The role of -sI marking in Kazakh compound nouns: Implications for the relationship between case-licensing and agreement*

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March 15, 2014

0 Introduction

Like many languages, Kazakh utilizes a productive system of noun-noun compounding. Words like ajaq kijïm (‘foot’ + ‘clothing’ = ‘shoe’) and jerkek adam (‘male’ + ‘person’ = ‘man’) are arguably fully idiomatic, lexicalized noun phrases composed of two juxtaposed bare (or nominative)1 nouns. In addition to these bare NP-NP compounds, Kazakh also utilizes another sort of NP-NP compound structure whereby the first (non-head) noun is bare, while the second (head) noun carries morphology that is surface-identical to the possessive (poss)2 agreement morphology (-sI) found on regular possessive constructions (RPs; cf. Munn 1995). This construction, called Izafet (Turkish for ‘annexation’), includes examples like tïs dârîger-î (‘tooth’ + ‘doctor-poss’ = ‘dentist’) and ûj äjel-î (‘house’ + ‘wife-poss’ = housewife), which, importantly, are different in that the second noun is marked byposs morphology.3 This same morphology is also found in regular possessive constructions, as in Bonnie-dyn kitab-î (‘Bonnie-gen’ + ‘book-poss’ = ‘Bonnie’s book’). However, in the Izafet cases, there is no corresponding genitive (gen) case-marking on the first noun to accompany theposs on the second noun. In regular possessive constructions, genitive case marking is obligatory on the possessor noun, while possessive agreement marking is obligatory on the possessed noun.

Some theories of case-licensing (e.g., Chomsky 1999) pose agreement marking to be an inextricably linked part of the case-assignment process, whereby case is licensed by a structural relationship with a head and agreement is a “morphological consequence of the same linguistic relationship” (Baker & Vinokurova 2010: p. 596), manifest on a neighboring noun phrase. In the case of genitive case-licensing, the Chomskyan view of the Kazakh possessive construction would be that genitive case is assigned by (possessive) D on its nearest NP, which would also trigger agreement morphology on the possessed head noun. The fact that possessive agreement morphology reflects phi features of

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1I’d like to thank Dana Kismeto for the many hours she has spent sharing Kazakh with me and our Field Methods class. Thanks also to Vera Gribova and Rob Podesva for their guidance in shaping this project, and to Sam Bowman, Bonnie Krejci, Ben Lokshin, and Hanzhi Zhu for helpful feedback and comments. All errors are my responsibility.

2Following Kara (2002), I assume that bare (i.e., non-case-marked) nouns such as these bear default nominative case. Thus, though they are not glossed nom, they should be understood as such.

3Glossing abbreviations throughout: 1 first person, 2 second person, 3 third person, acc accusative case, gen genitive case, nom nominative case, pl plural, ptcp participle, sg singular

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3As this paper enumerates, there is disagreement about whether the Izafet marker is one and the same with the poss marker found in the regular possessive paradigm. For the sake of simplicity, this paper will use the poss marker for both constructions.
the genitive noun is also consistent with the idea that gen-marking and poss-agreement are part and parcel of the same process. However, in light of examples like the *Izafet* in Kazakh, it becomes apparent that either the Chomskyan way of viewing case-licensing is insufficient, or that there may be some important syntactic loopholes that it overlooks.

This paper, then, is an attempt to understand the structural, semantic, and surface-level morphological characteristics of the Kazakh *Izafet* construction. In doing so, it will disentangle the processes of gen case assignment and poss agreement marking. In fact, this analysis will argue that a view like the Chomskyan head-licensing view is not adequate for the Kazakh data, proposing instead that gen and poss arise out of different heads and serve different purposes: namely, gen is primarily a function of definiteness/referential marking, while poss is a functional morpheme indicating a linking relationship between two nouns.

1 Empirical Observations

NP-NP compounds\(^4\) in Kazakh can be formed in three ways, presented in Tables 1 and 2 below (called for the purposes of this paper ‘Paradigm 1’ and ‘Paradigm 2’). The first way is through the juxtaposition of two bare nouns, as seen in the first row of both tables. In the second and third rows of the tables, the same NPs vary in whether they exhibit poss morphology on the second noun, or gen and poss morphology on the first and second nouns, respectively. (There are no instances in our Kazakh data of NP-NP constructions exhibiting gen morphology with no corresponding poss, and such cases are likewise not documented in the Turkic linguistics literature.) In all three of these sorts of compounds, the second noun serves as the head while the first noun is the non-head. This is consistent with our observation that Kazakh is a head-final language. In the cases of bare NP-NP compounds, most of the time, this juxtaposition results in a semantic interpretation like that seen in Table 1, where the non-head takes on adjectival semantic (and possibly structural) function, modifying the head noun. For example, in the case of *tïs dârîger*, the non-head noun *tïs* is effectively an adjective, meaning ‘toothy’ or ‘toothlike’ and modifying *dârîger* (‘doctor’). This is not the case for *ajaq kïjïm*, where in order to take on adjectival meaning (e.g., ‘foot-like clothing’), an additional adjectival suffix must be added to the non-head *ajaq*. In the case of *ajaq kïjïm*, (as seen in row 1 of Table 2), the two bare nouns together appear to make up a fully lexicalized compound.

*Ajaq kïjïm* is a fully lexicalized compound because when we try to give it *Izafet* (-gen/+poss) morphology, the construction simply does not work. The only way it can be understood is if there a presumed unspoken possessor. When presented with the example *ajaq kïjïm*-', our Kazakh consultant raised the question “Whose shoe?” suggesting that the addition of a possessive suffix to this particular NP-NP compound can only imply that there is an external possessor. Thus, it appears as though some NP-NP compounds cannot bear the characteristic *Izafet* morphology, while in other cases, as in *tïs dârîger*-', the *Izafet* morphology is the only way through which to understand them as a compound.

