#### Peter M. Arkadiev

Institute of Slavic Studies of the Russian Academy of Sciences / Russian State University for the Humanities / Sholokhov Moscow State University for the Humanities, Moscow peterarkadiev@yandex.ru

### Yakov G. Testelets

Russian State University for the Humanities / Institute of Linguistics of the Russian Academy of Sciences / Sholokhov Moscow State University for the Humanities, Moscow testelets@gmail.com

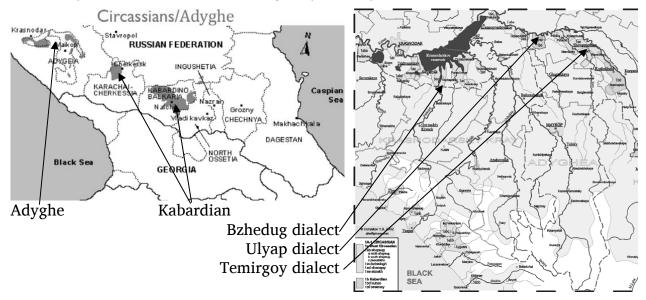
# The challenges of differential nominal marking in Circassian

### 1. The Circassian languages

Circassian < North-West Caucasian (Abkhaz-Adyghe) < North-Caucasian phylum Two languages (groups of dialects): **Adyghe** (West Circassian) and **Kabardian** (East Circassian).

Our fieldwork data come from three Circassian varieties spoken in the Republic of Adygea (Russian Federation):

- Temirgoy dialect of Adyghe, very close to Standard Adyghe;
- Bzhedug dialect of Adyghe (village Wechepshije), substantially different from Standard Adyghe;
- Besleney dialect of Kabardian, village Ulyap (very different from Standard Kabardian).



Important typological features:

- very little distinction between nouns, adjectives and verbs (Lander & Testelets 2006);
- **⊃ polysynthesis**: pronominal affixes expressing all arguments of the verb (S, A, P as well as various indirect objects such as recipient, benefactive, and even location, cf. e.g. Smeets 1992) and a rich system of affixes marking aspectual, temporal and modal meanings (Smeets 1984; Korotkova & Lander 2010; Lander & Letuchiy 2010)

#### (1) Besleney Kabardian

sə-qə-zer-a-x<sup>w</sup>ə-ç'erə-mə-tetə-ç'ə-z'-a-r 1sg.Abs-dir-rel.fct-3pl.io-ben-loc-neg-tie-elat-re-pst-abs 'that they could not untie me' **⇒ ergativity** in both head- and dependent-marking (Smeets 1992; Kumakhov & Vamling 2009; Letuchiy 2012), coupled with an impoverished case system comprising only Absolutive (-*r*, marks S (2a) and P (2b)) and Oblique (-*m*, marks A (2b), all types of indirect objects (2b), and adnominal possessors (2c)). Personal pronouns, possessed nominals and proper names, as well as **non-referential common nouns** normally do not admit case marking.

## (2) Temirgoy Adyghe

- a.  $\check{c}$ 'ale-r  $\varnothing^1$ -me-čəje. boy-ABS 3.ABS-DYN-sleep 'The boy is sleeping.'
- b.  $\check{c}$ 'ale-m  $p\hat{s}a\hat{s}e$ -m  $tx\partial\lambda$ -r  $\varnothing$ - $\varnothing$ -r-j-e- $t\partial$ . boy-obl girl-obl book-abs 3.abs-3sg.io-dat-3sg.erg-dyn-give 'The boy is giving the book to the girl.'
- c. *cafa-m* Ø-*ja-wane*man-OBL 3sg.PR-POSS-house
  'the man's house'

Existing sources on Circassian morphosyntax:

- in general on Circassian: Kumaxov 1971 (in Russian); Kumakhov & Vamling 2009 (in English);
- on Adyghe: Paris 1989 (in French); Smeets 1984 (in English); Rogava & Keraševa 1962; Testelec (ed.) 2009 (in Russian);
- on Kabardian: Colarusso 1989, 1992, 2006; Matasovič 2008 (in English); Kumaxov (ed.) 2006 (in Russian).

