Definiteness via partitive specificity? A view from Abaza

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1 Intro

This paper discusses the semantics of the nominal prefix *a-* (glossed here as SP) and the suffix *-ḳ* (glossed as INDF) in Abaza (< Northwest Caucasian), a polysynthetic language spoken mainly in the Karachay-Cherkess Republic (Russia) and in Turkey.

Previous studies (Tabulova 1976, Arkadiev submitted) treat the prefix *a-* and the suffix *-ḳ* as the markers of definiteness and indefiniteness, respectively. However, as I will show, the prefix *a-* and the suffix *-ḳ* can be combined within a single NP, a fact that challenges the traditional view. I will propose a novel analysis of the data, according to which *a-* marks partitive specificity (Enç 1991, Farkas & Brasoveanu 2019) rather than definiteness. The analysis is formalized within the framework of compositional dynamic semantics (Groenendijk & Stokhof 1990, Muskens 1996).

The data for this study come from the variant of the Ashkharywa dialect of Abaza spoken in Apswa (Karachay-Cherkess Republic, Russia) and were elicited by the author during the expedition in July 2023. Some additional data were collected in April 2024. The methodology of Matthewson (2004) was employed.

The paper is structured as follows. I will first discuss the semantic properties of NPs marked by the suffix *a-*, the prefix *-ḳ*, and their combination (sect. 2). Then, a formal semantic analysis of the prefix *a-* and the suffix *-ḳ* will be proposed (sect. 3). The last section is devoted to a brief discussion.

2 Data

The prefix *a-* and the suffix *-ḳ* are affixes that are attached to the head noun in NPs. In what follows, we will look at the semantic properties of NPs marked by (i) the suffix *a-*, (ii) the prefix *-ḳ*, and (iii) their combination.

(i) NPs marked by the prefix *a-* (but not by the suffix *-ḳ*) must be used in anaphoric contexts (1b) and in contexts of situational uniqueness (2) and are, thus, definite.

(1) a. h-čǝ́   sasǝ́-ḳ   d-á-j.
       1PL.PO-near guest-INDF   3SG.H.ABS-CSL-go(PST)
       'A guest came to us.'

    b. aslán   **á-sas**   d-ǝj-dǝ́rǝ-wa-j.
       A.   **SP-guest**   3SG.H.ABS-3SG.M.ERG-know-IPF-DCL
       'Aslan knows **the guest**.'

(2) sará   dǝ-z-dǝ́rǝ-wa-j   **a-č'ampǝjáwn**   šáχmat-la.
    1SG   3SG.H.ABS-1SG.ERG-know-IPF-DCL   **SP-champion**   chess-INS
    'I know **the chess champion**.'

(ii) NPs marked by the suffix (but not by the prefix *-ḳ*), by contrast, are indefinite: they are used to introduce new discourse referents (3) and cannot be used in anaphoric contexts (4b) or in contexts of situational uniqueness (5).

(3) [Out of the blue:]

h-čə́	**sasə́-ḳ**	d-á-j.
1PL.PO-near	**guest-INDF**	3SG.H.ABS-CSL-go(PST)

'**A guest** came to us.'

(4) a.

h-čə́	sasə́-ḳ	d-á-j.
1PL.PO-near	guest-INDF	3SG.H.ABS-CSL-go(PST)

'A guest came to us.'

b.

#aslán	**sasə́-ḳ**	d-əj-də́rə-wa-j.
A.	**guest-INDF**	3SG.H.ABS-3SG.M.ERG-know-IPF-DCL

intended: 'Aslan knows **the guest**.'

(5) [*Scenario*: there is only one principal in the school under discussion.]

#sará	**dəjrájktar-ḳ**	də-z-də́rə-wa-j.
1SG	**principal-INDF**	3SG.H.ABS-1SG.ERG-know-IPF-DCL

intended: 'I know **the principal**.'

(iii) Finally, NPs marked both by the prefix *a-* and the suffix *-ḳ* are also indefinite, e. g. they cannot be used in anaphoric contexts (6). However, unlike NPs marked by *-ḳ* but not by *a-*, they require partitive specificity, i.e. must refer to a part of a familiar set of entities (see Enç 1991, Farkas 2002, Farkas & Brasoveanu 2019). This is illustrated in (7–8). Importantly, no other differences between NPs marked both by *a-* and *-ḳ* and NPs marked only by *-ḳ* (e. g., w.r.t. epistemic or scopal specificity; von Heusinger 2011, Farkas & Brasoveanu 2019) were attested (the relevant examples are not included for the reasons of space).

(6) a.

á-sas-ḳ	də-z-də́rə-wa-j.
SP-guest-INDF	3SG.H.ABS-1SG.ERG-know-IPF-DCL

'I know one of the guests.'

b.

aslán-g'əj	**á-sas-ḳ**	də-j-də́rə-wa-j.
A.-ADD	**SP-guest-INDF**	3SG.H.ABS-3SG.M.ERG-know-IPF-DCL

OK'Aslan also knows **one of the guests**.'