As Tables 1 and 2 indicate, Paradigm 1 differs structurally from Paradigm 2 only with respect to their first two rows. Essentially, they differ in terms of the semantics of the bare NP-NP compounds and the availability of the -gen/+poss compound. There are likely to be two options for why these

\(^4\)At this juncture, the term ‘compound’ is not used in any theory-specific way; rather, it is used to denote a NP-NP sequential relationship in which two nouns form some sort of unit/constituent when juxtaposed. A discussion specific to theories of compounding will follow in Section 2.
### Table 1: NP-NP relationships in Kazakh: Paradigm 1

<table>
<thead>
<tr>
<th>Morphology</th>
<th>NP1 (non-head)</th>
<th>NP2 (head)</th>
<th>Gloss</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bare</td>
<td>tïs</td>
<td>dârîger</td>
<td>tooth doctor</td>
<td>‘toothy doctor’</td>
</tr>
<tr>
<td>-Gen/+Poss</td>
<td>tïs</td>
<td>dârîger-ï</td>
<td>tooth doctor-Poss</td>
<td>‘dentist’</td>
</tr>
<tr>
<td>+Gen/+Poss</td>
<td>tïs-tïn</td>
<td>dârîger-ï</td>
<td>tooth-GEN doctor-Poss</td>
<td>‘a tooth’s doctor’</td>
</tr>
</tbody>
</table>

### Table 2: NP-NP relationships in Kazakh: Paradigm 2

<table>
<thead>
<tr>
<th>Morphology</th>
<th>NP1 (non-head)</th>
<th>NP (head)</th>
<th>Gloss</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bare</td>
<td>ajaq</td>
<td>kijïm</td>
<td>foot clothing</td>
<td>‘shoe’</td>
</tr>
<tr>
<td>-Gen/+Poss</td>
<td>*ajaq</td>
<td>kijïm-ï</td>
<td>foot clothing-Poss</td>
<td>ungrammatical</td>
</tr>
<tr>
<td>+Gen/+Poss</td>
<td>ajaq-tyn</td>
<td>kijïm-ï</td>
<td>foot-GEN clothing-Poss</td>
<td>‘a foot’s clothing’</td>
</tr>
</tbody>
</table>

The paradigms differ. The first option is that the Paradigm 2 bare NP-NP compound is a grammaticalized lexical unit while the bare NP-NP Paradigm 1 compound is not. Perhaps in the cases of ajaq kijïm, jerkek adam and others, the orthographical space between the two nouns is a misleading artifact of a long ago completed process of word-formation — what was once two NPs (perhaps at one time linked through pos tag morphology on the head noun) has now completely fused into one NP. Accordingly, the Poss marker, now no longer needed, has fallen away. If this is correct, then the more idiomatic of the Izafet cases, like the examples tïs dârîger-ï and üj âjel-ï, could likewise be in an intermediate stage in the process of lexicalization, and that the loss of the Poss marker is a final stage in the process. Simply put, the difference between Paradigm 1 and Paradigm 2 could be the extent to which the two nouns are actually just that: two discrete nouns. Or, could they rather be one fused noun that was once two. One way to answer this question would be to explore how these compounds were structured historically or to see if there is evidence of the Izafet compound being a transitional form.

Another possible reason for why the two paradigms differ relates to a phenomenon that has been discussed in the Turkish linguistics literature (e.g., Braun & Haig 2000) and would presumably be applied to Kazakh as well: the lack of a concrete distinction between adjective and noun. Through experimental investigation, Braun & Haig (2000) have found there is a salient category of so-called ‘neutral’ nouns that can take on adjective-like syntactic and semantic function. The authors conclude that adjectives are not in fact a discrete word class in Turkish. If Kazakh mirrors Turkish in this way, then perhaps the difference between Paradigm 1 and 2 pertains to this characteristic – that some nouns are more adjective-like than others, and they are the ones that take on adjectival meaning when compounded as bare nouns. For example, perhaps tïs (meaning ‘toothy’ in the case of tïs dârîger, or ‘toothy doctor’) is just such a ‘neutral’ noun, and therefore functions as an adjective in the syntax. In contrast, ajaq, (meaning ‘foot’ by itself, but ‘shoe’ when compounded as ajaq kijïm) may be a noun that it is not ‘neutral’ and therefore would not function this way.

Exactly which of the two potential options holds is only of partial importance for this analysis, as the focus of this paper is more pointedly on the relationship between the rows 2 and 3 of the tables, raising questions for where case assignment and possessive agreement come from in Kazakh. For both of the paradigms, as rows 3 of both tables indicate, the NPs can be conjoined with a combination of genitive case marking on the non-head and possessive agreement marking on the head noun. In both paradigms, once this happens, the non-head noun takes on a specific, referential
linguistic meaning. That is, tīs-tīn dārīğer-i and ajaq-tyn kijīm take on the meaning of a (specific) tooth’s doctor, and a (specific) foot’s clothing. As such, in all cases, when the genitive case is assigned to the non-head noun, the noun takes on specific reference, in a way that is not unlike the referentiality created in the regular possessive construction. In light of this shared feature of referentiality between the Izafet and the regular possessive constructions, we can ask the following questions:

1. Why is it that in some cases, poss agreement marking on the head noun must co-occur with gen case marking on the non-head, and in other cases it must not?

2. Can we say that the Izafet morpheme is one and the same with the possessive poss morpheme?

2 Possessives or compounds?

Kazakh is not the only language in the Turkic family to exhibit the Izafet phenomenon, although as indicated earlier, there is some debate among linguists as to what exactly the features in question are. One option is to call the -sl suffix an ‘unmarked genitive case’ marker (Römer 2000), so the assumption is that the morpheme found in Izafet compounds is in fact one and the same with the poss morpheme that co-occurs with genitive case. For example, two well-known Turkish grammars (Lewis 1967 and Underhill 1976) view it this way, as does Kara (2002) for Kazakh. Underhill (1976) in particular provides an extensive description of the construction, which he calls the ‘possessive compound.’ The description itself nicely circumscribes the possible options for this marker. Is the Izafet -sl a possessive marker, identical to the morpheme used in regular possessive constructions (cf. Römer 2000)? Or, is it something different, a special marker denoting one type of NP-NP compound relationship?

Those holding the ‘unmarked genitive’ viewpoint are the minority among linguists of Turkish. Most linguists who have written on the topic call the Izafet poss marker a compound/linking morpheme (e.g., Göksel & Haznedar 2007; Kornfilt 2008; Aslan & Altan 1988). For them, the poss marker is actually a linking marker (dubbed LE for ‘linking element’ in Göksel & Haznedar 2007 and CM for ‘compound marker’ in Aslan & Altan 1988) used to conjoin two NPs. According to these analyses, while this linking morpheme bears surface resemblance to the poss marker, and may even share common genetic ties, it is actually a different morpheme altogether, with a decidedly different structural purpose. Under this analysis, the Izafet construction is a compound noun phrase - separate and distinct from the regular possessive paradigm.