Our data comes mainly from the fieldwork materials collected during field trips in 2004–2006 (Temirgoy Adyghe), 2011–2013 (Besleney Kabardian) and 2014 (Bzhedug Adyghe). Our research has been supported by the Russian Foundation for the Humanities, grants 04-04-18008e (2004), 11-04-00282a (2011–2012), 12-34-01345 (2013), the Russian Foundation for Fundamental Linguistic Research, grant A-23 (2012), grant "Languages and Literature in the Context of Cultural Dynamics", Section of Language and Literature, Russian Academy of Sciences, 2012–2014, and the Russian Scientific Foundation, grant 14-18-03406 (2014).

### 2. Differential nominal marking in Circassian

Nominal constituents in Circassian languages may lack the case endings -r (Absolutive) and -m (Oblique):

- ⇒ alternation of case-marked and unmarked forms occurs almost in all syntactic contexts; ⇒ non-specific or indefinite NPs are unmarked, whereas specific or definite NP are case-
- ⇒ non-specific or indefinite NPs are unmarked, whereas specific or definite NP are casemarked.

#### 2.1. The **Absolutive** contexts

- 2.1.1. Subjects (S) of monovalent intransitive verbs
- (3) Temirgoy Adyghe:

a.  $p\hat{s}a\hat{s}e$ -r ma-k<sup>w</sup>e b.  $p\hat{s}a\hat{s}e$  ma-k<sup>w</sup>e girl-ABS DYN-go girl DYN-go 'The girl is going.'

<sup>1</sup> Below we will not mark and gloss zero morphemes.

-

- 2.1.2. Subjects (S) of bivalent intransitive verbs
- (4) Besleney Kabardian

 $\lambda a = \hat{s}ap\dot{q}e(-r)$   $je\&a\hat{s}-ja$   $p\hat{s}a\hat{s}e-m$   $je-we-ne-\dot{q}am$  man = true(-ABS) life-ADD girl-OBL DAT-hit-FUT-NEG 'A real man will never hit a girl.'

- 2.1.3. Direct objects (P) of transitive verbs
- (5) Besleney Kabardian:
  - a.  $\mathbf{\check{z}'ema-r}$   $qe-s-\check{s}'e\chi^w-a$  cow-ABS DIR-1SG.ERG-buy-PST 'I bought the cow.'
  - b. **ž'em** qe-s-š'ex<sup>w</sup>ə-ne-w s-we-k̄<sup>w</sup>e **ž'**.jə.?-a cow dir-1sg.erg-buy-fut-adv 1sg.abs-dyn-go 3sg.erg:say-pst 'I'm going in order to buy a cow.' (DX Anekdot: 3)
- 2.2. The **Oblique** contexts:
- 2.2.1. Indirect objects of intransitive (6) and ditransitive (7) verbs
- (6) Standard Kabardian (Kumaxov 1971: 37):
  - a. **Ṣale-r txəλə-m** j-we-ǯe boy-ABS book-OBL DAT-DYN-read 'The boy is reading the book.'
  - b. **§ale txəλ** j-we-ğe boy book DAT-DYN-read 'A boy reads a book.'
- (7) Besleney Kabardian
  - a.  $p\hat{s}e\hat{s}e = wesa-m$  qewawe  $j\partial -r-j\partial -t\partial -n-w\partial$   $x^wje$  girl = well.mannered-OBL flower 3sg.IO-DAT-3sg.ERG-give-POT-ADV want 'He wants to present flowers to the well-mannered girl.'
  - b.  $p\hat{s}e\hat{s}e = wesa$  qewawe  $j\partial -r j\partial -t\partial -n -w\partial$   $x^wje$  girl = well.mannered flower 3sg.Io-dat-3sg.erg-give-pot-adv want 'He wants to present flowers to (some) well-mannered girl.'
- 2.2.2. Indirect object introduced by applicative prefixes
- (8) Besleney Kabardian
  - a. s-ja-psase  $\ddot{c}$ 'ele = daxe-m  $\underline{de}$ -k''e-n-wa x''aje 1sg.pr-poss-girl boy = beatiful-obl com-go-pot-ADV want 'My daughter wants to marry a (particular) handsome guy.'
  - b. s-j-psase  $\ddot{c}$ 'ele = daxe  $\underline{de}$ - $\dot{k}$ we-n-wa xwaje  $\underline{de}$ - $\underline{k}$ pe-poss-girl boy = beautiful  $\underline{de}$ - $\underline{$
- 2.2.3. Locative (9) and temporal (10), (11) adverbials
- (9) Standard Kabardian (Kumaxov 1971):
  - a. meza-m  $ma-k^we$  b. mez  $ma-k^we$  forest-OBL DYN-go forest DYN-go '(S)he is going to the forest.' '(S)he is going to a forest.'
- (10) Bzhedug Adyghe:

