# Definiteness via partitive specificity? A view from Abaza

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#### Intro

- Two nominal affixes in Abaza
  - ► the prefix *a* (glossed here as SP) **á**-sas 'SP-guest'
  - ► the suffix -k (glossed as INDF) sasá-k 'guest-INDF'
- Traditional analysis Tabulova 1976, Arakelova 2019, Arkadiev submitted
  - a- marks definiteness
  - -k marks indefiniteness

#### Intro

#### Problems

- ▶ nominals marked by both *a* and -k̄
- *a* attached to indefinite pronouns

á-sas-k 'SP-guest-INDF'
á-za<sup>2</sup> 'SP-someone'

#### This talk

- ▶ an attempt at a new monosemic account of *a* and -k.
- ► *a* as a marker of **partitive specificity** rather than definiteness
- formalization within compositional dynamic semantics

#### Data

- Preliminary data coming from the Ashkharywa dialect
  - Apswa (Karachay-Cherkess Republic, Russia), July 2023 + April 2024
- Elicited using the methodology of Matthewson 2004
- Additional data from Staro-Kuvinsk (elicitation + texts) forthcoming

#### Outline

- Background
- Observations
- 3 Analysis
- 4 Discussion

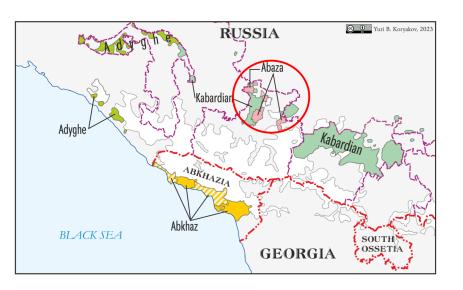
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#### Abaza

- < West Caucasian family</li>
  - closest relative: Abkhaz
- Two main dialects: Tapanta and Ashkharywa (might be closer to Abkhaz, Chirikba 2003)
- Spoken mainly in Karachay-Cherkess Republic (Russia) and in Turkey
- ~ 38,000 native speakers in Russia and ~ 10,000 in other countries Arkadiev submitted

#### Abaza



# Abaza: grammatical profile

- Polysynthesis
- Head-marking, all arguments are cross-indexed by prefixes on argument-taking expressions (verbs, possessed nouns, postpositions)
- Argument indexing follows an ergative pattern, case system is neutral
- Prevalent left branching

Grammatical descriptions: Tabulova 1976, Arkadiev submitted

### Nominal phrases

- The noun and its 'adjectival' modifiers form a single phonological word: so-called **nominal complex**
- Inflectional affixes are attached to the nominal complex
  - ▶ SP/agreement with the possessor stem plural INDF case
- Demonstratives, nominals denoting possessors, and relative clauses occur outside the nominal complex

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### Types of nominal phrases

Four logically possible types of nominal phrases:

unmarked sasá 'guest'

• marked by a- á-sas 'SP-guest'

• marked by -k sasá-k 'guest-INDF'

• marked by a- and -k á-sas-k 'SP-guest-INDF'

All of them are attested.

#### **Unmarked nominals**

- (1) **\$\delta\$** j-a-w-m-r-t\delta-n. **door** 3SG.N.ABS-3SG.N.IO-2SG.M.ERG-NEG-CAUS-open-NEG.IMP 'Don't open **any door**.'
  - Resist modification
  - Typically have narrow scope indefinite interpretations
  - So far, an analysis in terms of pseudo-incorporation seems plausible (see Arkadiev & Testelets 2019 for the Tapanta dialect)

I won't consider unmarked NPs further due to the lack of data.

Occur in contexts typical for anaphoric and unique definites:

- anaphora
- situational uniqueness
- presence of a demonstrative

#### Anaphoric contexts:

- (2) a. h-çɨ sasɨ-k d-á-j. 1PL.PO-near guest-INDF 3SG.H.ABS-CSL-go(PST) 'A guest came to us.'
  - aslán á-sas d-əj-dér-aj.
     Aslan SP-guest 3SG.H.ABS-3SG.M.ERG-know-PRS
     'Aslan knows the guest.'