If the morphology are so similar to that of the genitive-possessive paradigm, then what evidence is there for the compound argument? It turns out that, at least for Turkish, there is some compelling evidence suggesting that Izafet construction is some kind of NP-NP compound. Aslan & Altan (1988) claim that, semantically, if the poss marker is indeed related to the genitive construction, it would have to represent a semantic possessor-possessed relationship. One Turkish example they cite is the word kan kardes-i or ‘blood brother’. They argue that if the suffix -i in this case is indeed a genitive poss marker, then there has to be a possessor-possessed relationship between ‘blood’ and ‘brother’, which they claim is not the case (though they provide no semantic evidence for this except their own ‘common sense’). They also note that like other compounds, CM-linked compounds cannot be bisected by additional modifying adjectives, though additional nouns are permitted. They conclude that the marker must therefore be a compound marker (CM), and they then test various Turkish Izafet constructions according to experimental syntactic and psycholinguistic compound parameters. Their empirical conclusions hinge upon whether their native-Turkish-speaking subjects
perceived *Izafet* constructions to be frozen lexical items with idiosyncratic meaning, or whether they were perceived as separate-yet-adjoined nouns. As they say, the *poss* suffix “forms nominal phrasal constructions which do not have substantive basis. However, the CM forms nominal compounds which refer to one simple lexical item” (p. 61).

In another account, Göksel & Haznedar (2007) describe the Turkish compound in general terms as follows: “While Turkish has compounds in the three major nominal categories N, A and ADV, the vast majority of compounds belong to the syntactic category of nouns and are made up of two nouns and a linking element [\(N+N\)+LE] \(_N\)” (p. 1). While NP-NP compounds without the linking element can occur in Turkish, the majority of NP-NP compounds bear *Izafet* *poss* morphology, which is manifest as the affix -\(sI\) on the second (head) noun, with a bare (nominative) first (non-head) noun. What Aslan & Altan (1988) call a CM, Göksel & Haznedar (2007) call a ‘linking element’ (LE), but both are talking about a construction which “refer[s] to one lexical entity though they consist of two separate lexical items...The first constituent which is the ‘modifier’ of the compound simply acts as specifying or restricting the meaning of the second constituent” (Aslan & Altan 1988: p. 60). Göksel & Haznedar deem the Turkish *Izafet* construction to be an example of an NP-NP compound. First, they note that the *Izafet* adheres to the stress patterns typical for bare NP-NP compounds in Turkish (i.e., stress falls on the stress-able syllable – usually the last syllable – of the non-head noun). They also note that in *Izafet* constructions, the two NPs cannot be bisected by any other modifiers.

As for the linking element, Göksel & Haznedar say its optionality in the compound structure has to do with whether the NP-NP relationship in question is subordinate or attributive. That is, following Bisetto & Scalise’s (2005) (purportedly universal) classification of compounds into subordinate, attributive, and coordinate categories, they claim that Turkish NP-NP compounds with an LE are subordinate and those without an LE are attributive. Thus, if the Kazakh NP-NP constructions are similarly construed, we could say that *ajaq kijïm* (‘foot clothing’) is an attributive compound while *tïs dïrïgerï* (‘tooth doctor’ or ‘dentist’) is a subordinate compound. However, as Göksel & Haznedar go on to state, “As is widely acknowledged in the literature, operational means for unambiguously distinguishing nouns from adjectives in Turkish are difficult to find...This is one of the main factors that makes it difficult to ascribe a structural description to compounds along the SUB/ATT divide...” (p. 11). Seeing as how Krejci & Glass (2013) found similar such ambiguity in Kazakh, and the fact that Göksel & Haznedar (2007) qualify their point so soon after they make it, it seems clear that the difference between those compounds with the -\(sI\) morpheme and those without are not so easily ascribed.

An appropriate compromise may be one that is offered by Underhill (1976) described above. He calls the *Izafet* construction a *possessive compound*, likening the Turkish *Izafet* to a similar possessive compound construction in English. See (1) and (2) below.

(1) a. the children’s book  
   b. a children’s book  
   ‘the children’s book is in their room’  
   ‘Dr. Seuss wrote a new children’s book’

(2) a. Hilton’s hotel  
   b. Hilton Hotel  
   ‘the hotel belonging to Mr. Hilton’  
   a brand of hotel
In each of the above examples, (a) is a regular possessive construction, in which the second (head) noun is an actual entity that is possessed by the non-head noun. (b) on the other hand, is a possessive compound of the Izafet sort. (1-b) differs from (2-b) in the use of the possessive -s on the non-head noun. Underhill does not explain why (1-b) uses the possessive marker while (1-b) does not; he simply calls both of these examples possessive compounds under the rationale that they are necessarily collocated NPs which utilize distinctly different stress systems than do their surface (near) identical regular possessive counterparts. Underhill’s failure to explain this difference is one shortcoming of his generalization (although to be fair, he is writing a grammar of Turkish, not English), but in limiting his discussion of Turkish compounds to this construction, he also notably neglects the large body of NP-NP constructions in Turkish that do not carry a possessive marker. Thus, for Underhill, the possessive compound (or Izafet) is the only type of NP-NP compound in Turkish, so his analysis is incomplete.

As already discussed, the Turkish data show both types of NP-NP structures that are also found in Kazakh. So, even as Underhill’s analysis of the construction is quite limited, the point about NP-NP+/- (or Izafet) constructions being simply the same thing as possessive compounds is an important one when we think about the structural ramifications for syntax. If we think the Izafet structure is carrying both characteristics of compounds and characteristics of possessives (rather than one or the other), we can propose similar syntactic roles between regular possessives and possessive compounds as well as for compounding in general. However, as Göksel & Haznedar (2007) often note, the complexity of the compounding paradigm in Turkish, including many irregularities of form, headedness, stress, and even the potential effects of orthographic confusion, make it difficult to make this case using Turkish data. The comparative straightforwardness of the data for Kazakh, though, makes it an apt language for studying this phenomenon.

2.1 Possession in Kazakh

Indeed, the possessive paradigm in Kazakh is comparatively straightforward. RPs are formed by genitive case marking on the possessor noun, followed by possessive marking on the possessed noun. See in (3), below, an example of the first-person singular pronoun men and a proper noun Bonnie used in this construction to indicate possession of a book kitap.