 $nep^hema\dot{\varsigma}' = mafe(-m)$   $t\partial -qe-\dot{k}^we-t$  another = day(-OBL) 1PL.ABS-DIR-come-FUT 'We'll come on another day.'

- (11) Besleney Kabardian:
  - a.  $nah-mex^we = x^wabe-m$   $ps\partial-m$   $d\partial-\dot{k}^we-ne$  more-day = warm-OBL water-OBL 1sg.ABS-go-FUT 'We'll go to the river on the warmer day (we know the forecast).'
  - b.  $nah-mex^we = x^wabe$  psa-m  $da-k^we-ne$  more-day = warm water-OBL 1sG.ABS-go-FUT 'We'll go to the river on a warmer day (if there is any).'
- 2.2.4. NP-internal possessors
- (12) Bzhedug Adyghe:
  - a.  $dawat^he$  caf = baja-m  $a-p\chi^w$   $q-a-\check{s}'^he-n-ew$  feja-w Daut man=rich-OBL 3SG.PR-daughter DIR-3SG.ERG-lead-POT-ADV want-PST 'Daut would like to marry the daughter of a (particular) rich man.'
  - b.  $dawat^he$  caf = baj  $a-p\chi^w$   $q-a-\check{s}'^he-n-ew$   $feja-\mathscr{U}$  Daut man=rich 3sg.pr-daughter Dir-3sg.erg-lead-pot-ADV want-pst 'Daut would like to marry a rich man's daughter.'
- 2.2.5. Complements of postpositions
- (13) Besleney Kabardian

 $p\hat{s}e\hat{s}e = daxe$   $\hat{s}ha\hat{c}'e$  maskva-ja  $\hat{k}^we-ne$  girl = beautiful for Moscow-ADD go-FUT 'For a pretty girl he will go even to Moscow.'

(14) Bzhedug Adyghe:

nab3'e $s^w$ (-am)  $p^haj$   $t^hjamwar$  ze $\dot{c}$ 'e-r-ja a- $\hat{s}a$ -t friend(-oBL) for Timur all-ABS-ADD 3SG.ERG-do-FUT 'Timur will do everything for his friend / for anyone who is his friend.'

2.2.6. Ergative marking of the subject with transitive verbs

Oblique subjects of transitive verbs (as well as the Absolutive subjects of bivalent intransitive verbs, see 2.1.2) are the least available context for the unmarked form. The latter is only possible in this position when the subject is non-specific, and the verb phrase serves as an individual-level predicate with the lasting effect, e.g. of (in)ability, cf. (15) vs. (16–17) and (4) above:

Temirgoy Adyghe:

- - girl dress(-ABS) 3sg.ERG-sew-PST 'The/a girl made a (/the) dress.'
- (16)  $2aze = dex^w a$   $w-ja-se-\chi^w az'a-s't$  doctor-good 2sg.Abs-3sg.erg-caus-recover-fut 'A good doctor will [be able to] cure you.'
- (17) Besleney Kabardian:

'A well-behaved boy won't write such a letter.' (i.e. this letter is such that no decent boy would write it)

#### 2.3. The **Instrumental** contexts

The Oblique case can combine with the polysemous Instrumental case marker  $-\dot{\xi}$ 'e (Bzhedug  $-\dot{\xi}$ 'e), resulting in the same contrast in (in)definiteness.

