Specification of D Derives Variation in Relative Clauses

Overview. Several Turkic and Mongolic languages possess a type of genitive-subject relative clauses (GSRCs) where the relative clause (RC) subject is marked with genitive case, and agreement with the genitive-marked subject appears on the modified noun phrase (Hale 2002; Kornfilt 2008, 2015). This study examines GSRCs in Kazakh (Turkic) and Khalkha Mongolian (Mongolic), two languages that exhibit superficially similar structures (1)-(2) but differ fundamentally in their underlying syntactic configurations.

(1) KAZAKH
[Ajʃa-nɯŋ $___i$ okɯ-gan] kitab$_i$-ɯ
[Aisha-**GEN** read-PRF] book-**POSS.3**
'the book [that Aisha read]'

(2) KHALKHA MONGOLIAN
[Dorj-iin $___i$ unš-san] nom$_i$ ni
[Dorj-**GEN** read-PST.PTCP] book **POSS.3**
'the book [that Dorj read]'

We show that these syntactic differences are derived from variation in the properties of the D head of the modified noun phrase, specifically: **(i) EPP**, and **(ii) the C-selection properties of D**. By comparing Kazakh and Khalkha, two languages with otherwise highly parallel syntactic profiles, we create an ideal test case to isolate how these properties of D drive cross-linguistic variation in GSRCs. We demonstrate that combining the (i) EPP and the (ii) C-selection parameters gives rise to four language-types with distinct properties.

The Positions of GEN Subjects. Much existing research on GSRCs focuses on the position of the genitive RC subject, giving rise to two main theoretical perspectives: one posits that the GEN subject is RC-internal (Kornfilt 2008, 2015; Miyagawa 2011), while the other maintains that the GEN subject is RC-external (Hale 2002; Laszakovits 2019; Dékány & Georgieva 2021; Ótott-Kovács 2021,2023,2024; Pleshak 2022; O'Reilly-Brown 2024). Leveraging novel data from Kazakh and Khalkha, we demonstrate that both structural configurations are generated by syntax: in Kazakh, the genitive RC subject occupies an RC-external possessor position, while in Khalkha, it is internal to the RC.

The structural position(s) of GEN subjects is systematically tested through a series of diagnostics, developed in Ótott-Kovács (2021, 2023, 2024), and references therein: (i) negative element (NCI or NPI) licensing, (ii) distribution of the GEN subject and the possessor, (iii) intervening modifiers, (iv) interpretation of the GEN phrase. We applied these diagnostics to both Kazakh and Khalkha, with detailed results presented in Table 1. For space reasons and for maximum clarity, in this abstract we will focus on illustrating one of the diagnostics: (iii) intervening modifiers. The RC-external and RC-internal GEN analyses make different predictions regarding the acceptability of the placement of nominal modifiers pertaining to the RC head, (3). The RC-internal GEN analysis predicts that no modifier of the RC head can intervene between the GEN phrase and the RC predicate (3a); the RC-external analysis makes the opposite prediction (3b).

(3) a. **RC-internal GEN analysis**: *[$_{RC}$ DP-GEN **MODIFIER** ... RC-predicate] modified-DP

b. **RC-external GEN analysis**: DP-GEN **MODIFIER** [$_{RC}$ ... RC-predicate] modified-DP

(4) shows that Khalkha (4a) is consistent with the RC-internal GEN analysis, whereas Kazakh (4b) patterns as predicted by the RC-external GEN analysis.

(4) a. *[$_{RC}$ Tuya-giin **tasalgaan dakhi** khudalda.j aw-san] sandal (ni)
[$_{RC}$ Tuya-GEN **indoors LOC** trade.CVB buy-PST.PTCP] chair POSS.3SG
Int. 'The indoor chair, which Tuya bought.'

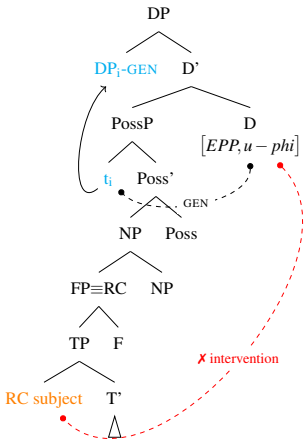
b. Men-iŋ **Vengrija-da-gɯ** [$_{RC}$ erteŋ bar-atɯn] ʒer-im alɯs-ta.
I-GEN **Hungary-LOC-ADJ** [$_{RC}$ tomorrow go-PRSP] place-POSS.1SG far-LOC
'The place, situated in Hungary, where I am going tomorrow is far.'

Table 1 outlines the diagnostics distinguishing RC-external and internal GEN subjects. Kazakh and Khalkha display opposite patterns across all diagnostics. Based on these results, we conclude that **Kazakh GEN subjects** are base-generated in an **RC-external** position, whereas **Khalkha GEN subjects** remain **RC-internal**. Languages where the GEN subject is base-generated RC-internally, but later moves to a derived, RC-external position, such as Uyghur (potentially, as argued by Major, Thoms, & Eziz 2024), are predicted to exhibit mixed behavior on these

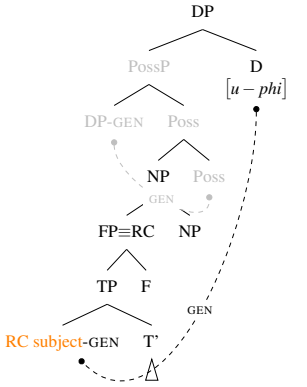
diagnostics. Specifically, these languages are expected to allow negative element licensing by both RC-external and internal NEG operators, while aligning with Kazakh on the other diagnostics (iii)-(iv).