(3) a. men-īN kītab-īm
   1.sg-gen book-poss.1sg
   ‘my book’

    b. Bonnie-dyN kītab-ī
       Bonnie-gen book-poss.3
       ‘Bonnie’s book’

The above examples show how in regular possessive constructions, the gen and poss must agree with each other in person and number. Table 3 illustrates the regular possessive paradigm in Kazakh in its entirety.

In cases of multiple, nested, possessors in one noun phrase, we can see evidence that the poss marker is affixed before genitive case marking occurs. For example, in (4), ājel-ē-nīm, (wife-poss-gen) shows how the poss marker is affixed after the bare noun but before the gen suffix that marks

5Examples taken from Underhill (1976: p. 93)
Table 3: Kazakh Possessive paradigm

<table>
<thead>
<tr>
<th>Person, Number</th>
<th>Suffix</th>
<th>Example</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.SG</td>
<td>-(I)m</td>
<td>men-iN at-yn</td>
<td>‘1.sg-gen name-1sg.poss’</td>
</tr>
<tr>
<td>2.SG</td>
<td>-(I)n/-(I)Ne</td>
<td>seniN at-yn</td>
<td>‘2.sg-gen name-2.sg.poss’</td>
</tr>
<tr>
<td>3.SG</td>
<td>-(s)i</td>
<td>o-nyN at-y</td>
<td>‘3.sg-gen name-3.poss’</td>
</tr>
<tr>
<td>1.PL</td>
<td>-(I)miz</td>
<td>biz-diN at-ymyz</td>
<td>‘1.pl-gen name-1.pl.poss’</td>
</tr>
<tr>
<td>2.PL</td>
<td>-INiz</td>
<td>siz-der-diN at-yNy</td>
<td>‘2.sg-pl-gen name-2.pl.poss’</td>
</tr>
<tr>
<td>3.PL</td>
<td>-(s)i</td>
<td>o-lar-dyn at-y</td>
<td>‘3.sg-pl.gen name-3.poss’</td>
</tr>
</tbody>
</table>

its possession of the following noun *ana-sy* (mother-poss).

(4)  
adam-nyN äjel-üňN  | *ana-sy*  
man-gen  | wife-poss-gen  | mother-poss

‘man’s wife’s mother’

In fact, in the normal order of affixation, the possessive agreement morpheme is affixed before case-marking, but after the plural marker, as is seen in (5) and (6).

(5)  
on-yn  | iS-:i-nen  
3.sg-gen stomach-3.poss-abl

‘from his stomach’

(6)  
biz-diN  | üj-ler-imiz-de  
1.pl-gen house-1.pl.poss-loc

‘in our houses’

Additionally, consistent with what Göksel & Haznedar (2007) find for Turkish, a possess morpheme can only manifest one time on a head noun. That is, in a triple-NP situation, where both a semantic possessive-possessor relationship and a NP-NP linking relationship are imbued upon the head noun, the noun receives only one -sI suffix, which agrees with the possessor noun. See (7) below.

(7)  
a.  
til  | kitab-i  
language book-poss.3

‘language (grammar) book’

b.  
men-iN  | til  | kitab-i-m  
1.sg.gen language book-poss.1sg

‘my language (grammar) book’

In (7-a), we see the Kazakh Izafet compound *til kitabî* (‘grammar book’) bearing poss.3 morphology on its head noun. However, when we add the 1.sg possessor *men* to the noun phrase, creating a regular possessive construction, then the head noun *kitap* bears poss morphology that agrees with the first-person pronoun, not the third-person agreement morphology it had previously. (Note also that *men* obligatorily receives gen case-marking.)

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The possess morphemic inventory presented here differs a bit from the paradigm offered in Kara (2002). The suffixes and examples in Table 3 convey our elicited data with our Kazakh consultant.
Another structural feature of RPs in Kazakh is that the NPs in regular possessives can be bisected by various other prenominal modifiers, including demonstratives and quantifiers (see (8)). In fact, no matter how many additional modifiers come between them, their relationship is never in question because they carry their co-referential agreement morphology (i.e., gen and poss).

(8) a. \textit{wosy men-iN kïlab-\textit{im}}
   \begin{tabular}{ll}
   this & 1.SG-GEN book-poss.1SG  \\
   ‘this my book’ & \\
   \end{tabular}

b. \textit{men-iN wosy kïlab-\textit{im}}
   \begin{tabular}{ll}
   1.SG-GEN this & book-poss.1SG  \\
   ‘my this book’ & \\
   \end{tabular}

c. \textit{kejbïr men-iN kïtab-tar-\textit{im}}
   \begin{tabular}{ll}
   some & 1.SG-GEN book-pl-poss.1SG  \\
   ‘some my books’ & \\
   \end{tabular}

d. \textit{men-iN kejbïr kïtab-tar-\textit{im}}
   \begin{tabular}{ll}
   1.SG-GEN some & book-pl-poss.1SG  \\
   ‘my some books’ & \\
   \end{tabular}

Adjectives, however, are different from other prenominal modifiers. Kazakh has a strict constraint whereby an adjective must immediately precede the noun it modifies. Thus, in an RP construction, an adjective modifying the head noun must immediately precede it. In fact, adjectives cannot precede the genitive-marked non-head noun unless they are actively modifying it. Thus, (9-a) is not grammatical unless \textit{qyzyl} (‘red’) is modifying the first person singular pronoun (which is not acceptable). It cannot modify \textit{kïlap} (‘book’) in this position. (9-b) shows the adjective in the only position it can occupy for modifying \textit{kïlap}. (9-c) is fine, as long as the adjective is understood to be modifying \textit{mektep} (‘school’), and not \textit{kïlap}.

(9) a. \textit{*qyzyl men-iN kïlab-\textit{im}}
   \begin{tabular}{ll}
   red & 1.SG-GEN book-poss.1SG  \\
   ‘red my book’ & \\
   \end{tabular}

b. \textit{men-iN qyzyl kïlab-\textit{im}}
   \begin{tabular}{ll}
   1.SG-GEN red & book-poss.1SG  \\
   ‘my red book’ & \\
   \end{tabular}

c. \textit{qyzyl mektep-tiN kïlab-\textit{im}}
   \begin{tabular}{ll}
   red school-GEN & book-poss.1SG  \\
   ‘the red school’s book’ (i.e., book belonging to a red school) & \\
   \end{tabular}

There are many similarities between nominative and genitive-marked nouns in Kazakh. One important similarity is that pro-drop is pragmatically preferred for both of them in everyday conversation. For sentence structure, this means that nominative subject pronouns can be omitted; likewise, for the RP construction, genitive possessor pronouns can also be omitted. Presumably, in both cases, this is because the verb and the possessed nouns, respectively, carry person and number morphology, which makes the realization of the pronoun pragmatically redundant. Thus, in Kazakh we often see cases of poss-marked nouns without any corresponding gen-marked NPs, as in (10-a).

