

This is a preprint and subject to modification.

The Syntax of Reflexive Binding in Mongolian¹

Chigchi Bai

School of Foreign Languages, IMUFE

chigchi.hohhot@qq.com

December 26, 2024

Abstract

This article demonstrates that the Reflexive-Possessive Principle (RPP) in Mongolian is a special kind of Binding Principle A by showing that the properties of RPP resemble those of Principle A to a great extent: 1) RPP employs the suffix *-aa* as a reflexive marker, which is attached to an NP possessum and Principle A employs a *self*-type morpheme as a reflexive marker, which is attached to a pronoun possessor; 2) both *-aa* and *self* resist a nominative host; *-aa* is licensed by a local subject and an anaphor containing *self* is bound by a local subject; 3) *-aa* is blocked by disjoint reference (or switch reference) and an anaphor containing *self* resists rebinding. The specific proposals are as follows. **First**, regarding how binding is implemented, [phi] on D as a bare phrase in Spec of the possessive D head is valued by that on a local subject, instantiating Agree as binding. **Second**, reflexivity, which is conditioned by binding, is a Spec-Spec (subject-subject or subject-possessor) relation, rather than a Spec-Comp (subject-object) relation. **Third**, anaphors of all types (including the accusative anaphor as an object, the genitive anaphor as a possessor, the accusative anaphor as a subject of an embedded *gež* clause (CP), and the genitive anaphor as a subject of an embedded nominalized clause and relative clause (both TP)) are formed and bound in a unified way—the portmanteau pattern. **Fourth**, the interaction between the body anaphor (*öör-in-bey* or its alternative forms) and the suffix *-aa*, categorially a clitic, in Mongolian suggests that a first phase derivation comes into play in forming and interpreting anaphors, especially body(part) anaphors.

Keywords: Binding, Reflexive, Possessive, Anaphor, Mongolian

¹ This research was funded by NSSFC [21XYY018].

Contents

- 1 Introduction
- 2 Basics of *öör*
 - 2.1. *Öör* as an object
 - 2.2. *Öör* as a possessor
 - 2.3. *Öör* as the subject of subordinate clauses
 - 2.4. Interim summary
- 3 Basics of *-aa*
 - 3.1. Con/Disjoint reference and RX
 - 3.2. Licensing domain of RX
- 4 Reflexivity as a spec-spec relation
- 5 Internal organization of anaphors and possessive pronouns
- 6 Explaining reflexive binding
 - 6.1. Reflexives-Possessive Principle as Binding Principle A
 - 6.2. Implementing binding
 - 6.3. Categorical status and position of RX
7. Conclusion

1 Introduction

Compared with other languages, Mongolian has rarely been researched in the context of binding theory. However, the condition named “Ерөнхийлөн Хамаатуулах Нөхцөл” in Mongolian grammar,² which translates as “Reflexive-Possessive Principle” (RPP), is comparable to what is referred to as “Principle A” of the Standard Binding Theory (SBT) in generative grammar. Few studies except Gong (2023) have attempted to elucidate the binding nature of RPP. Let us first look at simple examples catering to the three conditions of SBT, advocated by Chomsky (1981; 1986b).

- (1) Principle A: An anaphor must be bound in its binding domain.
- Principle B: A pronoun must be free in its binding domain.
- Principle C: An R-expression must be free.

As exemplified below, SBT basically holds in Mongolian. The anaphor *öör* is bound by the local subject *Baatar*, referring back to it in (2). The pronoun *tüün* is not bound by *Baatar*, referring to a person other than it, in (3). The R-expression *Bat* is free in (4).

- (2) *Baatar*_i *ööri*/**j*-*ig-öö* *šüümjile-sen*. (Principle A)
Baatar-NOM self-ACC-RX criticize-PST³
‘Baatar criticized himself.’

² Ерөнхийлөн Хамаатуулах Нөхцөл literally translates to “approximately associating condition”.

³ The abbreviations to use in this paper include ACC: accusative, COMP: complementizer, DAT: dative, GEN: genitive, NOM: nominative, PS: passive, PSS: possessive suffix, PST: past, and RX: reflexive-possessive suffix.

(3) Baatar_i tüün*_{i/j}-ig šüümjile-sen. (Principle B)
 Baatar-NOM 3rd-SG-ACC criticize-PST
 ‘Baatar criticized her/him (someone else).’

(4) Baatar_i Bat_j-ig šüümjile-sen. (Principle C)
 Baatar-NOM Bat-ACC criticize-PST
 ‘Baatar criticized Bat.’

What concerns us in this paper is cases like (2), which exemplifies Principle A. Particularly noteworthy with such cases is that the anaphor *öör* calls for the presence of what has been called “reflexive-possessive suffix” (RX), namely, *-aa*.⁴ Gong (2023), discussing RX in terms of Principle A, proposes the following.

- (6) RX (her REFL.POSS -AA) signals agreement with a minimal pronoun bound by the closest *v* which introduces the local subject.
- i. Binding mechanism: Binding by *v*.
 - ii. Nature of bound (reflexive) pronoun: Minimal Pronouns (MIN)
 - iii. Morpho-syntactic source of -RX: Feature Transmission

Gong’s (2023) proposal follows from Kratzer’s (2009), who argues that it is the local functional head *v* rather than an antecedent DP that serves as the binder of reflexives, which acquire their phi-feature set from *v* via Feature Transmission under Binding (FTUB).

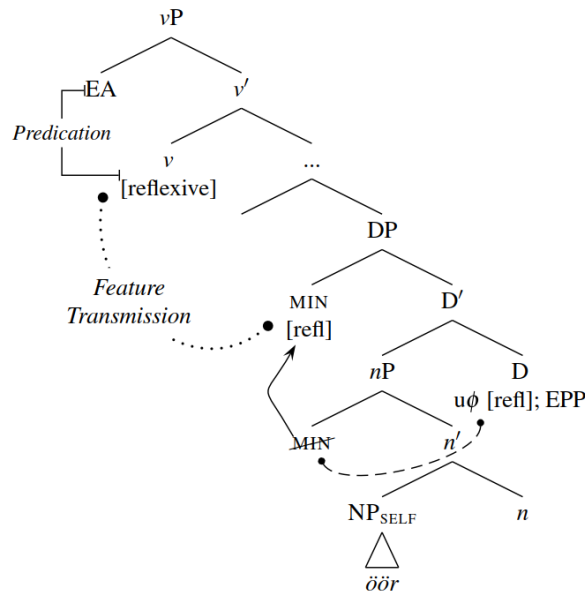
- (7) Feature Transmission under Binding (Kratzer 2009: 216)

The ϕ -feature set of a locally bound pronoun unifies with the ϕ -feature set of the head that hosts its binder.

On this account, reflexives are elements born without ϕ -features, which Kratzer (2009) called MIN, for minimal pronoun. Following Kratzer (2009), Gong (2023) assumes that there is MIN in Mongolian, which is base-generated in Spec of nP, sharing ϕ -features with D, and moves to Spec of DP due to EPP on D. Having moved to Spec of DP, MIN remains in the same domain as *v*. FTUB applies and MIN receives the feature [ref], for reflexivity, from *v*. Since MIN shares this feature with D, as a result it is present on three heads including *v*, MIN, and D, and is spelled out as RX on D.

- (8) Derivation of *öör-ig-öö* in (2):

⁴ RX, being subject to vowel harmony, has three allophonic morphemes, *-aa*, *-ee*, *-oo* and *-öö*, which do not differ from each other syntactically and semantically.

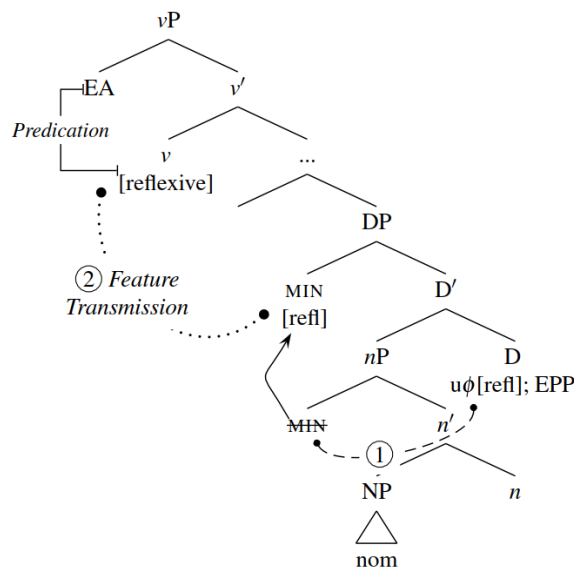


(Gong 2023: 5)

Regarding the case in which *öör* is used as a possessor in a possessive DP, as in (9), Gong (2023) treats *öör* as a noun just like a common noun, as shown in (10), and RX as a D head.

- (9) Baatar *öör-in* *nom(-φ)-oo* *mart-san.*
 Baatar-NOM self-GEN book-ACC-RX forget-PST
 ‘Baatar forgot his own book.’

(10) Derivation of *nom-oo* as in (9):



(Gong 2023: 6)

While the idea that the reflexive property takes shape via the link between the nominal domain and *v* is valuable, a few problems remain unclear to me under this approach. First, it is unclear where to locate *öör* in *öör-in nom-oo* ‘one’s own book’ as in (9), if *nom* ‘book’ is located under NP. Second, even problematic is the case such as *öör-in-öö nom* as in (10), in which RX

Baatar-NOM self-GEN-body-ACC-RX criticize-PST
'Baatar criticized himself.'

Third, it takes one of accusative, dative and ablative cases, depending on (the lexical semantics of) the verb. For example, the same meaning "Baatar loves himself" can be expressed by both (15), in which the anaphor takes dative case, and (16), in which the anaphor takes accusative case.

(15) Baatar bey-d-ee hair-tai.
Baatar-NOM body-DAT-RX love-be
'Baatar loves himself.' (Literally: Baatar has love for his body.)

(16) Baatar bey-ee hairl-naa.
Baatar-NOM body-ACC-RX love-be
'Baatar loves himself.'

However, unlike *bey*, *öör* cannot be used with dative case, as shown in (17), which contrasts with (18), in which *öör* is used with accusative case. This is because *öör* with dative case and RX makes up an intensifying adverb *öör-t-oo* 'oneself', which blocks the argumental use of the dative *öör*. In other words, the same form *öör-t-oo* is potentially available as both an argument and an adverb. However, *öör-t-oo* as an adverb is a lexicalized word, which prevents the same form from being used syntactically. Certainly, *öör-in-bey* can also be used since it does not give rise to a blocking effect.

(17) *Baatar öör-t-öö hair-tai.
Baatar-NOM body-DAT-RX love-be
'Baatar loves himself.' (Literally: Baatar has love for his body.)

(18) Baatar öör-ig-öö hairl-naa.
Baatar-NOM body-ACC-RX love-be
'Baatar loves himself.'

The following examples show that *öör* as well as its two variants takes ablative case in acting as an object.

(19) Baatar öör-öös-öö asuu-san.
Baatar-NOM self-ABL-RX ask-PST
'Baatar asked himself.'