		RC-externally base-generated GEN **Kazakh**	RC-internal GEN **Khalkha**
(i)a	RC-internal negation doesn't license GEN NCI/NPI	✓	✗
(i)b	RC-external negation licenses GEN NCI/NPI	✓	✗
(ii)	GEN subject & possessor can't co-occur	✓	✗
(iii)	Modifiers can intervene between GEN phrase & RC predicate	✓	✗
(iv)a	Unique N can't be modified by GEN-subject RC (out-of-the-blue)	✓	✗
(iv)b	Obligatory possessive interpretation with relational nouns	✓	✗

Table 1: GSRC Diagnostics: Kazakh vs Khalkha



Analysis. We propose that the syntactic variation observed in Table 1 can be attributed to two properties of D: (i) the C-selectional property of the genitive assigning $D_{[u\phi]}$ head, and (ii) whether $D_{[u\phi]}$ has an EPP feature. **The Kazakh patterns are explained as follows:** (i) The $D_{[u\phi]}$ in Kazakh obligatorily selects for PossP which introduces the possessor in its specifier. However, Poss cannot assign (semantic/inherent) GEN to its specifier in Kazakh. Instead, $D_{[u\phi]}$ probes and enters into Agree with the possessor DP, assigns GEN to the possessor and thereby values its own [uϕ]. (ii) $D_{[u\phi]}$ also has EPP, and thus the possessor moves to Spec,DP. Importantly, Agree between $D_{[u\phi]}$ and the RC subject is blocked due to an intervention effect: the possessor is always the closest goal to D. The presence of the possessor prevents $D_{[u\phi]}$ from probing beyond it to reach the RC subject.



In Khalkha, unlike Kazakh, the $D_{[u\phi]}$ head (i) can C-select for either PossP or NP, and (ii) lacks an EPP feature. When $D_{[u\phi]}$ selects for an NP, it can directly establish Agree with the RC subject since there is no possessive intervener, allowing D to assign GEN to the RC subject. The absence of EPP on $D_{[u\phi]}$ means that the RC subject need not move to the RC-external Spec, DP position in Khalkha. Additionally, when $D_{[u\phi]}$ selects for PossP, the Poss head can assign semantic/inherent GEN to the possessor, as evidenced by a distinct genitive vocabulary item (the singular interpretation of 1st person genitive *manai*) that can only be assigned by Poss but not by D. Once Poss assigns inherent GEN to the possessor in its Spec, the latter becomes inactive in the derivation, allowing $D_{[u\phi]}$ to probe further and Agree with the RC subject as the next available goal.

This analysis makes the prediction that, in addition to Kazakh- and Khalkha-type languages, there are (i) languages where $D_{[u\phi]}$ head has EPP *and* it can select for an NP (not only PossP); and (ii) languages where $D_{[u\phi]}$ can only select for a PossP and has no EPP (i.e., the possessor agrees with D but remains in-situ). In support of our proposal, both of these predictions are borne out. Uyghur is likely to be a language of the first type (see Major, Thoms, & Eziz (2024), who argue that the RC subject *moves* to Spec,DP), and Hungarian low possessors (bearing no overt case marker) are of the second type (Szabolcsi 1994, Dékány 2011).

C-selection / D-features	NP, PossP	only PossP
EPP	Uyghur?	Kazakh
No EPP	Khalkha	Hungarian

Table 2: Typology of $D_{[u\phi]}$ heads

Bibliography. Dékány 2011. A profile of the Hungarian DP. ♦ Dékány & Georgieva 2021. Three ways of unifying participles and nominalizations: the case of Udmurt. ♦ Hale 2002. On the Dagur Object Relative: Some Comparative Notes. ♦ Kornfilt 2008. Agreement and its Placement in Turkic Nonsubject Relative Clauses. ♦ Kornfilt 2015. Turkish Relative Clauses: How Exceptional are they from a Central Asian Turkic Perspective? ♦ Laszakovits 2019. On possessed relative clauses in Kyrgyz. ♦ Major, Thoms & Eziz 2024. Raised heads and subjects in Turkic genitive subject relatives. ♦ Miyagawa 2011. Genitive subjects in Altaic and specification of phase. ♦ O'Reilly-Brown 2024. The Subject Extraction Asymmetry in Uyghur Relative Clauses. ♦ Ótott-Kovács 2021. Restrictions on genitive subjects in Kazakh relative clauses. ♦ Ótott-Kovács 2023. Differential Subject Marking in Kazakh. ♦ Ótott-Kovács 2024. Control and intermediate scrambling: An investigation of Kazakh relative clauses. ♦ Pleshak 2022. Severing Case from Agreement: Non-finite Subjects in Hill Mari. ♦ Szabolcsi 1994. The Noun Phrase.