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8
However, the gen case marker is obligatory on the possessor noun when the RP is reconstructed (10-b). Because of the obligatory nature of the genitive marker on possessor nouns, (11-a) is ungrammatical if it is meant to mean ‘Bonnie’s book.’ Interestingly, if ‘Bonnie’ is not meant to be a possessor, then the phrase can still work. Simply, in this form it can be construed as an Izafet construction. In this say, example (11-b) can be perfectly grammatical, but can only mean ‘a Bonnie-like book.’ This example is indicative of what appears to be the primary purpose of the non-head Izafet noun – that of modification of the head noun. This will be discussed in more detail in Section 3.

(10)  

a. \textit{kïtab-}î  
book-poss.3  
‘his/her/their book’

b. \textit{on-}yN \textit{kïtab-}î  
his/her-gen book-poss.3  
‘his/her book’

(11)  

a. \textit{*Bonnie} \textit{kïtab-}î  
Bonnie book-poss.3  
‘Bonnie’s book’

b. \textit{Bonnie} \textit{kïtab-}î  
Bonnie book-poss.3  
‘a Bonnie-like book’

In sum, these data show three important characteristics about the RP construction in Kazakh. First, the genitive case marker is obligatory, in all instances. Second, given its possessive nature, it is always referential. Finally, the genitive case-marked non-head noun does not need to immediately precede the head noun. It can be intersected by other modificational elements in the NP, and in fact, in the case of adjectival modifiers, it must not immediately precede the head noun. The fact that additional modificational elements can intersect the two noun phrases in an RP construction is an important observation, which will be addressed in Section 4’s structural hypothesis about these constructions.

2.2 The Kazakh Izafet vs. Conventional Compounds

But, does the Kazakh Izafet construction, behave like regular possessives? As Section 2.1 has shown, the RP paradigm in Kazakh is relatively straightforward. If the Izafet construction in Kazakh can be shown to be a similar type of possession, simply sans the genitive case marking, then it would be possible to draw parallel conclusions about what the poss marker on the head noun is meant to indicate, and how the genitive case marker may operate in terms of referentiality.

If, on the other hand, the poss morpheme is a compound/linking morpheme and has nothing to do with possession, how would that work for the Kazakh data? Does the Izafet construction behave more like a compound or like a possessive? Or, is this an artificial distinction to make? In light of the dearth of literature describing compounding strategies in Kazakh, the Turkish literature and some observations of elicited Kazakh constructions can shed some light on the compound question.
Not only do scholars of Turkic languages distinguish the Izafet from the regular possessive constructions, but they have also differentiated the Izafet from the regular compound. This was touched on in section 1, but will be presented in more detail with regard to Kazakh here. In Turkish, the main difference between these two types of phrases is that one set has NP-NP structures that appear to be fused and lexicalized and the other does not (cf. Aslan & Altan 1988). The presence of the poss marker in these NP-NP phrases is variable and seemingly unpredictable, though Bağrıaçık & Ralli (2012) articulate an approach for classifying two types of NP-NP phrases in Turkish. Bağrıaçık & Ralli (2012) differentiate between what they call Modificational (M) constructs and Referential (R) constructs in Turkish. M-constructs allow direct modification of the head (with another noun), can be coordinated under identity with other non-head constructions, and the addition of a gen case marker on the non-head noun gives them a definite reading. R-constructs, on the other hand, are frozen lexically; the head cannot be modified by additional modifiers, they are anaphoric islands, and the non-head cannot receive a gen case marker. Again, even as they are distinguished by these syntactic characteristics, they may or may not carry a poss marker.

In Kazakh, however, the difference between these two types of non-genitive compounds seems to lie crucially in the poss marker or lack thereof. That is, if the NP-NP phrase contains a poss marker (Izafet), it bears syntactic characteristics analogous to Bağrıaçık & Ralli (2012)’s M-constructs; it if does not carry a poss marker, then it behaves more akin to R-constructs. The data provided in Tables 1 and 2 exemplify this distinction.

Starting with the non-Izafet constructions in Table 2, the Kazakh data do not carry a poss marker. Rather, they are bare-NP-NP compounds. Neither the non-head nor the head nouns can be modified; the compound is a frozen lexical item. This explains why the example in the second row of Table 2 is problematic (shown again in below in (b) of (12)).

(12) a. ajaq kijîm
foot clothing
‘shoe’

b. *ajaq kijîm-î
foot clothing-poss
‘foot-like clothing?’

c. onyN ajaq kijîm-î
3 sg.gen foot clothing-poss
‘his shoe’

Example (12) illustrates how the head noun cannot be modified with respect to the non-head noun. That is, a poss marker can be added, but it cannot indicate a relationship with the non-head. Rather, a gen-marked possessor has to be included in the phrase in order for the poss marker to be grammatical.

Another important characteristic of this type of compound is that the two NPs cannot be bisected by any other phrase whatsoever, including adjectives or other noun phrases. An adjective or other prenominal modifier must precede the entire compound unit, and no corresponding poss marker is
required. Example (13) illustrates this. In both (b) and (d), we see that neither an adjective, in (b), nor a noun, in (d), can come between the two NPs.

(13)  

a. \textit{ajaq kijim}  
\text{foot clothing}  
\text{‘shoe’}  

b. \textit{*ajaq qyzyl kijim}  
\text{foot red clothing}  
\text{‘red shoe’}  

c. \textit{qyzul ajaq kijim}  
\text{red foot clothing}  
\text{‘red shoe’}  

d. \textit{*ajaq qazaq kijim}  
\text{foot qazaq clothing}  
\text{‘Kazakh shoe’}  

e. \textit{qazaq ajaq kijim}  
\text{qazaq foot clothing}  
\text{‘Kazakh shoe’}  

While it is not impossible to find in Kazakh a phrase such as shown in (14), its meaning is drastically different from the conventionalized compounds in (13). A native speaker would not consider \textit{ajaq-tyn kijim-\text{\i}} in any way to be one and the same with \textit{ajaq kijim}, even as it is composed of the same NPs (differing only in \text{\textup{gen}} case-marking).