(20) Baatar (öör-in-)bey-ees-ee asuu-san.
Baatar-NOM self-GEN-body-ABL-RX ask-PST
'Baatar asked himself.'

Notably, *öör* is not favored over *bey* and *öör-in-bey*, presumably due to avoidance of ambiguity

that would arise between it (the anaphor *өөр* ‘self’) and the homophone *өөр*, which means “another” or “different”, as in *өөр хүм* ‘a different person’. Note that the anaphor *өөр* is written as ᠡᠡᠷ , whereas the adjective *өөр* is written as ᠡᠡᠷᠢ in the classical alphabetic orthographical system. The Cyrillic orthographical system does not distinguish them.

2.2. *Өөр* as a possessor

Өөр acts as a possessor in a DP object, a DP adjunct and a PP adjunct.⁵ These three share the following common properties. **First**, *өөр* takes genitive case; **second**, it cooccurs with RX, which is present either on it or on the possessum; **third**, it can be absent; **fourth**, it cannot be replaced by the body anaphors *bey* and *өөр-in-bey*.⁶

- (21) Baatar өөр-in-өө nom-ig mart-san. (DP object)
 Baatar-NOM self-GEN-RX book-ACC forget-PST
 ‘Baatar forgot his own book.’
- (22) Baatar (өөр-in) nom(-ϕ)-oo mart-san. (DP object)
 Baatar-NOM self-GEN book-ACC-RX forget-PST
 ‘Baatar forgot his own book.’
- (23) Baatar өөр-in-өө haṣaan-d mod zail-san. (DP adjunct)
 Baatar-NOM self-GEN-RX yard-DAT-RX tree plant-PST
 ‘Baatar planted a tree in his own yard.’
- (24) Baatar (өөр-in) haṣaan-d-aa mod zail-san. (DP adjunct)
 Baatar-NOM self-GEN yard-DAT-RX tree plant-PST
 ‘Baatar planted a tree in his own yard.’
- (25) Baatar өөр-in-өө hazuu-d nom tabi-san. (PP adjunct)
 Baatar-NOM self-GEN-RX next-DAT-RX book put-PST
 ‘Baatar put a book next to himself.’
- (26) Baatar (өөр-in) hazuu-d-aa nom tabi-san. (PP adjunct)
 Baatar-NOM self-GEN next-DAT-RX book put-PST
 ‘Baatar put a book next to himself.’

When *өөр* acts as the supreme possessor in double possessives, it displays the following properties. RX is allowed to present only on the pivot (the noun possessed by *өөр* and possesses

⁵ Only locative postpositions such as *deer* ‘above’ and *dotor* ‘inside’ can occur with *өөр* that is interpreted as a possessor, with RX present. Non-locative postpositions such as *tuhai* ‘about’ can also cooccur with *өөр*, but only when *өөр* is not interpreted as a possessor, with RX disallowed. Locative PPs in Mongolian are categorically ambiguous. They display properties of nouns, adjectives and prepositions. In the language, there exist few purely functional prepositions. The Mongolian counterparts of English prepositions such as *for*, *to*, *with* and *at*, for example, are not postpositions but case forms such as dative, ablative and instrumental.

⁶ Replacement of *өөр* by the body anaphors *bey* and *өөр-in-bey* is possible when an inherent possession is obtained.

the other noun) and in that case the precense of *öör-in* is less favored but acceptable. It is disallowed to be present on *öör-in* and the other element (noun or postposition).

(27) *Baatar öör-in-öö bagš-in nom-ig mart-san.
 Baatar-NOM self-GEN-RX teacher-GEN book-ACC forget-PST
 ‘Baatar forgot his own teacher’s book.’

(28) Baatar (öör-in) bagš-in-aa nom-ig mart-san.
 Baatar-NOM self-GEN teacher-GEN-RX book-ACC forget-PST
 ‘Baatar forgot his own teacher’s book.’

(29) *Baatar (öör-in) bagš-in nom(- ϕ)-oo mart-san.
 Baatar-NOM self-GEN teacher-GEN book-ACC-RX forget-PST
 ‘Baatar forgot his own teacher’s book.’

RX can be present on a postposition possessed by the pivot, when the location (in space or time) denoted by the postposition is interpreted as possessed by *öör*. That is, only a direct possession obtained between *öör* and an element allows RX on that element, regardless of the double possessive form. The precense of *öör-in* is less favored but acceptable.

(30) Baatar (öör-in) ger-in gadana-aa ceberl-sen.
 Baatar-NOM self-GEN house-GEN outside-RX cleaned-PST
 ‘Baatar cleaned the outside of his house.’

In such sentences, PP, e.g., *ger-in gadana* ‘outside of house’ as a whole is interpreted as a possessum. Importantly, the presence of RX on the pivot is less favored and even disallowed, when the PP is an object.

(31) #Baatar (öör-in) ger-in-ee gadana-ig ceberl-sen.
 Baatar-NOM self-GEN house-GEN-RX outside-ACC cleaned-PST
 ‘Baatar cleaned the outside of his house.’

However, when the PP is an adjunct, the sentence becomes quite acceptable.

(32) Baatar (öör-in) ger-in-ee gadana mod zail-san.
 Baatar-NOM self-GEN house-GEN-RX outside tree plant-PST
 ‘Baatar planted a tree outside his house.’

The argumenthood and adjuncthood of such PPs thus seem to affect the interpretation of the location denoted by a postposition as a possessum of *öör* and the presence or absence of RX.

2.3. *Öör* as the subject of subordinate clauses

Any of clausal objects with or without *gež*, object relative clauses and clausal adjuncts can have *öör* as a subject and RX must be present. Situations differ according to the types of clause.

When used as the subject of clausal objects headed by the complementizer *gež* and clausal adjuncts, *öör* takes accusative case and cannot be absent. Without *öör*, the covert embedded subject is interpreted as a nonspecific person.

(33) Baatar öör-ig-öö buruud-san gež med-sen. (*gež* clause)
 Baatar-NOM self-ACC-RX go wrong-PST-RX COMP know-PST
 ‘Baatar realized that he was wrong.’

(34) Baatar öör-ig-öö buruud-h-d busud-ig šüümjil-sen. (adverbial clause)
 Baatar-NOM self-ACC-RX go wrong-CV-DAT others criticize-PST
 ‘Baatar criticized others for his own mistakes.’

When used as the subject of clausal objects headed by the complementizer *gež* and relative clauses, *öör* takes genitive case and can be absent. RX is present either on *öör*, when it is present, or on the verb.

(35) Baatar öör-in-öö buruud-san-ig meder-sen. (clausal object without *gež*)
 Baatar-NOM self-GEN-RX go wrong-PST-RX admit-PST
 ‘Baatar admitted that he was wrong.’

(36) Baatar (öör-in) buruud-san-aa meder-sen. (clausal object without *gež*)
 Baatar-NOM self-GEN go wrong-PST-RX admit-PST
 ‘Baatar admitted that he was wrong.’

(37) Baatar öör-in-öö hel-sen üg-ig mart-san. (relative clause)
 Baatar-NOM self-GEN-RX say-PST word-RX forget-PST
 ‘Baatar forgot the words he said.’

(38) Baatar (öör-in) hel-sen üg-ee mart-san. (relative clause)
 Baatar-NOM self-GEN-RX say-PST word-RX forget-PST
 ‘Baatar forgot the words he said.’

2.4. Interim summary

In summary, we obtain the following findings. As shown in (39), *öör-in* (genitive) acts as a possessor in DPs and PPs, which are a special type of DP due to their property as locative expressions, and as the subject of object clauses without *gež* and relative clauses, which are categorily nominalized TP (see section 6). *Öör-ig* (accusative) acts as an object and as the subject of object clauses with *gež*, which are categorily CP (see section 6), and adjunct clauses, which are categorily non-nominalized TP (see section 6). When taking dative or ablative case, the anaphor can only be objects.

(39) Distributional paradigm of *öör* (interaction of its case and grammatical functions)

	As an object	As a possessor	As a subject
Genitive		possessive DP;	object clause without <i>gež</i> ;

			possessive PP	relative clause
Non-genitive	accusative	DP object		object clause with <i>gež</i> ; adjunct clause
	dative	DP object		
	ablative	DP object		

Regarding the position of RX, which is required for an overt *öör*, two positions are available. One follows the genitive and accusative case markers and the other follows the whole phrase.

(40) Presence or absence of *öör-in* (genitive) and position of RX

genitive		accusative
<i>öör-in-öö</i> XP	<i>öör-in</i> XP- <i>öö</i>	<i>öör-ig-öö</i>
absence disallowed	absence allowed	absence disallowed

Importantly, the genitive *öör-in* is absent when RX occurs in the second type of position. In other words, *öör-in* is absent when it is separated from RX. This means that RX always requires an overt host. Let us tentatively formulate this property as follows.

(41) The Elsewhere Marker Condition (EMC)

Anaphors can be absent at PF when RX is present elsewhere as a reflexive marker.

EMC is evidently correct in terms of the linear structure. It is, however, not simply a surface condition for a linear structure. The logic underlying it is essentially a matter of syntax and is hierarchically derived. Section 6 discusses this in more detail.

3 Basics of *-aa*

As seen in section 2, *öör* always calls for the presence of RX, which plays the most crucial role in reflexive binding in Mongolian. Only elements other than nominative subjects can be attached by RX. This paper, however, is concerned only with cases in which RX is attached to accusative-marked objects. This section focuses on the interactions of RX and the conjoint reference (CR) or disjoint reference (SR) between subjects or possessors.

3.1. Con/Disjoint reference and RX

As can be summarized from section 2, any of the following conditions must be satisfied where RX occurs.

(42) Conditions on RX

- a. The accusative *öör* acts as an object that is coindexed with a local subject.
- b. The genitive *öör* acts as the possessor of *bey*, which hosts RX, and is coindexed with a local subject.
- c. The genitive *öör* acts as the possessor of an NP hosting RX and is coindexed with a

local subject.

- d. The genitive *öör* acts as the subject of a relative clause that modifies an NP hosting RX and is coindexed with the matrix subject.
- e. The genitive *öör* acts as the subject of a complement clause that contains with its predicate hosting RX and is coindexed with the matrix subject.

Notably, the necessary condition of licensing RX is that coindexation is obtained between a subject and *öör*, either accusative or genitive and either present or absent at PF. For (42c), (42d), and (42e), *öör* itself can host RX, which, however, is subject to pragmatic semantic constraints to some extent. When combined with *bey*, *öör* cannot hold RX.