- (18) Temirgoy Adyghe (Serdobol'skaja & Kuznecova 2009: 189; cf. Xalbad 1975 a.o.):
  - a. t-jate  $p\chi e$ -xe-r weta $\dot{c}$ 'a- $\dot{c}$ 'e j-e-q<sup>w</sup>ate-x 1PL.PR-father wood-PL-ABS axe-INS 3SG.ERG-DYN-chop-PL 'Father is chopping the wood with an axe.'
  - b. t-jate  $p\chi e$ -xe-r weta $\dot{c}$ 'a-m- $\dot{c}$ 'e j-e-q<sup>w</sup>ate-x 1PL.PR-father wood-PL-ABS axe-OBL-INS 3SG.ERG-DYN-chop-PL 'Father is chopping the wood with the axe.'
- (19) Bzhedug Adyghe:
  - a. a-r mač'e nebγər-jə-ṭwə-m-ǯ'e that-ABS little person-LNK-two-oBL-INS
     'This is too little for the two persons.'
  - b. a-r mač'e nebγər-jə-t"-ð'e that-ABS little person-LNK-two-INS
     'This is too little for (any) two persons.'

To sum up: we are dealing with **Differential Nominal Marking (DNM)** triggered by definiteness/specificity and occurring in all syntactic positions.

### 3. What is special about the Circassian DNM?

- ⇒ The regular alternation between overt and zero case marking of nominals triggered by their referential properties (including specificity) is widely attested in the languages of the world, but only for a very restricted set of syntactic contexts, i. e. patients of transitive verbs (direct objects) **Differential Object Marking** (DOM) (cf. Comrie 1979; Bossong 1985, 1998; Enç 1991; Aissen 2003; Leonetti 2004; Öztürk 2005; de Hoop & Malchukov 2007; de Swart 2007; Dalrymple & Nikolaeva 2011; Iemmolo 2010, 2011 etc.).
- □ Unlike other instances of object marking with cases or adpositions, DOM is determined by non-relational characteristics such as person, animacy, specificity, topicality, partitivity, aspect, negation etc. It was observed long ago that if an object nominal takes a marked case form, all nominals that outrank it on the person, definiteness or animacy hierarchies, take the marked form, too. There is no generally accepted explanation of this asymmetry, factors such as "distinguishability" and "marking of prominence" having been invoked in the literature (Silverstein 1976; Comrie 1979; Kozinskij 1982; Næss 2004 etc.).
- ⇒ Similar kinds of alternation with subjects/agents are rarely attested and do not show a "mirror-image" behavior suggested by some explanations (e. g. Aissen 2003), see de Hoop & Malchukov 2008, Fauconnier & Verstraete 2014.

Some typical examples of DOM:

- (20) Hebrew: definiteness-based (Danon 2001)
  - a. Dan kara \*(et) ha-itonim.

    Dan read.PST PREP DEF-newspapers

    'Dan read the newspapers.'
  - b. Dan kara (\*et) itonim.

    Dan read.PST PREP newspapers

    'Dan read newspapers.'

- (21) Thulung Rai (Tibeto-Burman, Nepal): animacy-based (Lahaussois 2002: 69)
  - a. go ama-mam\*(-lai) hapa mim-pu
    I my-mother-DAT much think-1sG > 3sG
    'I think of my mother a lot.'
  - b. gu-ka gari(\*-lai) thur-y.
    3SG-ERG car(\*-DAT) drive-3SG>3SG
    'He drives the car.'

By contrast, in the Circassian languages the alternation is not restricted to the syntactic role of the direct object — it is not restricted at all. As it were, the closest parallel to the situation in Circassian would constitute a "pseudo-Icelandic" where only the suffixed definite article would inflect for case, like with a small subset of actual nouns, cf. Table 1. See below for a parallel in the Pamir languages.