(14) \textit{ajaq-tyn kijim-\text{\i}}  
\text{foot-3\text{\textup{gen}} clothing-3\text{\textup{poss}}}  
\text{‘a foot’s clothing’}  

Unlike what is shown in Table 2 (a construction which I call a ‘conventional compound’), the Izafet construction crucially exhibits the poss marker. This is an extremely productive NP-NP construction in Kazakh, and each instantiation varies in the degree to which it is idiosyncratic or conventionalized. By ‘conventionalized,’ I do not mean ‘lexicalized’ in the same way as with the conventional compounds from Table 2; rather, these constructions may be produced on the spot in a unique context, or they may be conventional collocations of nouns with a referent accepted by a broader speech community, or somewhere in between.\footnote{Admittedly, this detail is not attested in the literature; it was described as such by the Kazakh informant.}

Importantly, all Izafet phrases contain a poss marker on the non-head noun. If the poss marker is missing, the non-head noun takes on an attributive-like function. See below in (15).

(15)  

a. \textit{tis d\text{"{}arger}}  
\text{tooth doctor}  

\footnote{Admittedly, this detail is not attested in the literature; it was described as such by the Kazakh informant.}
(b) 
\[ \text{tïs däřïger-ï} \]
\[ \text{tooth doctor-3.poss} \]
\[ \text{‘dentist’} \]

In (15) above, (b) – exhibiting the poss marker – is the conventional phrase denoting the person with the occupation ‘dentist.’ (a), on the other hand, is one way of describing a doctor (of any subfield of medicine) who has big teeth. Thus, without the poss marker, the non-head NP becomes attributive.

Usually, however, licensed Izafet constructions are modificational in nature. That is, non-head nouns add to or change the meaning of the noun they precede. As with conventional compounds, the head in an Izafet construction cannot be modified by adjectives and other prenominal modifiers. See (16) below.

(16) 
(a) 
\[ \text{tïs däřïger-ï} \]
\[ \text{tooth doctor-poss} \]
\[ \text{‘dentist’} \]

(b) 
\[ *\text{tïs ülken däřïger-ï} \]
\[ \text{tooth big doctor-poss} \]
\[ \text{unparseable} \]

(c) 
\[ ülken tïs däřïger-ï \]
\[ \text{big tooth doctor-poss} \]
\[ \text{‘big dentist’} \]

However, contrary to what we saw with conventional compounds in Kazakh, additional nouns can be adjoined to the head noun to create new Izafet structures. Thus, this paradigm is very productive. Structures with multiple nouns before the head are nested, manifesting multiple poss markers, but they are arguably parts in turn of nested DP structures. See (17) below.

(17) 
(a) 
\[ \text{tïs däřïger-ï kïlab-ï} \]
\[ \text{tooth doctor-poss book-poss} \]
\[ \text{‘dentist book’} \]

(b) 
\[ *\text{tïs ülken däřïger-ï kïlab-ï} \]
\[ \text{tooth big doctor-poss book-poss} \]
\[ \text{‘tooth big doctor book’} \]

(c) 
\[ ülken tïs däřïger-ï kïlab-ï \]
\[ \text{big tooth doctor-poss book-poss} \]
\[ \text{‘big dentist book’} \]

So, we see now that Izafet constructions can be modified by the addition of other nouns. Interestingly, with the addition of an overt possessor carrying different person-number characteristics (such as menïN), the poss marker on the head noun must carry poss agreement consistent with the possessive noun. And, when gen is present in the phrase, it cannot be marked twice. Note that
the pronoun *men* must have *gen* case marking.

(18) a. *men-iN ūlken tīs dārīger-ī kiṭab-īm*
   1.sg-gen big tooth doctor-poss book-1.sg.poss
   ‘my big dentist book’

   b. *ūlken men-iN tīs dārīger-ī kiṭab-īm*
   big 1.sg-gen tooth doctor-poss book-1.sg.poss
   ‘big my dentist book’

Thus, what (18) exhibits is what I argue to be the primary obligation of the *poss* marker: to agree with a *gen*-marked noun if there is one.

When an explicit possessor noun is not present, the head noun takes a default third-person *poss*. If we add *gen* case marking to the non-head noun in an *Izafet* phrase, that noun immediately takes on possessor status — sometimes dramatically, sometimes subtly. For example, in some cases, as in (19), the semantics is significantly changed; in other cases, as in (20), it merely provides more specific information. But, in all cases, the *gen* case marking makes the phrase *referential* when otherwise it wouldn’t be. In (20), the genitive-marked non-head, then, is not only telling us *what kind of* wife/woman is being referred to, but also *which one* she is. Thus, when *gen* case marking is present, the relationship between the two nouns always becomes a specific, referential relationship.

(19) a. *tīs dārīger-ī*
   tooth doctor-poss
   ‘dentist’

   b. *tīs-tīn dārīger-ī*
   tooth-gen doctor-poss
   ‘a tooth’s doctor’

(20) a. *ūj ājel-ī*
   house woman-poss
   ‘housewife’

   b. *ūj-dīn ājel-ī*
   house-gen woman-poss
   ‘a woman of the house’

To summarize, when we compare these Kazakh *Izafet* data with that of the Kazakh RP construction in section 2.1, we have counterpoints to the three main features reported there. First, instead of being obligatory, the genitive case is crucially missing in *Izafet* phrases; a genitive marker necessarily changes the semantics and provides a referential reading. Second, *Izafet* phrases are decidedly un-referential. They necessarily refer to a generic noun or class of nouns. Finally, the non-head noun should immediately precede the head noun; no modificational elements can intersect them. This contrasts starkly to the RP construction, in which adjectives in particular must bisect the two NPs, if the adjective is to modify the head noun.
2.3 Three different NP-NP constructions

What has been explored thus far are three different NP-NP structures in Kazakh: 1) the bare NP-NP ‘conventional compound;’ 2) the poss-marked NP-NP Izafet construction; and, 3) the gen- and poss-marked NP-NP ‘regular possessive’ (RP) construction. These three structures have differed in terms of their morphology, whether they allow intersecting modifiers between NPs, whether additional (nested) NPs can be present, the degree to which their construction is fused/lexicalized on the one hand or idiosyncratic on the other, and whether the NP is +referential. Table 4 summarizes how these features are exhibited on the three different constructions.