#### Situational uniqueness:

(3) [There is only one chess champion in the town.] sará də-z-dər-aj a-c'ampəjáwn šáχmat-la. 1SG 3SG.H.ABS-1SG.ERG-know-PRS SP-champion chess-INS 'I know the chess champion.'

When the DP features a demonstrative, *a*- is also typically used:

(4) sará awój a-təwk'án s-c-ów-š. 1SG DIST.SG SP-shop 1SG.ABS-go-IPF-FUT 'I will go to that shop.'

- Occur in contexts typical for indefinites
- Don't require partitive specificity
- Can take narrow scope w.r.t. different operators

Introduce new drefs; don't require partitive specificity:

```
    (5) [Out of the blue:]
    h-çió sasó-k d-á-j.
    1PL.PO-near guest-INDF 3SG.H.ABS-CSL-go(PST)
    'A guest came to us.'
```

#### Infelicitous in anaphoric contexts:

- (6) a. h-čá sasá-k d-á-j. 1PL.PO-near guest-INDF 3SG.H.ABS-CSL-go(PST) 'A guest came to us.'
  - b. # aslán sasó-k d-əj-dér-aj.
     Aslan guest-INDF 3SG.H.ABS-3SG.M.ERG-know-PRS intended: 'Aslan knows the guest.'

Infelicitous in contexts of situational uniqueness:

(7) [There is only one principal in the school under discussion]
 # sará dəjrájktar-ķ də-z-dər-aj.
 1SG principal-INDF 3SG.H.ABS-1SG.ERG-know-PRS intended: 'I know the principal.'

#### Can take narrow scope:

(8) **vráč'-ķ** w-j-á-ĉaĝa! **doctor-INDF** 2SG.M.ABS-3SG.M.IO-DAT-talk(IMP) 'Talk to **some doctor**!' (any doctor will do)

- Occur in contexts typical for indefinites
- Do require partitive specificity
- Can take narrow scope w.r.t. different operators

Introduce new drefs, cannot be used anaphorically:

- (9) a. á-sas-k də-z-dər-aj. SP-guest-INDF 3SG.H.ABS-1SG.ERG-know-PRS 'I know one of the guests.'
  - b. aslán-g'əj **á-sas-**k də-j-dər-aj.
    Aslan-ADD **SP-guest-INDF** 3SG.H.ABS-3SG.M.ERG-know-PRS

    OK 'Aslan also knows **one of the guests.**'
    # 'Aslan knows **that guest**.'

#### Infelicitous out of the blue:

```
(10) [Out of the blue:]
# h-čá á-sas-k d-á-j.
1PL.PO-near SP-guest-INDF 3SG.H.ABS-CSL-go(PST)
'One of the guests came to us.'
```

OK in contexts of **partitive specificity** (the nominal phrase refers to a subset of a familiar set of entities; Enç 1991, Farkas 2002, Farkas & Brasoveanu 2019):

- (11) a. h-čá 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-ķ də-z-dər-aj.
     SP-guest-INDF 3SG.H.ABS-1SG.ERG-know-PRS
     'I know one of the guests.'

#### Don't signal wide scope:

```
    [In a hospital:]
    á-vrač'-ķ w-j-á-ĉaĉa!
    SP-врач-INDF 2SG.M.ABS-3SG.M.IO-DAT-говорить(IMP)
    'Talk to one of the doctors.' (any doctor will do)
```

### **Summary**

- DPs marked by *a*-: **definite**
- DPs marked by -k: indefinite
- DPs marked by *a* and -k: **indefinite** + **partitive specific**

# Additional evidence: indefinite pronouns

- Some indefinite pronouns can carry the prefix *a*-
  - zaĝó 'someone' á-zaĝ 'SP-someone', zğ'aķó 'someone' á-zğ'ak 'SP-someone'
- The only semantic difference between 'bare' indefinite pronouns and their counterparts marked by *a* seems to be partitive specificity.