(43) Distributional paradigm of RX in simplex anaphors, *gež* clauses, and adverbial clauses⁷

NOM	ACC	Example
SBJ _i	<i>öör</i> _i -RX	(12, 33, 34)

(44) Distributional paradigm of RX in complex anaphors

NOM	GEN	ACC	Example
* SBJ _i	<i>öör</i> _i -RX	bey	
SBJ _i	<i>öör</i> _i	bey-RX	(14)
SBJ _i		bey-RX	(13)

(45) Distributional paradigm of RX in possessive NPs (as well as possessive PPs)

NOM	GEN	ACC	Example
NP2 _i	<i>öör</i> _i -RX	NP _j	(21, 23, 25)
NP2 _i	<i>öör</i> _i	NP _j -RX	(22, 24, 26)
NP2 _i		NP _j -RX	(22, 24, 26)

(46) Distributional paradigm of RX in NPs with relative clauses

NOM	GEN	ACC	Example
NP2 _i	<i>öör</i> _i -RX	NP _{RELj}	(37)
NP2 _i	<i>öör</i> _i	NP _{RELj} -RX	(38)
NP2 _i		NP _{RELj} -RX	(38)

(47) Distributional paradigm of RX in clausal complements without *gež*

NOM	GEN	ACC	Example
SBJ _i	<i>öör</i> _i -RX	V	(35)
SBJ _i	<i>öör</i> _i	V-RX	(36)
SBJ _i		V-RX	(36)

It then follows that CR feeds RX and DR (or switch reference/SR) blocks it. Importantly, RX is licensed by a local subject that is involved in coindexation. In what follows, we test this result.

In (48), *muur* ‘cat’ is possessed by the embedded genitive subject *Bat*, which is located in

⁷ Case suffixes are all left out in these tables.

the same clause as *muur*. RX is thus licensed by *Bat* and present on *muur*. Note that this RX is not licensed by the matrix subject *Baatar* because *muur* ‘cat’, the host of RX, is not an argument of the matrix verb; that is, the host of RX and the matrix subject are not coarguments and are not in the same clause. Therefore, DR between the matrix subject and the embedded subject or between the matrix subject and the host of RX is not relevant here and does not block RX.

(48) Baatar Bat-in muur-(ϕ)-aa üns-san-ig har-san.
 Baatar-NOM Bat-GEN cat-ACC-RX kiss-PST-ACC see-PST
 ‘Baatar saw that Bat kissed his cat (= Bat’s cat).’

In (49), RX on *muur* is licensed by the embedded subject *bagš* ‘teacher’, not by the matrix subject *Baatar*. In contrast, RX on the embedded subject *bagš* is licensed by the matrix subject because there is a possessive relation between them.

(49) Baatar bagš-in-aa muur-(ϕ)-aa üns-san-ig har-san.
 Baatar-NOM teacher-GEN-RX cat-ACC-RX kiss-PST-ACC see-PST
 ‘Baatar saw that his teacher kissed his cat (= teacher’s cat).’

The same holds true in sentences containing a relative clause. Let us illustrate this using non-accusative elements as in (50) and (51), showing that this property is not restricted to accusative elements.

(50) Baatar Bat-in bagš-aas-aa zeel-sen nom-(ϕ)-ni unš-san.
 Baatar-NOM Bat-GEN teacher-ABL-RX borrow-PST book-ACC-RX read-PST
 ‘Baatar read the book that Bat borrowed from his teacher (= Bat’s teacher).’

(51) Baatar bagš-in-aa hüü-d-ee ab-san nom-(ϕ)-ni unš-san.
 Baatar-NOM teacher-GEN-RX son-DAT-RX buy-PST book-ACC-RX read-PST
 ‘Baatar read the book that his teacher (= Baatar’s teacher) bought for his son (= the teacher’s son).’

In conclusion, RX is licensed by a local subject but blocked by DR. The requirement of CR indicates that RX is a reflexive marker. The optional absence of *öör-in* indicates that an anaphor is not the hallmark of reflexivity in Mongolian.

3.2. Licensing domain of RX

As seen in section 3.1, RX is licensed by a local subject. This subsection elaborates on this. As exemplified in (52), RX on *öör* is licensed by the embedded subject *Dorž*, which is indexed with *öör*.

(52) Baatar_i Dorž_j-ig öör*_{i/j}-ig-öö šüümjil-sen-ig har-san.
 Baatar-NOM Dorž-ACC self-ACC-RX criticize-PST-ACC see-PST
 ‘Baatar saw that Dorž criticized himself (= Dorž).’

If *öör* is not indexed with the embedded subject, but with the matrix subject *Baatar*, RX is not present on *öör*.

(53) Baatar_i Dorž_j-ig öör_{i/*j}-ig-ni šüümjil-sen-ig med-ne.
 Baatar-NOM Dorž-ACC self-ACC-RX[3] criticize-PST-ACC know-PRS
 ‘Baatar knows that Dorž criticized him (= Baatar).’

The same holds true of the case in which the embedded clause is headed by the complementizer *gež*, as exemplified in (54) and (55).

(54) Baatar_i Dorž_j-ig öör_{i/*j}-ig-öö šüümjil-sen gež hel-sen.
 Baatar-NOM Dorž-ACC self-ACC-RX criticize-PST COMP say-PST
 ‘Baatar said that Dorž criticized himself (= Dorž).’

(55) Baatar_i Dorž_j-ig öör_{i/*j}-ig-ni šüümjil-sen gež hel-sen.
 Baatar-NOM Dorž-ACC self-ACC-PSS[3] criticize-PST COMP say-PST
 ‘Baatar said that Dorž criticized him (= Baatar).’

Note that where RX is blocked, *-ni*, which is a marker of possessive (not reflexive or reflexive-possessive) relation, is needed. *-Ni* is not licensed by a subject of any type and is not subject to clause boundaries. Note that *öör* with *-ni* is coindexed with the matrix subject *Baatar*. However, this does not mean that the matrix subject licenses *-ni*. This is because the host of *-ni* can also be possessed by an element other than the matrix subject and is not obligatory, as shown by the following example, in which *-ni* is glossed by “PSS[3]” (for “third person possessive marker”).⁸

(56) Baatar_i Dorž-in hüü-ig(-ni) šüümjil-sen.
 Baatar-NOM Dorž-GEN son-ACC-PSS[3] criticize-PST
 ‘Baatar criticized Dorž’s son.’

This said, the licensing domain of RX is a minimal phrase in which the coindexed arguments, one of which must be a subject. This connects to the discussion on binding domain in section 6.

4. Reflexivity as a Spec-Spec relation

I use the word “pivot”, used as a term by Striling (1993: 6), to refer to an element that is related to another element by conjoint reference. There are thus two pivots, one high and another low, for conjoint reference to hold. As seen in section 2, the high pivot always a subject and the low pivot may be a subject, a possessor, or an object. That is, there are three kinds of coreferential relations: subject-subject relation (SSR), subject-possessor relation (SPR) and subject-object

⁸ Unlike RX, PPS[3] is attached to a third person element. Mongolian also has PPS[1] and PSS[2]. For relevant descriptions, see Janhunen (2012) and Kullmann and Tserenpil (2015) among many.

relation (SOR). What is the common property of SSR, SPR and SOR? What is the most basic relation that underlies SSR, SPR and SOR, whereby they are expressed by the common marker RX? This issue naturally relates to what reflexivity is.

In line with extensive discussion in the literature (Faltz 1977; Reuland and Reinhart 1993; Kazenin 2001; Huang 2005; Reuland 2011a, and many), an informal characterization of reflexivity would be like (57) below.

(57) Reflexivity is a dependency between two arguments of a predicate that assigns external and internal roles to them.

One of the most influential studies on reflexivity is Reinhart and Reuland (1993) as well as their subsequent research. Reuland and Reinhart (henceforth, R&R) defined reflexivity as follows.

(58) A predicate is reflexive iff two of its arguments are bound by the same λ -operator. (Reuland 2014: 11)

Roughly speaking, reflexivity is obtained between a subject and an object, according to (57) and (58). Accordingly, only SOR among the three relations noted above would qualify as reflexivity.

However, as suggested by the Mongolian data discussed in section 3, reflexivity is not necessarily SOR. Reflexivity as defined by R&R remains one in the narrowest sense. Note that complex anaphors are structurally possessive DPs, as indicated by the bodypart anaphor *öör-in bey* ‘self’s body’. In a looser sense, *bey*, as the lexical core of the anaphor, is possessed by *öör*, which carries the referential meaning of the anaphor, as illustrated below.

(59) Baatar_i öör_i/*_j-in bey-ee šüümjile-sen.
 Baatar-NOM self-GEN-body-ACC-RX criticize-PST
 ‘Baatar criticized himself.’ (= (13))

In this sense, structurally, *bey* is N, which is selected by *öör-in*, which is a possessive determiner D, as represented below.

(60) [_{XP} ... subject ... [_{DP} possessor [_D D [_N]]]

(61) [_{XP} ... Baatar ... [_{DP} öör [_D -in [_N bey]]]

This suggests that the bare anaphors *öör* and *bey*, in (62) and (63) are in fact also realizations of the possessive structure in (59), where certain syntactic elements are not realized as morpho-phonological items. For *öör*, D and N have no content at PF, and for *bey*, Spec-DP and D do not have.

(62) Baatar_i öör_i/*_j-ig-öö šüümjile-sen.
 Baatar-NOM self-ACC-RX criticize-PST
 ‘Baatar criticized himself.’ (= (12))

(68) [_{XP} Pasha_j [_{VP} love [_{DP} cat_i [_{RC} [_{VP} she_j [_{V'} ____i]]]]]]]]

Note that we are not trying to derive possessive DPs by relativization. Instead, we are representing their logical syntax. Given this, reflexivity arises between a subject and a possessor, which is the subject of the semantic predicate *HOLD* (or *POSS*), but not between a subject and a possessum. Specifically, the following is obtained.

(69) Reflexivity arises between specifiers, not between a specifier and a complement.

This brings SSR, SPR and SOR under a unified frame, which are distinct instances of the Spec-H-Comp structure, as illustrated below.

(70) [_{XP} Spec(=SBJ=high pivot) ... [_{HP} Spec(=low pivot) [_{H'} H [Comp]]] ...] (for all)
 a. [_{VP} SBJ_i ... [_{VP} SBJ_i [_{V'} v [OBJ]]] ...] (for SSR)
 b. [_{VP} SBJ_i ... [_{DP} PSSR_i [_{D'} D^[HOLD] [N]]] ...] (for SPR and SOR)

Thus, both possessive predicates as in (71) and anaphoric predicates as in (72) can be successfully captured by (73b) in a unified way.

(71) Pasha_i loves her_i cat.

(72) Pasha_i loves her_i-self.

(73) A unified structure of anaphoric and possessive reflexives (informal):
 a. [_{VP} subject_i ... [_{DP} possessor_i [_{D'} D possessum]]] (D=*HOLD* in logical syntax)
 b. (69): [_{VP} Pasha_i love ... [_{DP} SHE_i [_{D'} 's [N cat]]] ...] ('s=*HOLD*)
 c. (70): [_{VP} Pasha_i love ... [_{DP} SHE_i [_{D'} 's [N self]]] ...] ('s=*HOLD*)¹¹

The following is an elaboration on the structure of anaphors.