#'Aslan also knows **this guest**.'

(7) [Out of the blue:]

#**á-sas-ḳ**	də-z-də́rə-wa-j.
SP-guest-INDF	3SG.H.ABS-1SG.ERG-know-IPF-DCL

'I know **one of the guests**.'

(8) a.

h-čə́	á-sas-ĉa	j-á-j.
1PL.PO-near	SP-guest-PL.H	3PL.ABS-CSL-go(PST)

'The guests came to us.'

b.

OK**á-sas-ḳ**	də-z-də́rə-wa-j.
SP-guest-INDF	3SG.H.ABS-1SG.ERG-know-IPF-DCL

'I know **one of the guests**.'

3 Analysis

While the suffix *-ḳ* is naturally analized as an indefiniteness marker, the prefix *a-* seems to mark definiteness when not combined with the suffix *-ḳ* and partitive specificity otherwise. The challenge is to provide a unified analysis for the prefix *a-*. To do so, I will adopt the familiarity view of definiteness (Christophersen 1939, Heim 1982, Roberts 2010). The relevant notion of familiarity is that of weak familiarity (Roberts 2003, 2010) rather than anaphoricity.

The idea is simple (Enç 1991). By definition, the discourse referent of a partitive specific NP must be related to a familiar discourse referent by the parthood relation. Under the familiarity view of definiteness, the discourse referent of a definite DP must be familiar. If a discourse referent is familiar, then it is related to some familiar discourse referent (namely itself) by the parthood relation. Thus, all definite NPs turn out to be partitive specific, and *a-* can be treated as a partitive specificity marker.

I formalize the proposal within the framework of compositional dynamic semantics (Groenendijk & Stokhof 1990, Muskens 1996, a. o.). The dynamic system used here is similar to Dekker's (1996) *EDPL*, which is in turn based on Heim (1982). The basic types are e for individuals, r for discourse markers, s for possible worlds and t for truth values. The domain of individuals D_e is structured by the (improper) parthood relation '$\leq$' (relativized to a possible world).

A context is modeled as a set of pairs $\langle w, f \rangle$, where w is a possible world and f is a partial assignment function. Every assignment function in a context c has the same domain, written as $\text{Dom}(c)$. The type of contexts is $(s \times (re))t$, abbreviated as k. The meaning of a sentence is a context change potential (CCP; type kk, abbreviated as T).

For two partial assignment functions, the relation of extension by a discourse marker is defined:

(9) $f \subseteq_i g$ iff $\text{Dom}(g) = \text{Dom}(f) \cup \{i\}$ and for every $j \in \text{Dom}(f)$: $f(j) = g(j)$

Now, we can define discourse referent (dref) introduction (cf. Dekker 1996):

(10) $[i] =_{\text{def}} \lambda c. \{\langle w, g \rangle \mid \text{there is } f \text{ such that } \langle w, f \rangle \in c \text{ and } f \subseteq_i g\}$

For every n-place static property p, we define the unique corresponding n-place dynamic predicate P as follows:

(11) $P(i_1)...(i_n) =_{\text{def}} \lambda c. \{\langle w, f \rangle \in c \mid p(w)(f(i_1))...(f(i_n))\}$

In particular, the dynamic predication of the parthood relation is defined in (12).

(12) $i \leq j =_{\text{def}} \lambda c. \{\langle w, f \rangle \in c \mid f(i) \leq f(j) \text{ in } w\}$

We will also need the definitions of conjunction (13a), the 'presupposing' operator ∂ (13b) (cf. Beaver 2001), and special novelty (13c) and familiarity (13d) presuppositions (cf. e. g. Heim's (1982) Extended Novelty-Familiarity Condition):

(13) a. $A; B =_{\text{def}} \lambda c. B(A(c))$
      b. $\partial(A) =_{\text{def}} \lambda c: A(c) = c. c$
      c. $\text{NOVEL}(i) =_{\text{def}} \lambda c: i \notin \text{Dom}(c). c$
      d. $\text{FAMILIAR}(i) =_{\text{def}} \lambda c: i \in \text{Dom}(c). c$

The only interpretation rule we will need is the standard functional application.

I adopt Minimalist syntax and propose the structure of nominal phrases in Abaza given in (14). The prefix *a-* and the suffix *-ḳ* are generated in different positions, reflecting their ability to combine within a single nominal phrase. In the absence of the suffix *-ḳ*, I postulate the null determiner $\emptyset_{[\text{-INDF}]}$ in the structure; similarly, the null marker $\emptyset_{[\text{-PTSP}]}$ is postulated when the prefix *a-* is absent.