Table 1. Inflection of singular "weak neuters" in Icelandic (Sweet 1985: 14, 17, 27, 28)

	"weak neuters": 'eye'		"strong neuters": 'ship'	
	indefinite	definite	indefinite	definite
Nom	аида	auga- <b>t</b>	skip	skip- <b>it</b>
Acc	аида	auga- <b>t</b>	skip	skip- <b>it</b>
Gen	аида	auga- <b>ns</b>	skip- <b>s</b>	skip- <b>s-ins</b>
Dat	аида	аида- <b>пи</b>	skip- <b>i</b>	skip- <b>i-nu</b>

⇒ We know of no other language that would show a similar alternation. Possible candidates: Haro (Omotic, Ethiopia; König 2008: 172–174), Creek (Muskogean, USA; Hardy 1988: Ch. 7; 2005: 232–233) and Diegueño (Yuman, USA; Gorbet 1976: 27–32; Miller 2001: 160–162). In all these languages overt case marking of both objects and subjects (and, at least in Diegueño, other participants as well) is linked in some way to definiteness and/or topicality. However, neither of the studies referred to report a degree of consistency in the choice of overt vs. zero marking similar to that found in Circassian.

### 4. A further issue: Pseudo Incorporation

A widespread instance of the unmarked member in the DOM alternation is the phenomenon called **Pseudo Incorporation (PI)** (Massam 2001, 2009; Öztürk 2005; Kamali 2008; Dayal 2011; Baker 2011; Ljutikova 2012), a cluster of features that tend to occur together and sometimes may even occur in the subject NP as well:

- (22) (i) involves a phrasal category (NP), not a word;
  - (ii) lack of case marking;
  - (iii) number neutrality;
  - (iv) semantic effects of incorporation like 'typical action';
  - (v) linear contact with the verb;
  - (vi) scope inertness of quantifiers;
  - (vii) non-specificity;
  - (viii) inability to antecede pronouns;
  - (ix) valency reduction (de-transitivation) of the verb;
  - (x) impossible with pronouns
  - (xi) no articles and other kinds of determiners.

PI in Niuean (Austronesian > Oceanic; Massam 2001: 157):

- (23) a. Takafaga tūmau nī e ia e tau ika. hunt always EMPH ERG he ABS PL fish
  - b. Takafaga **ika** tūmau nī a ia. hunt fish always EMPH ABS he (a=b) 'He is always fishing.'

PI in the Mishar dialect of Tatar (Ljutikova 2012):

- (24) a. Marat qizil alma aša-di Marat red apple eat-PST 'Marat ate a red apple//red apples.'
  - b. Marat qizil alma-ni aša-di Marat red apple-ACC eat-PST 'Marat ate a red apple//\*red apples.'

Massam (2001), Ljutikova (2012): PI involves a deficient nominal category (a "small nominal", Pereltsvaig 2006), i.e. an NP lacking case and number features, and not a full nominal projection (DP) which is (and has to be) characterized by such features.

## 5. Is Circassian DNM Pseudo Incorporation?

The unmarked form in Circassian displays some but not all characteristics of Pseudo Incorporation listed above.

- 5.1. Number neutrality of the unmarked form (Jakovlev, Ašxamaf 1941: 47; Kumaxov 1971: 13)
- (25) Standard Kabardian:

txəλ. qe-s-ŝex<sup>w</sup>α-ŝ book dir-1sg.erg-purchase-dcl 'I bought a book/books.'

- (26) Temirgoy Adyghe:
  - a. stolə-m txəλə-r tje-λ table-OBL book-ABS LOC-lie 'There is a (one) book on the table.'
  - b. stola-m  $txa\lambda$   $tje-\lambda$  table-OBL book LOC-lie

'There is a book on the table / There are books on the table.'