Table 4: Three Kazakh NP-NP structures and their features

<table>
<thead>
<tr>
<th></th>
<th>NP-NP(bare)</th>
<th>NP-NP-poss</th>
<th>NP-GEN-NP-poss</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP-NP(bare)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘conventional compound’</td>
<td></td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>poss marker</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>gen marker</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>intersecting modifiers allowed</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>additional nouns allowed</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>degree of lexicalization</td>
<td>high</td>
<td>variable</td>
<td>low</td>
</tr>
<tr>
<td>degree of idiosyncratic meaning</td>
<td>low</td>
<td>variable</td>
<td>high</td>
</tr>
<tr>
<td>referential</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

From the facts as they’ve been shown in Table 4, we can posit a picture of what the syntax of each of these structures may look like. Specifically, the ‘Modificational Possessive’ proposal offered by Munn (1995), and adapted a bit for Kazakh, is an analysis that can frame the distinctions between these structures nicely.

3 The ‘Modificational Possessive’ analysis

This paper proposes an analysis contrary to those that suggest the poss marker found on Regular Possessives and the linking marker (LE or CM) found in Izafet constructions are functionally and structurally different (e.g., Göksel & Haznedar 2007; Kornfilt 2008; Aslan & Altan 1988). Here, I propose that the poss agreement marker in Kazakh is generated in the same structural location regardless of whether it is found on Izafet constructions or ‘regular possessive’ constructions. In fact, I’d like to suggest that all NP-NP constructions in Kazakh (including bare-noun compounds) are identical in deep structure, but they differ in whether they have dominating PossPs. The only construction excepted from this generalization is the ‘conventional compound,’ which I’ve analyzed here as a fused, lexicalized single NP. In my general account, I conclude that gen case assignment occurs in the spec-DP position, and that the spec-NP position is reserved for attributive modifiers. Thus, +referential non-head NPs move to a spec-DP position (if it is empty), where they receive gen case marking; +attributive non-head NPs are pulled towards the spec-NP position, which is the place for all attributive phrases, especially adjectives. Both sorts of phrasal movement are motivated by the need to satisfy the Greed principle and either a +referential or +attributive feature-checking principle. I reiterate the Greed principle below:

Chomsky (1993)’s Greed principle:
1. An element $\alpha$ can only move to check some features of $\alpha$.

2. $\beta$ can only check features for $\alpha$ only if $\beta$ bears those features.

Munn (1995) gives an account for English NP-NP constructions that can work for Kazakh primarily because it distinguishes what Munn calls a ‘modificational possessive’ from both a ‘regular possessive’ and a ‘compound.’ To illustrate the difference between these constructions, he offers the following sentence:

(21) A man’s shoe is on the counter.

On the face of it, this sentence is ambiguous between two readings. The first reading would be one that Munn calls the ‘regular possessive,’ in which there is a certain shoe belonging to a certain man that is on the counter. Semantically, this ‘regular possessive’ in English works same way as does what we’ve been calling the ‘regular possessive’ in Kazakh. In English, the suffix -s indicates a possessive relationship between the head noun (‘shoe’) and the non-head (‘man’). The second reading of this sentence is what Munn refers to as the ‘modificational possessive.’ This corresponds to what we’ve been calling the *Izafet* for Kazakh, and what Underhill (1976) calls the ‘possessive compound’ for Turkish. In this reading, we are referring to a shoe that has the attributive property of being made for the use of men. Munn (1995) offers the following structural analyses of both readings of the sentence in (21) (see figure 1 below):

![Diagram of structural analyses of possessive constructions](image)

Figure 1: Munn (1995)’s structural comparison of ‘Modificational Possessives’ vis-à-vis ‘Regular Possessives’

The major difference between these two trees is the phrasal characteristics of the non-head noun ‘man.’ In (a), the word ‘man’s’ is an NP, and both it and the noun ‘shoe’ are dominated by a single DP. Munn provides no analysis provided here for where the -s morpheme comes from. In (b), the word ‘man’ is dominated by a separate DP than is the NP for ‘shoe’; the possessive -s marker is generated in the D position of the second DP. As Munn (1995) says, “The fact that regular possessors can be DPs but modificational possessors can only be NPs leads to a major interpretive difference between the two constructions: the possessor in an MP...is never referential; instead it receives a ‘type’ interpretation.” Indeed, the distinction between the two readings of the sentence does seem to lie in whether the non-head noun carries the feature $+_\text{referential}$.

In the Munn account, both types of possessive constructions differ from the compound NP in English, although the degree to which a modificational possessive differs from a compound can be quite gradient. For example, Munn hypothesizes that idiomatic MPs like ‘cat’s eye’ and ‘bull’s eye’ are probably compounds of the conventional sort, even as they contain a possessive marker.
However, for less idiomatic MPs, he shows that the non-head noun is more likely to share agreement in person and number with the head noun, and that the non-head is quite productively (and non-idiomatically) applied to a variety of other head nouns. (Examples he provides include ‘men’s room,’ ‘men’s clothing,’ ‘men’s pants,’ etc.). Finally, there is no regular predictability as to the semantics of a fully lexicalized English compound. In contrast, Munn argues that MPs are actually quite predictable in their semantics - the non-head noun modifies the head noun by providing a more specific ‘type’ interpretation for it.

Considering these characteristics, then, there are several crucial similarities between the MP in English and the Izafet in Kazakh. Like RPs, MPs carry possessive marking. While there may be some debate as to what exactly the -s morpheme characterizes in English, in Kazakh we have a poss morpheme in regular possessive constructions that mirrors the -sI morpheme in the Izafet construction in every morphological way. (See the regular possessive 3.sg morphemes (third row) in table 3, which mirror all of the Izafet poss-marked morphemes shown in examples throughout the paper.)

In English, MPs differ pivotally from RPs in that the possessive-marked non-head is modificational, and is never referential. Likewise, for Kazakh, the Izafet data also show that if a non-head noun were to receive referential status, it must have gen case marking. Otherwise, without gen case-marking, it retains a modificational status only. If we place referential reading on the non-head of an English MP, it changes the semantics of the phrase. English example: ‘men’s room’ in the sense of a restroom for males is not equal to ‘men’s room’ in terms of a room belonging to a particular group of males. This is consistent with an analysis that the non-head NP would move out of linked NP-NP constituent and receive gen case marking. In Kazakh we see this explicitly: if we add referentiality to the non-head NP in an Izafet construction, we have to give it gen marking, which then dramatically changes the semantics of the phrase. Kazakh examples of this are shown in (19) and (20) above.