(74) [_{VP} Pasha_i love ... [_{DP} SHE_i [_{D'} 's [N self]]] ...]
 a. D (=‘s) is a possessive determiner head in narrow syntax and a semantic predicate *HOLD* in logical syntax;
 b. The referential part, that is, phi-features, occupy Spec-DP;
 c. [phi] on Spec and [poss] on D (probably plus a Case feature) are spelled out as *her*;
 d. Two predicates (one being matrix and syntactic, another being embedded and semantic) are involved in the sentence;
 e. Neither of the two predicate is reflexive;
 f. Reflexivity obtains between the matrix subject *Pasha* and the logical subject *SHE*, which is contained by the DP and therefore is assigned no semantic role by the matrix predicate and is not bound by its λ -operator.

¹¹ *Him* in *himself* is not a genitive form regardless of its status as a possessor. This has to do with the way features such as phi and case are assembled in syntax and particular spell-out rules. See Bai (2024b) for a detailed discussion.

It then follows that the index-bearer is not the anaphor itself but rather the element in its Spec in a strict sense. The structure of Mongolian anaphors in (75) and (76) is represented in (77).

(75) Baatar öör-in-bey(- ϕ)-ee šüümjil-sen.
 Baatar-NOM self-GEN-body-ACC-RX criticize-PST
 ‘Baatar criticized himself.’ (=14)

(76) Baatar (ööör-in) nom(- ϕ)-oo mart-san.
 Baatar-NOM self-GEN book-ACC-RX forget-PST
 ‘Baatar forgot his own book.’ (=22)

(77) A unified structure of anaphoric and possessive reflexives (informal):

- a. [_{VP} subject_i ... [_{DP} possessor_i [_{D'} D possessum]]] (D=*HOLD* in logical syntax)
- b. (75): [_{VP} Baatar_i ... [_{DP} öör_i [_{D'} -in [_N bey]]] ... v] (in=*HOLD*)
- c. (76): [_{VP} Baatar_i ... [_{DP} öör_i [_{D'} -in [_N nom]]] ... v] (in=*HOLD*)

Combining this with the fact that subjects are Specs and embedded subjects can be coindexed with matrix subjects (sections 2.3 and 3), we can conclude that reflexivity is a spec-spec relation, not a spec-comp relation.¹²

5. Internal organization of anaphors and possessive pronouns

In this section, we elaborate on the internal structure of anaphors on the basis of the discussion in section 4. The core idea is that anaphors as well as possessive pronouns are formed in a portmanteau pattern. Technically, (an element with) [ϕ] sits in Spec, [poss] on D, and [n] on Comp, in the possessive DP structure, as represented below.

(78) [_{DP} [ϕ] [_{D'} [poss] [_N [n]]]]

To elaborate on this, we need to look at first how possessive pronouns are derived, taking English as an example.

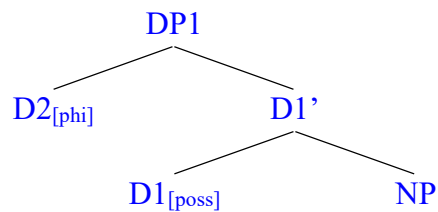
Previous studies on English (Abney 1987; Corver 1992; Chomsky 1995b; Munn 1995) suggest that possessors are merged in the specifier of DP, whose head D may be realized as *s*. Hudson (2003) and Deal (2006), however, argue that English possessive pronouns are portmanteau morphemes, which arise as result of morphological mergers, spelling out multiple syntactic nodes. Davis (2023) argues that English possessive pronouns are lexical realizations of ϕ -features ([ϕ]) and a possessive feature ([poss]), which enter the derivation separately but undergo clustering, ending up in a single D head. Davis (2023) assumes that either fusion (Halle and Marantz 1993; Embick and Marantz 2008) or spanning (Bye and Svenonius 2012; Merchant 2015; Haugen and Siddiqi 2016; Svenonius 2016) plus vocabulary insertion may lead to creation of possessive pronouns. The portmanteau formation of possessive pronouns prevents

¹² See Bai (2024b) for more details of reflexivity characterized in this way.

the D head from being realized independently, which, Davis (2023) argues, is the reason for why English possessives do not allow extraction out of them. Davis (2023) also assumes with Postal (1969), Abney (1987), Baltin (2012) and Stanton (2016) that (English) pronouns, lacking a lexical core (Wiltschko 1998), are non-projecting determiners.

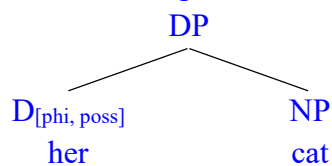
Specifically, possessive pronouns spell out the fused outcome of D and the material in its Spec. Based on a bare phrase structure theory of labeling (Chomsky 1995a, b), in which non-projecting heads are equivalent to phrases, Davis (2023) assumes that a bare determiner D2 occupies Spec of D1. Applying this analysis to *her cat*, we obtain (79).

(79) Initial structure of *her cat*



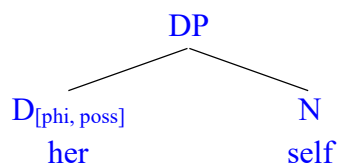
After (79) is built, D2 and D1 undergo fusion,¹³ thereby creating a single terminal node, where the features on D1 and D2 are clustered. The vocabulary insertion (VI) rule then applies, with the morpheme *her* is chosen for D, as in (80).

(80) Fusion of possessive D and its Spec



Note, however, that the above structure represents the non-anaphoric use of *her*, as in *Pahsa_i loves her_j cat*, in which no reflexivity is obtained. Regarding the anaphor *herself*, we obtain the following structure, in which D_[phi] and D_[poss] undergo fusion, which is followed by spanning. Ultimately, *herself* spells out two terminal nodes, namely, D_[phi, poss] and N.

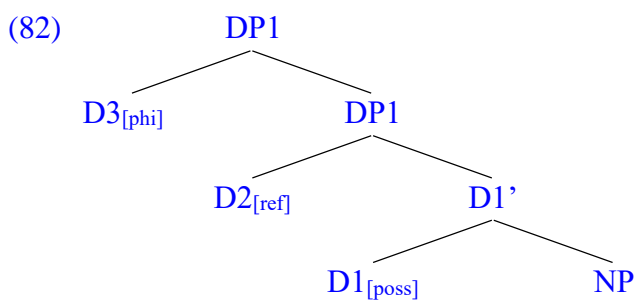
(81) Fusion of possessive D and its Spec



But what about *her* in its anaphoric use, as in *Pahsa_i loves her_i cat* and possessive anaphors in many languages? It has been claimed that English does not have a possessive anaphor, also known as reflexive possessive (Truswell 2014). However, many other languages have one, e.g., Chinese *zi-ji de* ‘one’s own’ and Japanese *kare zi-sin no* ‘his own’. Let us first derive *her* in its

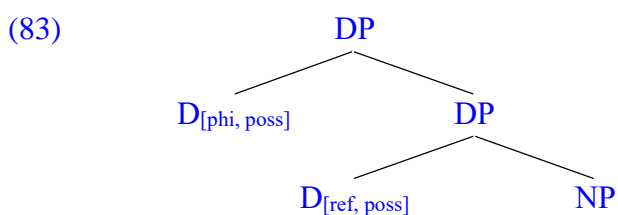
¹³ *Fusion* here, a term of Distributed Morphology (Halle and Marantz 1993; Embick and Marantz 2008), refers to a syntactic operation that gets two (or more) nodes united into one before the application of the morphological operation VI.

anaphoric use. The two instances of *her*, I argue, are formed in the same pattern but differ in their feature organization. If possessive pronouns are realizations of D with [phi] and [poss], it is reasonable to say that possessive anaphors (reflexive possessive pronouns) are also realizations of D with appropriate features, among which there are [phi] and [poss]. The third feature is supposed to be (unvalued) [ref], for reflexivity. I assume that there is another bare D that bears [ref], which is stored in the lexicon, along with [phi] and [poss]; they are not added during the process of derivation in syntax, complying with Inclusiveness Condition (Chomsky 1995). Because D with [poss] should be the head of a possessive phrase, D with [ref] as well as D with [phi] sits in Spec of D with [poss] in the initial structure, as shown below. The features [phi], [ref] and [poss] enter into the derivation separately. That is, anaphors, which encode [ref] and [poss] as well, are often deficient in phi-features (Reuland 2018: 2) and not all anaphors have [poss].



Note that four kinds of sets come out of these three features, namely, [phi, ref], [phi, poss], [ref, poss] and [phi, ref, poss], as inputs for clustering. However, clustering of features as well as fusion of heads is not arbitrary. It should be the case that head-head (lateral), spec-head (upward) or head-comp (downward), but not spec-spec, comp-comp or spec-comp, is subject to fusion. Given that D3 and D2 are both specifiers, they do not undergo fusion. That is, [phi] and [ref] do not undergo clustering, with the presence of [poss]. When [poss] is present with other features, it is subject to feature-clustering. D_[phi] and D_[ref] may undergo fusion if one of them is the head of the relevant DP, with D_[poss] absent. If D_[poss] is absent, no NP is selected by D_[ref]. This means that non-possessive pronouns spell out a D head that lacks a lexical core (Postal 1969; Abney 1987; Wiltschko 1998; Baltin 2012; Stanton 2016).

Regarding the above structure, both fusion applies twice. That is, the ultimate structure looks like (83), which is a layered DP structure. D_[phi, poss] is spelled out by *her*. What about D_[ref, poss]? I argue that it is spelled out by *own*. This means that *own* is a possessive anaphor just like, for example, Mongolian *öör-in*. This said, English has a reflexive possessive pronoun, contrary to the previous claim.



Note that *self's* does not spell out D_[ref, poss], because *self* is chosen for N, as in (81). This would

give one an impression of the lack of possessive anaphor in English.¹⁴ *Own*, however, may be absent at PF, resulting in *her* in the anaphoric use, as in *Pahsa_i loves her_i cat*.

(84) *Pahsa_i loves her_i (own) cat*.¹⁵

In Mongolian, $D_{[\text{phi, poss}]}$ and $D_{[\text{phi, poss}]}$ are spelled out by *tüün-ne* ‘her/his’ and *öör-in* ‘self’s/own’, respectively. However, *tüün-ne* is mostly absent at PF, arguably because of a language-specific morpho-phonological principle, which favors a more economical spell out. When it produces a distinctive interpretation such as an intensive interpretation, *tüün-ne* is most likely overt. If a distinctive interpretation is not obtained, the presence of *tüün-ne* lowers the acceptability of the sentence. Similar facts are observed in languages such as Chinese, in which *ta* ‘he/she’ in *ta zi-ji* or *ta zi-ji de* ‘her/his own’ may be absent if there is no semantic contribution it can make.