### Bzhedug Adyghe:

- (27) a. **\*\*\overline{\delta}ene = \delta \chi^wante** so-faj dress = blue 1sg.ABS-want 'I want a blue dress / blue dresses.'
  - b.  $\begin{subarray}{ll} \begin{subarray}{ll} \beg$

#### 5.2. Scope Inertness

Temirgoy Adyghe, Absolutive:

(28) a. tjetrad pepč wos-jo-ṭ<sup>w</sup> de-tə-ʁ notebook every poem-LNK-two LOC-stand-PST 'In every notebook, there were two poems.' (different in every notebook)

- b. *tjetrad pepč wəs-jə-ţwə-r de-tə-ʁ* notebook every poem-LNK-two-**ABS** LOC-stand-PST 'In every notebook, there were **the** two poems.' (same)
- (29) a. student pepč wəs-jə-ţw ə-txə-ʁ student every poem-LNK-two 3sg.erg-write-pst 'Every student wrote down two poems.' (different)'
  - b. student pepč wəs-jə-ṭwə-r ə-txə-ʁ student every poem-LNK-two-ABs 3sg.erg-write-pst 'Every student wrote down the two poems.' (same)'
- (30) Besleney Kabardian, Oblique:
  - a.  $txa\lambda = k^weda-m$   $s-ja-\check{g}'-a-\dot{q}am$ book = many-obl 1sg.ABS-3PL.IO + DAT-read-PST-NEG 'There are many books that I didn't read.' / 'I read not many books.'
  - b.  $tx = k^w ed$   $s-ja-\check{z}'-a-\dot{q} = m$ book = many 1sg.ABS-3pl.IO + DAT-read-PST-NEG 'I read not many books.' / \*'There are many books that I didn't read.'
- (31) Bzhedug Adyghe, Instrumental:
  - a. zeč'e č'ale-me selat chech-jə-ṭwə-ǯ'e q-a-šte-təʁ all boy-obl.pl salad fork-lnk-two-ins dir-3pl.erg-take-ipf 'All the boys were taking the salad with two forks.' (each boy had his own pair of forks)
  - b. zeč'e č'ale-me selat chech-ja-twa-m-ž'e q-a-šte-tak all boy-obl.pl salad fork-lnk-two-obl-ins dir-3pl.erg-take-ipf 'All the boys were taking the salad with the two forks.' (the same two fork for all boys)
- 5.3. No pronouns
- (32) Temirgoy Adyghe:

 $a^*(-r)$  ma- $k^we$  that-ABS DYN-go 'S/he is going.'

### 5.4. No determiners

- 5.5. Other

The unmarked form in the Circassian languages lacks other characteristics of Pseudo Incorporation: it may be not adjacent to the verb, cf. the linear order in (34), may antecede pronouns (35), and is not accompanied by valency reduction.

### Besleney Kabardian:

- (34) txəl mə twəč'anə-m š'-j-e-š'exw-zepət book this shop-obl loc-3sg.erg-dyn-buy-frq 'He often buys books in this shop.'
- (35)  $d \partial \kappa^w a s e$ twəč'anə-m  $sa-k^we-rja$ , txə\lambda\_i  $\dot{q}e$ -s- $\dot{s}$ ' $ex^w$ -a. yesterday shop-OBL 1sg.abs-go-cnv book DIR-1SG.ERG-buy-PST ž'n s-we-ž'e. a-bə, DEM-OBL 1sg.abs-dyn-read 'Yesterday I went to the shop and bought a book. Now I am reading it.'

Notably, there may be several (as many as necessary) unmarked nominals in a single clause, cf. (36):

(36) Besleney Kabardian:

```
p\hat{s}e\hat{s}e = \textit{wesa}\dot{q}e\textit{wase}j\partial -r - j\partial -t\partial -n - w\partialx^wjegirl = well.manneredflower3sg.IO-DAT-3sg.ERG-give-POT-ADVwant'He wants to present flowers to (some) well-mannered girl.'
```

⇒ Following recent proposals on DOM-related PI (Massam 2001, 2009; Ljutikova 2012), we assume that the case and number features in Circassian characterize the full nominal construction – DP, but not the "small nominal", i. e. an NP which can occur in the same syntactic positions. Being morphologically deficient, NPs are semantically inert (in generative terms, cannot undergo movement), which explains their narrow scope with respect to quantifiers and negation.

```
(37) a. NP[žane]
dress
'dress(es)'
b. DP[ma NP[žane]-r]
this dress-ABS
'this dress'; *'these dresses'
c. *NP[ma žane]
this dress
```