Another similarity between the English MP and the Kazakh Izafet is that English MPs comprise a full constituent; that is, they are circumscribed within the NP and cannot themselves contain modificational elements. This contrasts with RPs, for which the non-head and the head noun can be bisected by any number of modificational elements, including adjectives and quantifiers. Similarly, the Kazakh Izafet differs in the same way from the Kazakh RP; whereas the former must form a full constituent NP, the latter does not and hence the two NPs can be bisected by additional modifiers. These patterns are exemplified in (8) and (16).

Finally, MPs are productive and largely non-idiomatic; they do not always carry idiosyncratic meaning (in contrast to regular compounds). The Kazakh Izafet data concur; Izafet constructions may or may not carry idiosyncratic meaning (in contrast to regular compounds which must). Additionally, because they are modificational, they are very productive, as conceivably any NP-NP combination can work. Remember example (11-b) from section 2.1, where even though the semantics are odd (a ‘Bonnie-like book’), it is still can be a licensed Izafet form.

4 The structures

The English analysis for RP and MP provided by Munn (1995), and the similarities between the English MP and the Kazakh Izafet suggest that both of these forms share a similar underlying structure in both Kazakh and English. That is, for RPs, the non-head nouns in both structures carry a +referential feature which prompts movement out of the NP and into spec-DP. For MPs
(English) and Izafets (Kazakh), however, the non-head noun is -referential, and so stays put in its own NP. As Munn says, it “stays close to home.” Accordingly, proposed structures for both the RP and the Izafet are provided in (22) and (23).

(22) ńis-tıń  ċärįger-į
      tooth-gen doctor-3.sg.poss
      ‘a tooth’s doctor’ (i.e., a doctor belonging to a tooth)              Regular possessive (RP)

(23) ńis  ċärįger-į
      tooth doctor-3.sg.poss
      ‘dentist’                                                               Izafet construction/Modificational possessive (MP)
As the trees in (22) and (23) illustrate, both of the NPs are contained within one dominating DP structure, which itself is dominated under a PossP that frames the relationship between the two NPs. PossP provides the -sI morpheme, which effectively binds the two NPs together in surface form. Because both RP and MP forms are iterative, there can be multiple PossP structures (and hence multiple posses), which explains the iterativity of the -sI morpheme found in example (17) above. The +referential feature of the non-head noun in the RP construction prompts that NP to move via phrasal-movement to spec-DP, where genitive case is assigned to it. In the Izafet construction, the NPs c-command each other, which explains why there can be no intervening modifiers between them. In the RP construction, because the non-head NP moves to the spec-DP position, there can be intervening modifiers in the spec-NP position. One final note about these structures is that they need the PossP to provide the template for an NP-NP structure. Without an overarching PossP, the non-head NP takes on a default +attributive feature, which moves it to a dominating spec-NP position. A proposed structure for this can be found in (24).

(24) \[ \text{tēs dārīger} \]
tooth doctor

‘toothy doctor’

Bare noun (Noun-as-adjective) construction
As (24) shows, certain types of NPs rendered with +attributive meaning move up to a position normally held by modifiers like adjectives, which explains their adjective-like status in terms of semantic interpretation.

Finally, what about the ‘conventional compounds’? While this paper remains agnostic as to whether these lexicalized forms were once themselves NP-NP forms dominated by PossPs — carrying -sI morphology, but subsequently lost this morphology in the process of word-formation — a suggested structure as in (25) seems quite plausible. In this structure, there are two fused morphemes that can themselves be free content morphemes in other contexts, but in the conventional compound they together form one, fused, NP.

(25) ajaq kijïm
    foot  clothing
    ‘shoe’

4.1 Additional evidence for gen as +referential

The function of gen for +referential NPs does not appear to be applied in the regular possessive construction alone. In fact, there are a few other contexts in Kazakh noun phrase structure which also evidence poss marking on an NP without an accompanying gen case marker. In Kazakh, embedded clauses are nominalized such that their subjects exhibit optional gen marking, while the nominalized verb obligatorily receives poss marking. This phenomenon has been studied in Uyghur
(Asarina 2011) and Uzbek (Gribanova 2013), and is likewise evident in Kazakh (see (26)).

\[(26)\]

\[\text{a. } \text{Muhtar bala Züz-gen-ĕn qala-j-dy} \]
Muhtar child swim-PTCP-POSS.3-ACC want-PRS-3SG
Muhtar wants a (non-particular) child to swim.' OR
Muhtar wants children (as a general rule) to swim'

\[\text{b. } \text{Muhtar bala-nyN Züz-gen-ĕn qala-j-dy} \]
Muhtar child-GEN swim-PTCP-POSS.3-ACC want-PRS-3SG
Muhtar wants a (particular) child to swim.'

For Uzbek, Gribanova (2013) analyzes the gen marking also found for Kazakh in (26-b) as occurring outside of the verbal domain of the embedded clause. Specifically, Gribanova suggests that NPs raise out of the aspectual domain (AspP) and receive genitive case assignment in the spec-DP position. Gribanova speculates that Uzbek is a differential subject-marking language, and that this movement happens for topic-marking reasons. But the nominalized clause construction is quite complex and poses a significant challenge to study in its various instantiations. Thus, the analysis for the comparatively simple NP-NP phrase structures provided in this paper aligns nicely with what has been proposed for more syntactically complex constructions.

5 Conclusion

This paper set out to describe the possessive and compound noun phrase structure in Kazakh, including how they are realized with respect to the Izafet construction. In doing so, it showed how surface level morphological variation and the structural and semantic constraints therein present a clear picture of how genitive case-marking and possessive agreement marking occur in the Kazakh noun phrase. In this way, it provides a definitive answer as to whether the poss morpheme in regular possessive constructions could be one and the same as the so-called ‘LE’ (linking element) or ‘CM’ (compound marker) as named for the -sI morpheme found in Izafet constructions in Turkic languages. Namely, both of these markers should be called poss. Finally, the paper provides a simple structural argument for how regular possessive and Izafet/modificational possessives can be distinguished — they differ in whether the non-head noun carries +referential meaning. In the case of the referential RP, the non-head noun moves to spec-DP, where genitive case is assigned; for MPs, which are not referential, the non-head noun remains in-situ. Finally, this analysis suggests a reason for why bare NP-NP phrase structures (lacking poss morphology) so closely resemble AP-NP structures semantically. That is, without an overarching PossP, the non-head NP receives default +attributive meaning, which moves it to the spec-NP position used for other attributive modifiers.

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