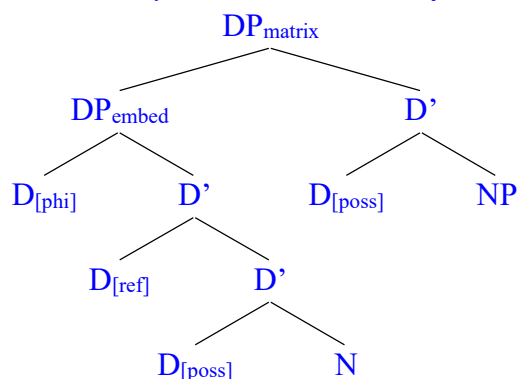
(85) #Baatar (tüün-ne) öör-in nom(- ϕ)-oo mart-san.
 Baatar-NOM 3SG-GEN self-GEN book-ACC-RX forget-PST
 ‘Baatar forgot his own book.’

Now we discuss the structure of the whole possessive DP structure containing a possessive anaphor. We clarify this using Mongolian complex anaphor *öör-in bey-in*.

(86) Baatar öör-in bey-in-ee čadal-ig šalg-san.
 Baatar-NOM self-GEN body-GEN-RX strength-ACC examine-PST
 ‘Baatar examined his own strength.’

Two possessive D heads are involved in this structure. This means that the DP headed by the embedded $D_{[\text{poss}]}$ is located in Spec of the matrix $D_{[\text{poss}]}$.

(87) Initial structure of *öör-in bey-in čadal* ‘self’s body’s strength’

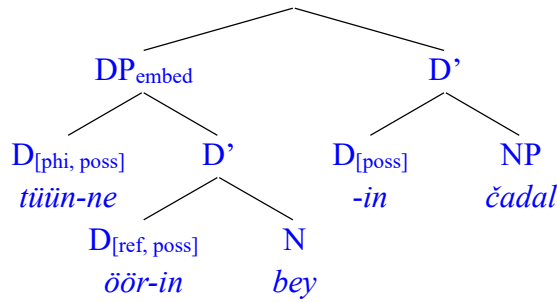


(88) Ultimate structure; lexical insertion applied

DP_{matrix}

¹⁴ Bai et al. (2024) reasons out that *own* in English is in fact a reflexive possessive pronoun (possessive anaphor).

¹⁵ This means that such sentences are subject to Principle A, not Principle B, with no violation of it.



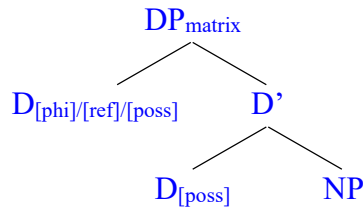
Due to economy principles of morpho-phonology such as (89), a spell-out with the smallest number of syllables, without affecting the possessive reflexive semantics, is favored.

(89) Use as few morphemes as possible, where other principles, if any, leave the choice open.

Consequently, either *öör-in* is the most likely ultimate realization of the embedded DP. *Bey-in* is also a likely option. However, due to the degree of lexicalization of *bey* as a body anaphor and the retention of the prototypical meaning “body” to some extent, *bey-in* is less likely to be used in possessive DPs expressing an alienable possession as in *my book*. With inalienable possession as in *my strength*, *bey-in* is more likely to be used, as in *bey-in čadal*, which literally means “body’s strength”.

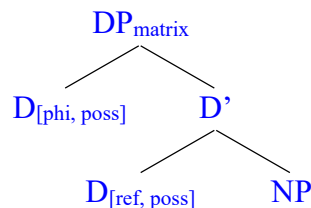
Importantly, since the embedded DP (DP_{embed}) as a whole can act as a simple element with [phi] or [ref], as represented below.

(90)



This means that DP_{matrix} as a possessive DP in fact represents the first phase formation of a bare phrase (or a bare D) located in Spec of a matrix $D_{[\text{poss}]}$. This in turn means that when [phi], [ref], and [poss] are selected from the lexicon into Spec of the $D_{[\text{poss}]}$, what would otherwise spell out the embedded DP (DP_{embed}) in (88) as a whole spells out the $D_{[\text{phi}]}$ or $D_{[\text{ref}]}$ part of $D_{[\text{phi}, \text{poss}]}$ or $D_{[\text{ref}, \text{poss}]}$ in (91), which is the ultimate structure of (90).

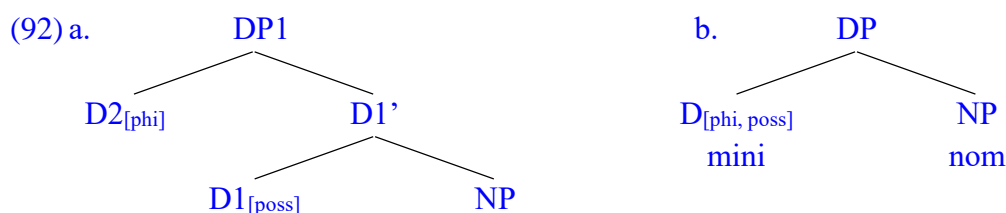
(91)



The possessive feature [poss] on D in the first phase structure is thus squeezed out in the ultimate structure of the matrix DP. Therefore, DPs such as (*mini*) *öör-in nom* ‘self’s/own book’

have either of the structures in (88), which is the full structure containing the first phase derivation, and (91), which is the very ultimate structure.

Regarding non-reflexive possessive DPs such as *mini nom* ‘my book’, the following obtains.



After (92a) is built and before the VI is applied, D2 and D1 undergo fusion, thereby creating a single node, with [phi] and [poss] clustered on it, as in (92b). Then, the VI applies and *mini* is inserted into $D_{[\text{phi}, \text{poss}]}$.

Having elaborated on the internal organization of anaphors, we move on to how binding takes place during the process of their portmanteau derivation.

6. Explaining reflexive binding

We first look at how RPP with RX as its hallmark can be identified as Binding Principle A in section 6.1, and implement binding in section 6.2. At last, we discuss the categorial status and position of RX in section 6.3.

6.1. Reflexives-Possessive Principle as Binding Principle A

For our purposes in this section, three properties of RX are particularly notable for RPP. **First**, RX is never attached to a nominative phrase.

(93) Attaching to nominative disallowed:

- a. *Baatar-in bagš-aa hičeel zaa-san.
 Baatar-GEN teacher-NOM-RX lesson-ACC teach-PST
 ‘Baatar’s teacher taught a lesson.’
- b. *Nom(- ϕ)-oo huučir-san.
 book-NOM-RX become old-PST
 ‘(Someone’s) book got aged.’

Second, it is licensed by a local subject, not by a non-local subject. This is illustrated by the examples in section 3, two of which are repeated below.

(94) Licensed by local subject:

- a. Baatar Bat-in muur-(ϕ)-aa üns-san-ig har-san.
 Baatar-NOM Bat-GEN cat-ACC-RX kiss-PST-ACC see-PST
 ‘Baatar saw that Bat kissed his cat (= Bat’s cat).’ (=48)
- b. Baatar_i Dorž_j-ig öör*_{i/j}-ig-öö šüümjil-sen-ig har-san.

Baatar-NOM Dorž-ACC self-ACC-RX criticize-PST-ACC see-PST
 ‘Baatar saw that Dorž criticized himself (= Dorž).’

Third, it is blocked by switch reference,¹⁶ as noted in section 3.1. For another example, in (95a), the book is possessed by the teacher, not Baatar, and therefore the clause, in which *Baatar* is the subject, does not serve as the licensing domain of RX on *nom*, leading to the ungrammaticality.

(95) Disjoint reference disallowed:

- a. *Baatar bagš-in nom(-ig)-oo mart-san.
 Baatar-NOM teacher-GEN book-ACC-RX forget-PST
 ‘Baatar forgot his teacher’s book.’
- b. *Baatar bagš-in ög-sön nom-ig-oo mart-san.
 Baatar-NOM teacher-GEN give-PST book-ACC-RX forget-PST
 ‘Baatar forgot the book the teacher gave him.’

This means that the possessor *bagš* ‘teacher’ blocks the licensing of RX by the subject. In this sense, the possessor is a potential licenser of RX. However, the possessor is not a syntactic subject and is not assigned an external role by any verb. The external role assigner *marta* ‘forget’ has a subject but that subject is blocked by the possessor. Thus, the licensing domain of RX fails to obtain.

In (95b), *nom* ‘book’ wants to be marked by RX, but it cannot because the licensing domain fails to obtain. Note that the potential licensing domain is the clause that contains the matrix subject *Baatar* and the syntactic predicate *marta* ‘forget’. However, *Baatar* is not the subject closest to the host of RX. The relative clause cannot be a licensing domain, although it has a subject and a predicate. This is because there is not an element that can host RX within the relative clause. Note that the host of RX, namely, *nom* is located within the matrix clause and outside the relative clause. It can be said that it has a trace in the object position in the relative clause. However, a trace as an empty element, cannot host RX. That is, there is no way for RX to be licensed by the relative subject. Another way of spelling out this is that *nom* is possessed by or related to the relative subject *bagš* ‘teacher’ and therefore is subject to marking by RX. However, after relativization, *nom* is now within the matrix clause, and is related to the matrix subject by virtue of being acted on by it. Unfortunately, LF fails to dissolve the complex situation in which the same book is related to two different licensers. The book would have two “possessors” in a broader sense and LF cannot determine which one “possesses” the book. All in all, relicensing of RX by a different subject leads to the failure of RX.

Importantly, these properties resemble the properties of Binding Principle A — an anaphor must be bound within its binding domain. Three uncontroversial facts about Binding Principle A are notable in English and many others. **First**, the reflexive *self* is out in nominative

¹⁶ This is a typical property of RX as a anaphoricity/reflexivity marker, which entails the explicit or implicit existence of an anaphoric element within the same nominal domain as it, given Reuland’s (2014: 22) description that the traditional diagnostic that anaphors, unlike pronouns (his pronominals), do not allow split antecedents follows as a consequence of the analysis.

position.¹⁷ **Second**, anaphors, which contain *self*, are bound by a local subject.¹⁸ **Third**, rebinding is disallowed. For example, in (97), *herself* is bound by *Martha*, which is a local subject, within the DP and is inaccessible for rebinding by *Heidi* within the CP, a larger domain containing a potential antecedent.

(96) Attaching to nominative disallowed:

*Chris_i said [_{CP} that himself_i was appealing].

(97) Bound by local subject:

John made her_i love herself_i.

(98) Rebinding disallowed:

[_{CP} Heidi_i believes [_{DP} Martha_j's description of herself_{*i/j}]].

The following description of (95) and (98) helps clarify the resemblance between the third property of RPP and that of Principle A. In (95), *bagš* ‘teacher’, the subject of the relative clause, is not coreferential with *Baatar*, the matrix subject, which leads to the failure of RPP, with RX as its hallmark. This is because *nom* ‘book’ is first related to (possessed by, loosely speaking) the subject of the my clause, *bagš* ‘teacher’,¹⁹ before the merger of the matrix verb, and then it (*nom* ‘book’) enters a new relation, but this time with the matrix subject. That is, RPP applies to the same item twice, leading to ungrammaticality. In (98), *Martha* binds (*her* in) *herself* and therefore there cannot be another NP, say *Heidi*, to bind it. If *herself* is bound twice, the derivation crashes at LF.