- ⇒ Note that the two-level (NP vs. DP) structure of nominal constituents can be independently motivated for the Circassian languages, since they have two kinds of nominal constructions (see e.g. Lander 2012a,b):
- full nominal projections forming several phonological words and able to recursively attach possessive modifiers and full relative clauses (38a);
- "nominal complex" consisting of the noun and its non-referential modifiers forming together one phonological word (38b).
- (38) Temirgoy Adyghe

```
a. \left[ \int_{DP} \left[ \int_{NP} \dot{c}' a d e \right] - x e - m \right]  \left[ \int_{NP} \left[ \int_{NP} \dot{c}' a d e \right] - x e - m \right]  \left[ \int_{DP} \left[ \int_{NP} \dot{c}' a d e \right] - d a x e \right]  \left[ \int_{DP} \left[ \int_{NP} \dot{c}' a d e \right] - d a x e \right]
```

b.  $[_{NP} \dot{s}olk = \dot{g}'ene = daxe]$ silk = dress = beautiful

'a beautiful silk dress / beautiful silk dresses'

With overt number marking, overt case marking becomes obligatory (39). This can be accounted for if we assume that both number and case features occur only at the DP level:

(39) a. 
$$_{DP}[ma]_{NP}[\S ane]-xe-r]$$
 this dress-PL-ABS 'these dresses' b.  $_{DP}^*[ma]_{NP}[\S ane]-xe]$  this dress-PL-ABS

Of all the Circassian varieties we have studied so far, only in the Bzhedug dialect of Adyghe overt plural nominals can be unmarked for case when they are indefinite and in the Absolutive case position (40).

## (40) Bzhedug Adyghe

*čhe*  $g^w \partial p \tilde{s}^h \partial s e - x e$  q - j - e - h e - x

1sg.pr + head thought-pl DIR-LOC-DYN-come-pl

'Into my head, thoughts come.'

However, in Bzhedug the unmarked form in the Absolutive (but not in the Oblique) positions is specified for number: it is singular, cf. (27 = 41a) vs. (41b):

### (41) Bzhedug Adyghe

- a. ğene = šχ<sup>w</sup>anţe sə-faj dress = blue 1sg.ABS-want
   'I want a blue dress / blue dresses.'
- b. lake stola-m  $tje-t^h$  plate table-OBL LOC-stand

'There is a plate on the table'; \*'There are plates on the table'

Data like (40–41) suggest that in Bzhedug, unlike other Circassian dialects, number is not associated with DP, but characterizes a smaller category like NP or NumP.

## 6. A possible parallel: DP vs. NP contrast in the Pamir languages

In most languages of the Pamir group of the Iranian languages<sup>2</sup> – Šughnī, Rošanī, Bartangī, Rošorvī, Yazghulāmī and Iškāšmī – the typical Iranian distinction between direct and oblique cases in nouns (cf. Arkadiev 2006, Stilo 2009) is not found. Only deictic elements – pronouns and demonstratives – inflect for case (Payne 1989 a.o.). Like in Circassian, case-marked DPs headed by overt determiners and caseless NPs show similar, if not altogether identical, distribution. Unlike Circassian, nouns, and not only DPs, are marked for number.

## (42) Šughnī (Edel'man, Jusufbekov 2000: 235)

- a. mev-and =  $\bar{e}n$  [ $\delta u$   $\check{c}\bar{\iota}d$ ] they.OBL-LOC=3PL two house 'They have two houses.'
- b.  $[y\bar{a} wi kit\bar{o}b] ist\bar{o}l$ -ti ART.F.ABS he.OBL book table-LOC 'His book is on the table.'