Background

Observations

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#### In a nutshell

- The suffix -k is naturally analyzed as an indefiniteness marker
- The prefix a- is more problematic: it seems to mark partitive specificity when combined with -k or indefinite pronouns and definiteness otherwise
- An idea for a monosemic account of *a*-:
  - under the familiarity view of definiteness (Heim 1982, Roberts 2010 a.o.), all definite NPs are partitive specific (Enç 1991)
  - ▶ thus, *a* can be analyzed as a partitive specificity marker

### Syntactic assumptions

#### I assume the following structure of DP in Abaza:

$$[_{\text{DP}} \{ -\dot{k}, \emptyset_{[-\text{INDF}]}, ... \}_{\text{D}} [_{\text{PossP}} \{ a\text{-}, \emptyset_{[-\text{SP}]}, ... \}_{\text{Poss}} \text{NP}]]$$

- *a* is generated in Poss<sup>0</sup>: recall that it cannot co-occur with prefixes cross-indexing the possessor
- -k presupposes novelty, while *a* presupposes partitive specificity of the dref introduced by the DP
- in the absence of -k and a-, null presuppositionless elements  $\emptyset_{[-{\tt INDF}]}$  and  $\emptyset_{[-{\tt SP}]}$  are postulated

- I adopt the framework of compositional dynamic semantics
- The system is similar to that of Dekker 1996 (which in turn is based on Heim 1982)
- Sentence meanings are **context change potentials**, i.e. functions from contexts to contexts

#### Context:

a set of pairs  $\langle w, f \rangle$ , where w is a possible world and f is a partial assignment function

Every assignment in c has the same domain, written as Dom(c)

#### **Dref introduction:**

$$[i] = \lambda c. \{\langle w, g \rangle \mid \text{there is } f \text{ s.t. } \langle w, f \rangle \in c \text{ and } f \subseteq_i g \}$$

where:

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

#### **Dynamic predication:**

For a static *n*-place property *r*,

$$R(i_1)...(i_n) = \lambda c.\{\langle w, f \rangle \in c \mid r_w(f(i_1))...(f(i_n))\}$$

in particular,

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

# Dynamic semantics

### Novelty and familiarity cf. Heim 1982:

 $\text{NOVEL}(i) = \lambda c : i \notin \text{Dom}(c). c$ 

 $\mathsf{FAMILIAR}(i) = \lambda c : i \in \mathsf{Dom}(c). c$ 

# Dynamic semantics

### Presupposing (cf. Beaver 2001):

$$\partial(A) = \lambda c : A(c) = c. c$$

### **Conjunction:**

$$A; B = \lambda c. B(A(c))$$

# Dynamic semantics

• NPs and VPs denote dynamic predicates, e.g.

$$\llbracket sasa \rrbracket = \lambda i.Guest(i)$$

• I will ignore the contribution of number for simplicity

### Semantics for the determiners

$$\begin{split} & \llbracket -\dot{k} \rrbracket = \lambda P.\lambda i.\lambda Q. \text{NOVEL}(i); [i]; P(i); Q(i) \\ & \llbracket \emptyset_{[-\text{INDF}]} \rrbracket = \lambda P.\lambda i.\lambda Q. [i]; P(i); Q(i) \\ & \llbracket a \text{-} \rrbracket = \lambda P.\lambda i.\lambda D.\lambda j.\lambda Q. \text{FAMILIAR}(i); \partial(P(i)); D(P)(j)(Q); j \leq i \\ & \llbracket \emptyset_{[-\text{SP}]} \rrbracket = \lambda P.P \end{split}$$

# Maximize presupposition (MP)

Given a context *c* and an LF S, if there is an LF S' s.t.

(i) 
$$[S](c) = [S'](c)$$
 and

(ii)  $\{c \mid \llbracket S' \rrbracket(c) \text{ is defined } \} \subset \{c \mid \llbracket S \rrbracket(c) \text{ is defined} \}$ ,

then S is infelicitous in the context c.