These facts suffice to illustrate that RPP in Mongolian is a special type of binding, with RX behaving in a similar way to *self*, as described below. Binding Principle A with *self* can be viewed as a type of simplex dependence in the sense that in *John loves pictures of himself*, for example, *John* and *him* in the anaphor *him-self* are coreferential, where *self* is employed as a marker of the coreferentiality/reflexivity. In contrast, RPP is a complex dependence in the sense that in, for example, (100), *Baatar* and the pronoun *öörin* ‘own’, the genitive form of *öör* ‘self’, are coreferential, where RX is employed as a marker of the coreferentiality/reflexivity. Morphologically, *self* is present on the possessor, while RX is present on the possessum.

(99) John_i loves pictures of him_i-self.

(100) Baatar_i öör_i-in nom(- ϕ)-oomart-san.
Baatar self-GEN book-RX forget-PST
‘Baatar forgot his own book.’

¹⁷ Notice that sentences like the following do not serve as counterexamples of the conclusion that *self* is excluded in a nominative position. In (i), *himself* arguably functions as an adjunct rather than an argument.

(i) I expected Bill_i to win even when he_i himself didn't. (Culicover and Jackendoff 2005: 297)

¹⁸ So-called “local subject” includes a nominative or accusative subject of my clause and a genitive subject of nominalized “predicate” such as *description*.

¹⁹ In the surface, this subject is genitive but not nominative because it is not a matrix subject. *Nom* ‘book’ itself remains bare, without being attached by RX. Notice that RX is attached to the whole DP.

For Binding Principle A with *self*, a simplex dependence, the binder and the bindee are present simply as an antecedent, e.g., *John* in (99), and the accusative pronoun in an anaphor, e.g., *him* in *him-self*.²⁰ In contrast, for RPP, a complex one, the binder is present as a nominative subject, e.g., *Baatar* in (100), and the bindee is the genitive pronoun *öör-in*, which may be absent at PF. Most importantly, both the reflexive markers *self* and RX are attached only to non-nominative elements that resist rebinding/relicensing and both are bound/licensed by a local subject.

6.2. Implementing binding

The analysis of binding to propose in this subsection results from the combination of the “portmanteau-formation” analysis and the feature-valuation analysis (Reuland 2019). Reuland (2019) presents a line of reasoning in which binding is Agree, which is an operation for DP subjects to value phi-features on anaphors. Reuland (2019) assumes that phi-features of anaphors start from the specifier of TP in a binding context since Agree requires tense as well as case to participate in it. This is a different approach than Kratzer (2009), who argues that phi-features of anaphors start out from the specifier of vP, as we reviewed in section 1. For Kratzer (2009), binding is not feature-valuation, but rather feature-transmission, which is not Agree per se. The essential difference between feature-valuation and feature-transmission is that for the former, unvalued phi-features are encoded by anaphors from the beginning, while for the latter, anaphors come to have phi-features after they receive them from a local subject. Rooryck and Vanden Wyngaerd (2011) also assume that phi-features of anaphors originate from a local subject in Spec of vP. Rooryck and Vanden Wyngaerd (2011) also argue that phi-features are specified for anaphors via Agree, which takes place between anaphors and local subjects merged in Spec of vP. Rooryck and Vanden Wyngaerd (2011), however, assume that anaphors are not bindees but binders, whereas local subjects are bindees, not binders. In this paper, I assume with Reuland (2019) and Rooryck and Vanden Wyngaerd (2011) that binding is feature-valuation (Agree), and with Kratzer (2009) and Rooryck and Vanden Wyngaerd (2011) that vP, as a local domain, is crucial for feature exchange in binding. Following Reuland (2019) and Kratzer (2009), I argue that anaphors are always bindees, not binders. Tying this with the “portmanteau-formation” analysis pursued in this paper, we obtain the following, where [phi] sits on D from the beginning and gets valued when the structure is built up to involve merger of the subject in Spec-vP.

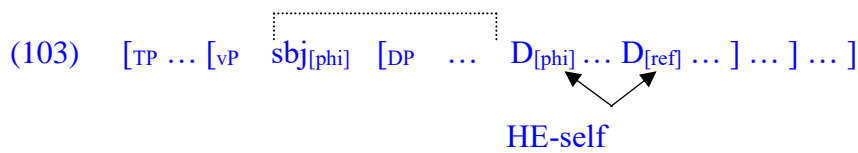
(101) [TP ... [vP sbj_[phi] [DP ... D_[phi] ... [NP ...] ...] ...] ...]

With the establishment of binding, the predicate concerned is a reflexive predicate, which comes to be marked by an appropriate morpheme, in accordance with Principle B advocated by R&R (1993), Reuland (2014) and Reinhart (2016) among many.

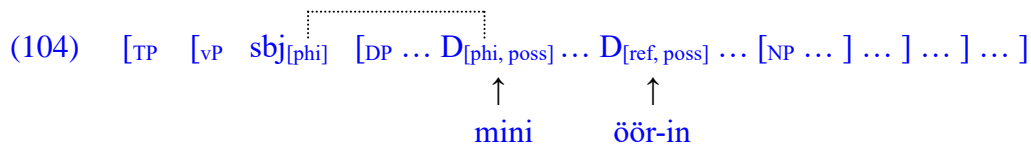
(102) Condition B: A reflexive semantic predicate is reflexive-marked. (R&R 1993: 678)

In English, for example, spanning applies to [phi] and [ref], and *HE-self* is chosen for vocabulary insertion into the spanning.

²⁰ However, we will see the accusative pronoun in anaphors are not the only type of bound indexicals in English.



The case in which [poss] is involved is illustrated by the Mongolian reflexive possessive pronoun (*mini*) *öör-in*. Fusion, not spanning, applies to [poss] and [phi] as well as to [poss] and [ref], followed by VI, which chooses *mini* and *öör-in* for the relevant D heads, respectively.



However, D_[ref, poss] is irrelevant to the implementation of binding; it is ([phi] in) [phi, poss] that comes to be relevant. After valued, [phi, poss] is assigned the morpheme *mini*, for example. With binding established, [ref] in [ref, poss] gets evoked and a reflexive interpretation is produced. The reflexive interpretation must come with a corresponding morpheme, complying with Condition B in (102). That corresponding morpheme comes as what we call an anaphor, *öör* here in Mongolian.

The proposed analysis thus successfully accounts for binding of accusative anaphors and genitive anaphors in possessive DPs straightforwardly. Importantly, it is also applicable in cases in which RX interacts with embedded (in a broad sense) clauses. Recall that the subject of a complement clause without *gež* is the genitive anaphor *öör-in* and that the subject of a complement clause with *gež* is the accusative *öör-ig*, as exemplified below.

(105) Baatar öör-ig-öö buruud-san gež med-sen.
 Baatar-NOM self-ACC-RX go wrong-PST-RX COMP know-PST
 ‘Baatar realized that he was wrong.’ (=33)

(106) Baatar (öör-in) buruud-san-aa meder-sen.
 Baatar-NOM self-GEN go wrong-PST-RX admit-PST
 ‘Baatar admitted that he was wrong.’ (=36)

We first need to determine the position of the genitive and accusative subjects. Fong (2019) observed that the accusative subject of *gež* clauses is raised to Spec-CP, thereby becoming accessible from the matrix *v*. Thus, *öör* of *öör-ig-öö* in (105) is within the binding domain and bound by the matrix subject in Spec-vP, as illustrated below.



Note, however, that *öör* can still be coindexed with the matrix subject when it is within the embedded TP, as shown below.

- (108) Baatar_i Dorž_j-ig öör_{i/*j}-ig-ni šüümjil-sen gež hel-sen.
 Baatar-NOM Dorž-ACC self-ACC-PSS[3] criticize-PST COMP say-PST
 ‘Baatar said that Dorž criticized him (= Baatar).’

Öör is an object and follows the embedded subject *Dorž*, suggesting that it is inside TP. Interestingly, *öör* is not marked by RX, but by the third person possessive suffix (PSS[3]) *-ni*. PSS[3] here serves to indicate that *öör* refers to a person other than *Dorž*. It does not indicate that *öör* refers to the matrix subject *Baatar*. Therefore, reflexivity is not obtained between them but coreferentiality is. Recall that reflexivity is a dependency that arises between specifiers (section 4). Even reflexivity defined by R&R in a narrow sense is not obtained between *öör* and *Baatar*.

- (109) A predicate is reflexive iff two of its arguments are bound by the same λ -operator.
 (Reuland 2014: 11)

There is no such predicate in (108); neither is a reflexive marker such as RX there. However, *öör* indeed refers back to the matrix subject *Baatar* and is bound by it. This instantiates the case violating Principle A of SBT. A similar fact is observed in Chinese.

- (110) Zhangsan shuo Lisi piping le ziji.
 Zhangsan say Lisi criticize PST self
 ‘Zhangsan said that Lisi criticized him (=Zhangsan or Lisi)’

It has sometimes been claimed that this is a typical example of long-distance binding. However, the complex anaphor *ta ziji* cannot be bound by the matrix subject *Zhangsan*.

- (111) Zhangsan shuo Lisi piping le ta ziji.
 Zhangsan say Lisi criticize PST he self
 ‘Zhangsan said that Lisi criticized himself (=Lisi)’

This comparison suggests that [phi] contained in the anaphor must be valued for local-binding to hold. In (111) as well as (108), [phi] remains unvalued by [phi] on the local subject. Therefore, it is subject to indexation with any element with [phi] other than the local subject. Another way of spelling out this is to say that the value of [phi] on the matrix subject just happens to be picked up by the anaphor in the embedded clause, resulting in coreferentiality. However, this coreferentiality is not reflexivity. This is why RX is not present on *öör* in (108). In the Chinese sentence in (111), since [phi] on the anaphor is not valued by the local subject *Lisi*, the anaphor cannot contain the third person singular morpheme *ta*. In contrast, [phi] is spelled out by *ta* and the complex anaphor *ta ziji* refers to *Lisi*.

Similarly, in (112), [phi] on *öör* is valued by that on the embedded subject, leading to both coreferentiality and reflexivity. Therefore, RX, the hallmark of reflexivity, is present on *öör*, which thus refers to the embedded subject, rather than the matrix subject.

- (112) Baatar_i Dorž_j-ig öör_{i/*j}-ig-ni šüümjil-sen-ig med-ne.

Baatar-NOM Dorž-ACC self-ACC-RX[3] criticize-PST-ACC know-PRS
 ‘Baatar knows that Dorž criticized him (= Baatar).’ (=53))

It then follows that when coindexed with matrix subjects, *öör* and *ziji* in embedded clauses are not bound by matrix subjects, given that binding is valuation of [ϕ] in a local domain (Rooryck & Vanden Wyngaerd 2011; Reuland 2014). Therefore, the so-called long-distance binding does not exist in a strict sense. This is compatible with the view that reflexivity is syntactically conditioned by binding (Reuland XXX). In this sense, RPP in Mongolian is indeed a type of binding.

Returning to XXX, *öör-ig-öö* is located on Spec-CP and bound by the matrix subject.

