew himself_k.’ – OK
 ‘The teacher_i thought that his student_k drew himself_i.’ – *

¹⁰ This fact itself supports my proposal that nominalizations with nominative subjects have a CP layer in their structure under the assumptions that *wh*-words undergo movement at LF (Huang 1982), that noun phrases are islands for extraction (see (39)) and that *wh*-words move through the specifiers of C projections: if nominalizations with nominative subjects did not have a CP layer, *wh*-words in (43) wouldn’t be able to move out of the nominalization and get interpreted in the matrix clause. Thus, the ungrammaticality of (44) is predicted under my analysis which suggests that nominalizations with genitive subjects do not involve CP.

In other words, nominalizations with nominative subjects exhibit CP-like behavior with respect to reflexives' binding, while nominalizations with genitive subjects are different in this respect.

There is further evidence which suggests that nominalizations with genitive subjects are DP¹¹s: they can contain demonstratives:

- (48) ustaz **a-ni** soxta-si-ni mašina-si-n buz-kan-i-n bil-di
 teacher **that-GEN** student-3-GEN car-3-ACC break-NMN-3-ACC know-PST
 'The teacher found out about that breaking of the car by the student.'

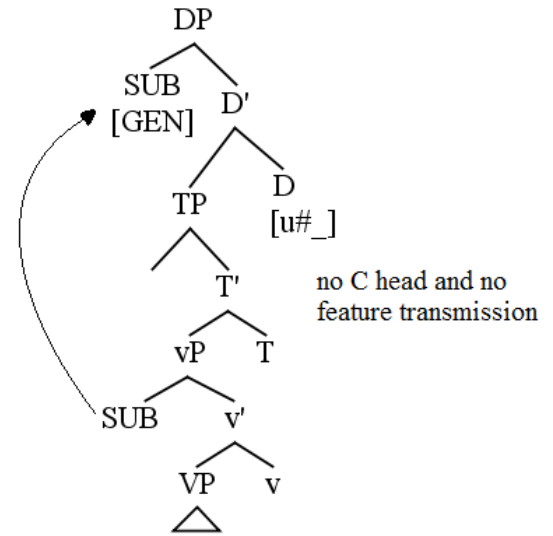
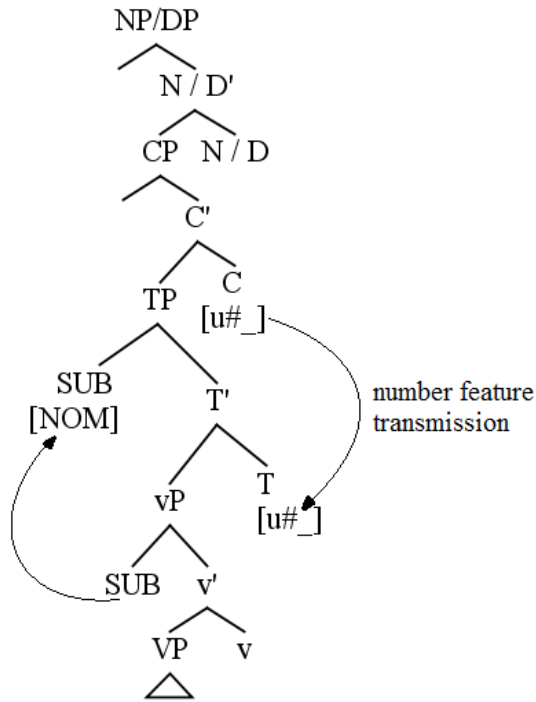
In (48) the demonstrative 'ani' can be interpreted as a modifier of the whole nominalization¹², which I take as evidence for the presence of D projection in the structure of the nominalization.