Heim 1991, Bade 2021

# Presuppose the NP restriction

I will employ the following additional principle (supposed to follow from more general pragmatic considerations):

• If a nominal phrase interpreted in the context c introduces a familiar dref i, then the NP restriction P predicated to i should be presupposed in c formally: P(i)(c) = c

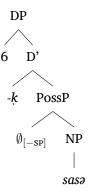
cf. Roberts 2010

### **Predictions**

- The combination  $\emptyset_{[-INDF]} + \emptyset_{[-SP]}$  is ruled out: it violates either MP or *Presuppose the NP restriction*
- DPs marked only by *a*-: definite (definiteness understood as weak familiarity; Roberts 2003)
- DPs marked only by -k: indefinite
- DPs marked by both *a* and -k: indefinite + partitive specific

### **Examples**

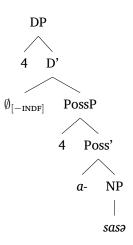
sasa-k 'guest-INDF'



 $\lambda Q.NOVEL(6); [6]; Guest(6); Q(6)$ 

### **Examples**

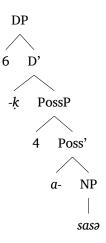
a-sas 'SP-guest'



 $\lambda \textit{Q}.\texttt{Familiar}(4); \partial (\texttt{Guest}(4)); \textit{Q}(4)$ 

# **Examples**

a-sas-k 'SP-guest-INDF'



 $\lambda Q.FAMILIAR(4); \partial (Guest(4)); [6]; Guest(6); Q(6); 6 \le 4$ 

# Extension to indefinite pronouns

- We can account for indefinite pronouns with and without *a* by decomposing them into an indefinite article and an NP restriction
- E.g., the structure for á-zaĝ 'SP-someone' could look like

[
$$_{DP}$$
 INDF [ $_{PossP}$   $a$ -  $_{HUMAN}$ ]]

• zaŷə spells out INDF + HUMAN

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# Recap

- In Abaza, the prefix a- (traditionally considered an definiteness marker) can co-occur with the indefiniteness marker -k and indefinite pronouns
- I proposed a solution to this problem by re-analyzing a- as a marker of partitive specificity

# Against analyzing a-NP-k as a partitive construction

- Could NPs featuring both *a* and -k be analyzed as genuine partitive constructions?
- The partitive analysis is unlikely to be correct: there is a dedicated analytic partitive construction

# Against analyzing *a*-NP-k as a partitive construction

• Note the prefix *a*- on the indefinite pronoun, which is hard to account for if the pronoun itself is a partitive construction in disguise

(13) [[awát rɨ-wa] á-zaʒ] aslán
DIST.PL 3PL.PO-among SP-someone Aslan
də-j-dər-aj.
3SG.H.ABS-3SG.M.ERG-know-PRS
'Aslan knows one of them.'

### Loose ends

- Usual problems of the familiarity theory of definiteness (see Coppock 2022 for a recent discussion)
- I ignored number and discussed only singular DPs (singular is unmarked) for simplicity and because the semantics of plurality markers in Abaza is ill-understood
  - ▶ importantly, *a* and -k do co-occur with plurality markers
- There are functions of a- and -k not covered by the account (e.g., a- can mark kind reference)

# Parallels from other languages

- A very similar construction in Akan Duah et al. 2023
- (14) AKAN (Duah et al. 2023) [[nkuriffós no] bi] people DEF INDEF 'Some of the people'

# Parallels from other languages

- Definite articles in Greek, Basque, and Hungarian can be used as quantifier domain restriction markers Etxeberria & Giannakidou 2009
  - ▶ NB: they do not co-occur with indefinite articles
- Some Uralic determiners used in definite and partitive specific contexts Simonenko 2017

# Thank you!

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# Presuppose the NP restriction

### Motivations for the additional principle:

- No clear examples of determiners violating it
- Evidence from an articleless language: a bare NP can be understood anaphorically only if its predicate can be construed as presupposed
  - if Heim 2011 and others are correct and such bare NPs are always indefinite, there should be a special constraint responsible for this effect

# Presuppose the NP restriction

# (15) RUSSIAN Petja sidel v kafe rjadom s neznakomcem $_i$ . Petja was.sitting in cafe near with stranger Vdrug on dostal pistolet i vystrelil v neznakomca $_{0K_i/??j}$ suddenly he took gun and shot in stranger

spy

/ špiona?<sub>i/OKj</sub>.

'Petja was sitting in a cafe next to a stranger. Suddenly he took his gun and shot **the** stranger / **a** spy.'

NB: 'the spy' reading is actually possible but seems to involve accomodation