(113) Baatar *öör-ig-öö* buruud-san gež med-sen.
 Baatar-NOM self-ACC-RX go wrong-PST-RX COMP know-PST
 ‘Baatar realized that he was wrong.’

This is exactly what is predicted Bošković’s (2016) formulation.

(114) [A]n anaphor can be bound outside of its own minimal phase XP only if it is located at the edge of the phase (the anaphor then does not really ‘belong’ to phase XP; rather, it belongs to a higher phase). (Bošković’s 2016: 14)

If CP is a phase, then *öör-ig-öö* is at its edge and belongs to the higher phase, being accessible from the matrix clause.

Regarding the genitive anaphor *öör-in* as the subject of embedded clauses, I argue that it is located on Spec-DP that contains a clausal structure.

(115) Baatar *öör-in* buruud-san-aa meder-sen.
 Baatar-NOM self-GEN go wrong-PST-RX admit-PST
 ‘Baatar admitted that he was wrong.’ (=36/106))

Specifically, TP is selected by $D_{[poss]}$ with the *HOLD* semantics. This is plausible given that TPs are subject to nominalization (Kornfilt and Whitman 2011; 2012), as evidenced by cross-linguistic data including English possessive gerund construction and many others.

(116) I learned about John’s smoking stogies. (Abney 1987: 109)

As observed by studies such as Abney (1987) and others, the morpheme *ing* spells out a nominalizing head that selects the verbal core as its complement to form an NP and that the genitive subject occupies the specifier of a D head selecting the NP. In this sense, the genitive subject is some kind of possessor that holds the event as a possessum under its control. Gong (2023) reasoned out that TP nominalization takes place in Mongolian. All this said, I argue that the genitive case marker *-in* in *öör-in* is a realization of the possessive D head, whose Spec is occupied by *öör*.

(117) [TP [vP Baatar_i [DP öör_i D(=in) [TP [vP t_i buruud] -san-aa]] meder] -sen]

To elaborate, a bare D with an unvalued [phi] and [ref] is introduced as an external argument by *v*, and subsequently moves to Spec-DP. Since *öör-in*, located in Spec-DP, is outside of the minimal phase DP (D' traditionally), it is accessible from the matrix clause. This makes it possible that [phi] on *öör* is valued by that on the matrix subject via Agree/binding, thereby evoking [ref]. After fusion applies, VI chooses the morpheme *öör-in* for D_[ref, poss]. D_[phi, poss] is realized as the third person singular possessive pronoun *tüün-ne*, which, however, is not absent at PF and even prevented due to economy principles such as (89). Interestingly, such principles even allow D_[ref, poss] to be absent, as exemplified below.

(118) Baatar buruud-san-aa meder-sen.
 Baatar-NOM go wrong-PST-RX admit-PST
 'Baatar admitted that he was wrong.'

Importantly, binding holds and reflexivity is obtained even when the (genitive) anaphor is not overt. This is why RX is present. Note that the presence of RX on *öör-in* is not favored, arguably because the structure in (88), in which an embedded possessive structure is contained, is less economic and less preferred compared with the structure in (91), which does not contain an embedded possessive structure. What occupies Spec-DP is thus a simple *öör*. If no possessive structure is contained, the semantic predicate *HOLD* does not hold. This means that for *öör-in* therein is not a possessum that can host RX. RX is thus present elsewhere, thus deriving EMC in (41).

The same holds true in the case of relative clauses, in which the relative subject is the genitive anaphor *öör-in*.

(119) Baatar (öör-in) hel-sen üg-ee mart-san.
 Baatar-NOM self-GEN-RX say-PST word-RX forget-PST
 'Baatar forgot the words he said.' (=38)

As shown below, the relative clause is located in Spec-NP, and a bare D with unvalued [phi] and [ref], which is base-generated in Spec-vP, moves out from the clause (TP/RC) to Spec-DP, headed by D_[poss]. Fusion applies so that D_[ref, poss] and D_[phi, poss] are derived. Since [phi] is now within the same domain as the matrix subject, it gets the value of [phi] on the matrix subject and [ref] is evoked. VI applies and *öör-in* spells out D_[ref, poss], as with the case of (117).

(120) [TP [vP Baatar_i [DP öör_i D [NP [TP(=RC) [vP t_i hel] -sen] üg-ee]] mart] -san]

Again, *öör-in* can be absent at PF. The head of the relative clause, which is a TP, not a CP, is a right head and therefore follows any other elements in the DP, being able to host RX.

6.3. Categorical status and position of RX

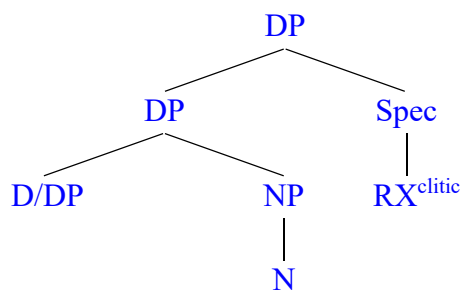
It is quite clear from the above discussion that it is RX rather than the anaphor *öör* that is the hallmark of reflexivity and binding in Mongolian (RPP). Note that *öör* can be absent while RX

is always required in a reflexive context.

Regarding the categorial status of RX, traditional grammarians refer to it as a suffix, without discussing its exact status. Among theoretical studies, Maki et al. (2015: 67ff) labeled RX “pronouns” and Gong (2023) treated it as a D head. Maki et al. (2015: 67ff) proposed that RX undergoes LF movement to its antecedent, e.g., the subject. However, RX can never be an element that can be characterized as a reflexive pronoun. It lacks a specification of any nominal features, which a pronoun may have. Functionally, RX is similar to anaphors (or reflexive pronouns), but it should belong to a different category. According to Gong (2023), RX as a D head selects *nP*, where *öör*, she assumes, is a noun much like a common noun. However, treating RX as D fails to account for several facts, as noted in section 1.

Given that RX is an outermost element in a DP, it is supposed to occupy an adjunct/specifier position. However, this would imply that it is a phrasal element, contra the fact that it does not display any properties displayed by phrases; it lacks a specification of phi-features (person, gender and number) and is unable to move. This in turn indicates that it is a head-like element.²¹ This ambivalent property of RX suggests that it is in fact a clitic-like element. Note that clitics are generated as specifiers of a null head (Bošković 1997b; 2002b). This leads us to the following representation, in which RX sits in the rightmost specifier of DP.

(119) Position of RX as a clitic



In this structure, D/DP takes care of phi-features, which are acquired via feature valuation (Agree) in the case of determinative elements including pronouns such as *ter*, anaphors such as *öör*, and possessive head such as *-in*, and NP/N represents a lexical core, if any, which serves as the host of RX in the linear structure.²²

This said, RX occurs to the right of N, *nom* here, as in (120).

- (120) Baatar öör-in nom(- ϕ)-oo mart-san.
 Baatar-NOM self-GEN book-ACC-RX forget-PST
 ‘Baatar forgot his own book.’

However, as exemplified below, RX can also occur to the left of N.

- (121) Baatar öör-in-öö nom-ig mart-san.

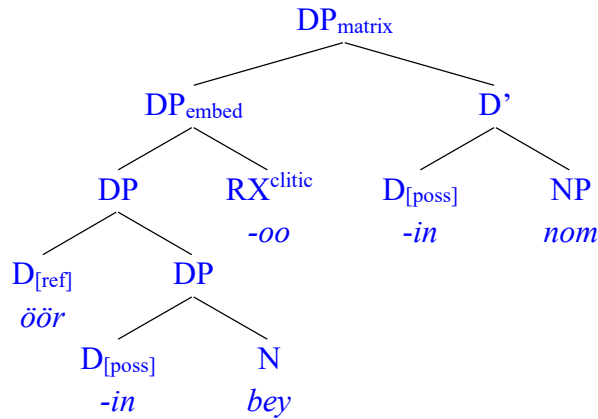
²¹ See Chomsky (1995a) and Bošković (1997b; 2002b) for relevant discussion on the ambiguous property of clitics, which behave like both X^0 or XP.

²² Notably, RX is a nominal clitic, unlike, for example, what is referred to as the “reflexive clitic” *se* in Slavic languages, which is identified as a verbal clitic (Reinhart 2016: 189-191).

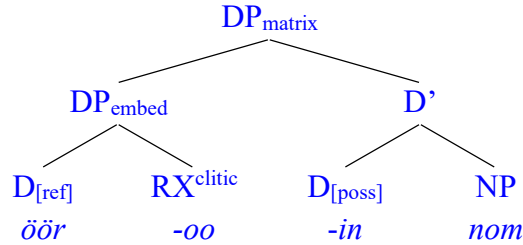
Baatar-NOM self-GEN-RX book-ACC forget-PST
 ‘Baatar forgot his own book.’ (= (11))

As shown below, *öör-in-öö nom* may have the structure in either (88) or (91), as discussed earlier. In any case, RX precedes *-in* in the hierarchical structure, contrary to the linear order. Note that *-in* in the surface structure is the realization of the matrix $D_{[poss]}$, not the embedded $D_{[poss]}$, as is clear from (123), where the embedded $D_{[poss]}$ is squeezed out due to a certain morpho-syntactic spell-out constraint.

(122) Structure of *öör-in-öö nom*, with first phase derivation of *öör-in* ([phi] left out)²³



(123) Structure of *öör-in-öö nom*, without first phase derivation of *öör-in* ([phi] left out)



Given this, it might seem that the structures in (122) and (123) are incorrect. However, there is solid reasoning for justifying these structures, as discussed in section 5. The crux of matter is then to determine how RX is constrained by a morpho-phonological principle. It is in fact quite clear that RX is not part of an anaphor or a pronoun. It is merely a marker of reflexivity. It, being a clitic, has no ability to project in syntax. Importantly, it is subject to vowel harmony, as also suggested by the fact that it has allophonic variants such as *-aa*, *-oo*, *-öö*, and *-ee*. This indicates that what determines the position of RX are not only a syntactic rule such as RPP and a semantic notion such as a reflexive-possessive relation, but also a spell-out rule. This said, I argue that insertion of RX follows that of all other materials required in forming an anaphor and spelling out a possessive relation. This is to say that $D_{[ref]}$ in the embedded DP (DP_{embed}) and the matrix $D_{[poss]}$ are spelled out first by *öör-in*, which is inserted as an inseparable morphological unit, and then RX is inserted into a linear, not hierarchical, position adjacent to

²³ This analysis may be carried over to complex forms such *your all's* (Deal 2006) in English, where $D_{[phi, poss]}$ and N in the embedded DP are spelled out by *you-r* and *all* respectively, and the matrix $D_{[poss]}$ is spelled out by *'s*.

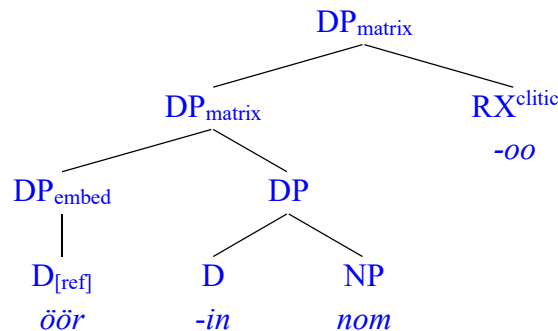
öör-in, resulting in *öör-in-öö*. Let us refer to this as “the late insertion rule”, which is informally stated as follows.