(14) $[_{\text{DP}} \{\text{-}ḳ, \emptyset_{[\text{-INDF}]}\}_{\text{D}} [_{\text{dP}} \{a\text{-}, \emptyset_{[\text{-SP}]}\}_{\text{d}} \text{NP}]]$

NPs and VPs denote 1-place dynamic predicates (type rT). The proposed meanings of determiners are listed below:

(15) a. $\llbracket$ *a-* $\rrbracket$ = $\lambda P. \lambda i. \lambda D. \lambda j. \lambda Q.$ FAMILIAR(i); $\partial(P(i))$; $D(P)(j)(Q)$; $j \leq i$
     b. $\llbracket$ $\emptyset_{\text{[-SP]}}$ $\rrbracket$ = $\lambda P. P$
     c. $\llbracket$ *-ḳ* $\rrbracket$ = $\lambda P. \lambda i. \lambda Q.$ NOVEL(i); $[i]$; $P(i)$; $Q(i)$
     d. $\llbracket$ $\emptyset_{\text{[-INDF]}}$ $\rrbracket$ = $\lambda P. \lambda i. \lambda Q.$ $[i]$; $P(i)$; $Q(i)$

The determiners are accompanied by referential indices in syntax. The prefix *a-* presupposes its index to correspond to a familiar dref satisfying the DP predicate and asserts that the dref of the DP is connected to that dref by the parthood relation (15a). $\emptyset_{\text{[-SP]}}$ has trivial semantics (15b). The suffix *-ḳ* presupposes novelty of the dref of the NP (15c), while $\emptyset_{\text{[-INDF]}}$ introduces a dref unmarked wrt. novelty (15d).

To avoid overgeneration, I will use the *Maximize presupposition* principle (MP), proposed in Heim (1991) and adopted in much following work (Bade 2021). In our system, presupposition is modeled as restriction on the input context. We can formulate MP as follows:

(16) *Maximize presupposition*
     Given a context *c* and an LF S, if there is an LF S' such that
       (i) $\llbracket$ S' $\rrbracket(c)$ = $\llbracket$ S $\rrbracket(c)$ and
       (ii) $\{c \mid \llbracket$ S' $\rrbracket(c)$ is defined$\}$ $\subset$ $\{c \mid \llbracket S \rrbracket(c)$ is defined$\}$,
     then S is infelicitous in the context *c*.

Now we can account for the data as follows. Whenever an NP introduces a new dref, MP requires it to be marked by the suffix *-ḳ*. For the same reason, all partitive specific NPs (including definite NPs) must be marked by the prefix *a-*. Thus, we correctly derive the distribution of NPs marked the prefix *a-* and the suffix *-ḳ*.

4 Outro

In this paper, I discussed the affixes *a-* and *-ḳ* in Abaza, which were traditionally claimed to mark definiteness and indefiniteness, respectively. However, *a-* and *-ḳ* can combine within a single NP, contrary to the traditional view. I proposed an alternative analysis of the data, according to which *a-* marks partitive specificity rather than definiteness.

A potential issue with my analysis is that it relies crucially on the familiarity view of definiteness, which is considered problematic by many. In particular, the existence of 'strong' and 'weak' definite articles, the former claimed to mark familiarity and the latter uniqueness, led such authors as Schwarz (2009, 2013) to propose that the familiarity alone cannot explain all uses of definites (see also Becker 2021 and Dawson & Jenks to appear, a. o.). I think, however, that this evidence is not concluding (see Coppock 2022 for a critical discussion) and that the data can be accounted for within the familiarity view of definiteness (specifically, one could assume that 'strong' and 'weak' articles require different types of familiarity, as briefly suggested in Roberts 2003 and Coppock 2022). Moreover, the data presented here can be taken to support the familiarity view of definiteness.

If the present proposal is on the right track, the system of articles found in Abaza seems quite unusual from the typological point of view (Becker 2021), and it would be interesting to search for similar article systems in other languages. Marking partitive specificity by the combination of the 'definite' article and the indefinite article is attested in Akan (Amfo 2010, Duah et al. 2023). On other hand, the use of the prefix *a-* in indefinite NPs is somewhat similar to the uses of definite articles as quantifier domain restrictors found in Greek, Basque, and Hungarian (Etxeberria & Giannakidou 2009, 2019). However, there is also an important difference: unlike

the prefix *a-* in Abaza, definite articles in such languages cannot combine with indefinite articles (Etxeberria & Giannakidou 2009).

Abbreviations

1, 3 – 1, 3 person; ABS – absolutive; ADD – additive; CSL – cislocative; ERG – ergative; DCL – declarative; H – human; INDF – indefinite; INS – instrumental; IPF – imperfective; M – masculine; PL – plural; PO – postposition; PST – past; SG – singular; SP – specific.

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