So far we have seen that nominalizations with nominative subjects are CP-like with respect to such properties as direct object scrambling possibilities, ability to host wh-phrases and reflexives that can enter into long-distance binding relations, while nominalizations with genitive subjects behave in a different manner and are DP-like with respect to scrambling and the ability to host demonstratives. These differences between the two nominalizations can be naturally connected with the difference in number agreement under the proposed analysis, which suggests that only nominalizations with nominative subjects have a CP layer in their structure. If it is C that introduces verbal phi-features into the derivation (by being a phase head), then it is expected that verbal agreement is possible only when C is present in the structure, and is impossible otherwise. However, the C under consideration is a special case, because it is nominalized. I propose that in configurations with a nominalized C some of its phi-features can be overridden by the phi-features of the nominalizing head. In case of the Balkar nominalization, the person feature is the one being overridden: as we have seen in section 3, in nominalizations with nominative subjects person agreement seems to be nominal. But crucially, the presence of the verbal number agreement in nominalizations with nominative subjects reveals that the C projection is present in the structure and that its number feature is retained and transmitted to T (Chomsky 2008), which can then act as a probe and attract the subject of nominalization to its specifier for the purposes of agreement, valuing its case feature nominative. The proposed structure for nominalizations with nominative subjects is presented in (49)¹³.

¹¹ The question of whether nominalizations with nominative subjects are DPs or NPs requires further investigation.

¹² It can also be interpreted as a modifier of the noun phrase "student" ('soxtasini').

¹³ I will leave unresolved the issue of whether nominalizations with nominative subjects are NPs or DPs, because I have no evidence that would argue in favor of one possibility over another. These nominalizations could be also thought of as KPs (see (Bittner & Hale)).



I argue that in nominalizations with genitive subjects there is no C projection. This immediately explains the absence of any verbal agreement between the nominalization and its subject: since C introduces phi-features into the derivation, there is no source of verbal phi-features in the absence of C. Consequently, T does not have phi-features, cannot act as a probe, enter into the Agree relation with the subject and value its case feature nominative. The subject with an unvalued case feature remains available for further interactions and enters into the Agree relation with D. This results in nominalization displaying the nominal agreement and in valuing subject's case feature genitive. In this way, the existence/ absence of CP in the functional make-up of nominalizations determines whether verbal agreement can or cannot be present¹⁴.

Scrambling properties of the two nominalization directly follow from the proposed structures. In nominalizations with a CP layer (49) nominative subjects remain in the Spec, TP position. Thus, these nominalizations contain an escape hatch (Spec, CP – A'-position) through which direct objects can be scrambled into the matrix clause (3). Direct objects can also stop directly in the Spec, CP position of the nominalized clause (2). There is no such escape hatch in the functional make-up of nominalizations with genitive subjects: DP is a phase, and Spec, DP is an A-position to which subjects move in order to get their case valued. Hence, under the proposed analysis it is predicted that scrambling of direct objects to the left periphery of nominalizations with genitive subjects and into the matrix clause should be impossible: there is no position through which such movements would take place. Note that the possibility of genitive subjects' scrambling out of such nominalizations is also predicted: being in the specifier of a phase (DP), these subjects can move out to the left periphery of the matrix clause (6) just like genitive possessors can be extracted outside noun phrases (41).

5. Conclusion

In this paper I proposed an analysis of nominative/genitive alternation in Balkar nominalized clauses. I have argued that nominalizations with nominative subjects and nominalizations with genitive subjects project distinct syntactic structures: only the former have a CP layer in their functional make-up. I have shown that this single difference in the functional structure of the two nominalizations can derive various discrepancies between them: scrambling possibilities and nature of number agreement. Besides, under the CP-analysis the parallelism between nominalizations with nominative subjects and finite CPs as to

¹⁴ I will not address the issue of how person agreement works in Balkar nominalizations (see footnote 4). With the stipulation that it does not require the movement of nominative subjects to positions higher than Spec, TP, it does not affect my analysis.

their ability to host wh-words and to allow of long-distance binding of reflexives comes out with no effort at all. There have been proposed two types of subject licensing operative in different languages: C-licensing and D-licensing. In this paper I have argued that subjects of Balkar nominalized clauses employ both mechanisms: C licenses nominative subjects, while D licenses genitive ones.

6. References

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Tatiana Bondarenko
t.i.bond@yandex.ru