(124) The Late Insertion Rule (LIR)

RX is inserted after the morpheme(s) required for DP formation are inserted.

LIR, essentially a spell-out rule, interacts with a syntactic condition to describe below. RX being subject to LIR implies that the right Spec of DP_{embed} is empty in syntax. Notably, RX can also be inserted into a position right to *nom*, specifically the right Spec of DP_{matrix} , forming *öör-in nom-oo*. In that case, *öör-in*, not being the host of RX, can be absent at PF.

(125) Structure of *öör-in nom-öö*, without first phase derivation of *öör-in* ([phi] left out)



Regarding (122) and (123), the reason for the conjecture that the syntactic position of RX is within the embedded DP is that RX is required to be hierarchically adjacent to the DP requiring it. That is, it is required to occur in the right Spec of DP_{embed} , which requires it. RX is required by DP_{embed} because there is $D_{[\text{poss}]}$ in DP_{embed} in terms of its first phase derivation, although $D_{[\text{poss}]}$ is ultimately squeezed out in the matrix DP. Therefore, an ideal result is the following: RX is positioned within DP_{embed} in the case of the first phase derivation holds, producing a possessive semantics and forming *öör-in-öö nom*; on the other hand, RX is positioned within DP_{matrix} in the case in which DP_{embed} comprises $D_{[\text{ref}]}$, but nothing else, producing a non-possessive semantics and forming *öör-in nom-oo*. In this sense, the representations in (122) and (125), not (123), remain the most appropriate. The common property of (122) and (125) is that the syntactic position of RX c-commands the possessive D head, namely, $D_{[\text{poss}]}$, which contributes to the licensing of RX. As discussed in sections 4 and 6.2, RX is licensed by a subject that binds the element in Spec of $D_{[\text{poss}]}$, by providing values of [phi] to *öör*. Reflexivity thus arises and RX is called for. In other words, $D_{[\text{poss}]}$ wants RX to be adjacent to its own projection. Let us refer to this property as “the adjacent condition”, which is informally stated as follows.

(126) The Adjacent Condition (AC)

RX is hierarchically a sister of DP, D being a possessive determiner head and its Spec bound by a local subject.

The syntactic position of RX is thus determined by AC and its linear position is determined by LIR, which is preceded by AC but has an adjusting effect on AC during the process of derivation. AC accounts for and is supported by the fact that *gež* clauses and adverbial clauses allow neither

a genitive subject nor a rightmost RX (RX that occurs in a rightmost position), whereas object clauses without *gež* and relative clauses allow both a genitive subject and a rightmost RX. *Gež* clauses are CPs and therefore are not subject to nominalization, unlike TPs, and adverbial clauses, being adjuncts and lacking argumenthood, are not subject to nominalization, either. Failing to have a nominal status, they cannot be selected by D_[poss], and therefore do not satisfy AC. Due to the lack of D_[poss], genitive subjects are disallowed in *gež* clauses and adverbial clauses. Recall our observation in section 2 that the accusative subject *öör-ig*, which is bound by the matrix subject, in *gež* clauses and adverbial clauses must not be absent at PF. This is because a rightmost RX cannot be present in them due to AC (specifically due to the lack of D_[poss]). With absence of a rightmost RX, the accusative subject does not satisfy EMC.

- (127) **The Elsewhere Marker Condition (EMC)**
 Anaphors can be absent at PF when RX is present elsewhere as a reflexive marker.
 (=41)

Nominalized clauses have a genitive subject and allow it to be absent, where EMC is satisfied.

7. Conclusion

(coming)

References

- Abney, Steven. 1987. *The Noun Phrase in Its Sentential Aspect*. PhD diss., Massachusetts Institute of Technology.
- Bai, Chigchi. 2024b. What can Mongolian tell us about reflexives and reflexivity? <https://ling.auf.net/lingbuzz/008696>.
- Bai et al. 2024. *Her, hers, herself and her own: Deriving reflexive possessive pronouns in English*. <https://ling.auf.net/lingbuzz/007975>.
- Baltin, Mark. 2012. *The Structural Signature of Pronouns*. Unpublished manuscript, New York University.
- Bošković, Željko. 1997b. *The Syntax of Nonfinite Complementation: An Economy Approach*. Cambridge: MIT Press.
- Bošković (1997b)
- Bošković, Željko. 2002b. Clitics as non-branching elements and the Linear Correspondence Axiom. *Linguistic Inquiry* 33: 329-340 .
- Bošković, Željko. 2016. Getting really edgy: On the edge of the edge. *Linguistic Inquiry* 45. https://doi.org/10.1162/LING_a_00203.
- Bye, Patrik, and Peter Svenonius. 2012. Non-concatenative morphology as an epiphenomenon. In *The Morphology and Phonology of Exponence*, ed. Jochen Trommer, 427-495. Oxford

- University Press.
- Chomsky Noam. 1981. *Government and Binding*. Dordrecht, Neth.: Foris.
- Chomsky Noam. 1986. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.
- Chomsky, Noam. 1995a. Bare phrase structure. In Gert Webelhuth, (eds.), *Government and Binding Theory and the Minimalist Program (Generative Syntax 1)*, 383-439. Cambridge, MA: Blackwell.
- Chomsky, Noam. 1995b. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Corver, Norbert. 1992. Left branch extraction. In *Proceedings of North East Linguistic Society 22*, ed. K. Broderick. GLSA Publications: UMass Amherst.
- Culicover, Peter W. and Ray Jackendoff 2005. *Simpler Syntax*. Oxford: Oxford University Press.
- Davis, Colin P. B. 2023. The Unextractability of English Possessive Pronouns: On Portmanteau Formation and the Syntax-Morphology Interface. To appear in *Syntax*.
- Deal, Amy Rose. 2006. Does English have a genitive case? *Snippets 13*: 7-8.
- Embick, David, and Alec Marantz. 2008. Architecture and blocking. *Linguistic Inquiry 39*: 1-53.
- Faltz, Leonard M. 1977. *Reflexivization: A Study in Universal Syntax*. Los Angeles: University of California dissertation.
- Fong, Suzana. 2019. Proper movement through Spec-CP: An argument from hyperraising in Mongolian. *Glossa: a journal of general linguistics 4*(1): 30. 1-42, DOI: <https://doi.org/10.5334/gjgl.667>.
- Haugen, Jason, and Daniel Siddiqi. 2016. Towards a restricted realization theory: Multi-morphemic monolistemicity, portmanteaux, and post-linearization spanning. In *Morphological Metatheory*, ed. Heidi Harley and Daniel Siddiqi, 343-386. John Benjamins, Amsterdam.
- Hudson, Richard. 2003. Gerunds without phrase structure. *Natural Language and Linguistic Theory 21*: 579-615.
- Gong, Mia. 2023. On the Nature of Reflexive Binding in Mongolian: from Nominals to Clauses. *Handout at WAFL 17*.
- Halle, Morris, and Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In Ken Hale and Samuel Jay Keyser, (eds.), *The View From Building 20*: 1-52. Cambridge, MA: MIT Press.
- Huang, Yan. 2005. *Anaphora: A Cross Linguistic Study*. Oxford: Oxford University Press.
- Janhunen, Juha A. 2012. *Mongolian*. Amsterdam/Philadelphia: John Benjamins.
- Kazenin, Konstantin I. 2001. Verbal reflexives and the middle voice. In Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals: An international handbook*, volume 2: 916-927. Berlin/New York: Mouton de Gruyter.
- Kratzer, Angelika. 2009. Making a Pronoun: Fake Indexicals as Windows into the Properties of Pronouns. *Linguistic Inquiry 40*: 187-237.
- Kornfilt, Jaklin and John Whitman. 2011. Afterword: Nominalizations in syntactic theory. *Lingua*, 121(7), 1297-1313.
- Kornfilt, Jaklin and John Whitman. 2012. Genitive Subjects in TP Nominalizations.

- Proceedings of JeNom 4*: 39-72.
- Kullman, Rita and Dandi-Ydam, Tserenpil. 2015. *Mongolian Grammar*, 5th edition, Switzerland: Kullnom Verlag.
- Maki, Hideki, Liana Bao, Megumi Hasebe. 2015. *Essays on Mongolian Syntax*. Tokyo: Kaitakusha, Chapter 6 (67-80).
- Merchant, Jason. 2015. How much context is enough? Two cases of span-conditioned stem allomorphy. *Linguistic Inquiry* 46: 273-303.
- Munn, Alan. 1995. The Possessor that Stayed Close to Home. In *Proceedings of the Western Conference on Linguistics 24*, ed. V. Samiian, 181-195.
- Postal, Paul. 1969. On So-Called Pronouns in English. In *Modern studies in English*, ed. David Riebel and Sanford Schane. Prentice-Hall Inc.
- Reinhart, Tanya. 2006. *Interface Strategies: Reference Set Computation*. Cambridge, MA: MIT Press.
- Reinhart, Tanya and Reuland Eric. 1993. Reflexivity. *Linguistic Inquiry* 24: 657-720.
- Reuland Eric. 2011. *Anaphora and Language Design*. Cambridge, MA: MIT Press.
- Reuland, Eric. 2014. Reflexives. *Oxford Handbook Topics in Linguistics*. Oxford: Oxford University Press.
- Reuland, Eric. 2018. Reflexives and Reflexivity. *Annual Review of Linguistics*, 4: 81-107.
- Reuland, Eric. 2020. The roots of pronouns and valuation. https://dspace.library.uu.nl/bitstream/handle/1874/429559/The_roots_of_binding_and_valuation_prefin_clean_.pdf?sequence=1.
- Rooryck, Johan and Guido Vanden Wyngaerd. 2011. *Dissolving Binding Theory*. Oxford: Oxford University Press.
- Roversi, Giovanni. 2024. Possession and syntactic categories: An argument from Äiwoo. *Natural Language & Linguistic Theory*, 00-00.
- Stanton, Juliet. 2016. Wholesale Late Merger in A' -movement: Evidence from Preposition Stranding. *Linguistic Inquiry* 47:86-126. https://doi.org/10.1162/ling_a_00205.
- Striling, Lesley. 1993. *Switch-Reference and Discourse Representation*. Cambridge: Cambridge University Press.
- Svenonius, Peter. 2016. Spans and Words. In *Morphological Metatheory*, ed. Daniel Siddiqi and Heidi Harley, 201-222. John Benjamins, Amsterdam.
- Truswell, Robert. 2014. Binding Theory. In Andrew Carnie, Yosuke Sato, and Daniel Siddiqi (eds.), *The Routledge Handbook of Syntax*: 214-238. New York: Routledge.
- Wiltschko, Martina. 1998. On the syntax and semantics of (relative) pronouns and determiners. *Journal of Comparative Germanic Linguistics* 2: 143-181.