#### (43) Rošanī

- a. [yi  $p\bar{o}t\check{x}\bar{o}$ ] wij, [way  $p\bar{o}t\check{x}\bar{o}$ ] =  $y\bar{a}n$  [ $\delta aw$  puc] wij one king be.PST ART.M.OBL king = 3PL two son be.PST 'There was a king, and the king had two sons.' (Fajzov 1966: 33)
- b.  $m\bar{a}wn-\bar{e}n = an$   $ri\check{x}t$  apple-PL = 3PL fall.PST 'Apples fell down.' (Fajzov 1966: 99)

However, not all definite nominals are provided with determiners; they appear bare when "the determinacy is seen from the context" (Fajzov 1966: 34); "the use of articles is not obligatory" (Edel'man 1966: 28):

# (44) Šughnī (Luqo Injīl 2001)

a.  $at\bar{a}$   $\check{cupun-en} = en$   $ga\check{x}t$   $\check{cud}$  and shepherd-PL=3PL come.back.PST AUX 'And the shepherds came back.' (Lk 2:20)

\_

<sup>&</sup>lt;sup>2</sup> It has been a matter of dispute whether the specific characteristics of the Pamir languages are due to their being a separate genetic branch within East Iranian or to later contacts and interference, cf. Dodyxudoeva (2000) and references therein.

- b. **kūdak** qād-i čūd child grow.up.PST-3SG AUX 'The child grew up' (Lk 2:40)
- c.  $\mathring{\gamma}$ ulům ga $\mathring{x}t$ -i  $\mathring{c}ud$  [xu xu] $\mathring{a}y$ in-ard] = i naqli  $\mathring{c}u$  servant come.back.pst-3sg aux rel.poss master-to = 3sg story do.pst 'The servant came back and told this to his master.' (Lk 14:21)

This situation resembles Diegueño (Gorbet 1976: 27–28), where the use of case markers is obligatory after the suffixed definite article *-pu*, which is, however, itself optional.

In Yazghulāmī, case distinction can be found only with free personal pronouns that are DP-proforms, so this language became typologically close to English or Dutch.

### (45) Yazghulāmī:

- a. **way** zext du gəxt he.OBL take.PST that//the meat 'He took that meat.' (Edel'man 1971: 291)
- b. **u** šod he.ABS go.PST 'He went.' (Edel'man 1971: 278)

#### 7. Discussion and conclusions

Basing on the evidence presented in sections 2 and 4 we hypothesize that

- differential nominal marking in Circassian is an instance of Pseudo Incorporation whereby the unmarked form represents a bare NP which is grammatically deficient and lacks the grammatical features of case and number;
- **2** both marked forms (Absolutive and Oblique) represent full nominal constructions (DPs).

Assuming that the two-layered NP vs. DP model is adequate for many languages, the main typological peculiarity of Circassian is that **the syntactic distributions of NP and DP are close to identical**.

This fact is a challenge to all theoretical approaches to differential case marking proposed so far, within the formal or the functional perspective alike. All of them have been focused on the grammatical asymmetry of subjects and objects: DOM is a phenomenon that involves objects only. Pseudo Incorporation can have a wider take and involve subjects, too (cf. Kamali 2008 on Turkish, Grossman 2015 on Coptic), but we are aware of no other language where it is as pervasive and systematic as it is in Circassian.

⊃ In the generative approaches to DOM it is often assumed that the NP object that lacks case characteristics remains in the VP whereas the case-marked DP object raises to get its case feature checked (Massam 2001 a.o.).

However, it is hard to postulate as many VP-internal positions for the unmarked NPs as there are VP-external positions for their case-marked DP counterparts. Within the generative framework, the subject vs. object structural asymmetry is a VP(vP)-internal characteristic based on the verb's subcategorization properties, and as such it cannot be merely fully replicated at the higher structural levels. Moreover, this approach cannot be simply extended to DNM with adjuncts and in non-clausal domains such as adnominal possessors and postpositional complements, which in Circassian languages show the same behavior as verbal arguments.

⇒ Likewise, all accounts of DOM in the functionalist perspective have been based on the subject vs. object asymmetry: to solve the DOM puzzle is to account for the fact why it occurs with some arguments and not with others. To abide by the functional principles,

viz. to provide the effectiveness and the economy of communication, languages tend to mark an element whenever it is necessary. The functional strategy responsible for DOM has been characterized as marking a participant that is less "natural", or less expected to occur in a given role, e.g. animate or definite nominals as objects (Silverstein 1976; Comrie 1979; Dixon 1979 a.o.), or shows a less frequent pattern, i.e. an unexpected association between grammatical role and information-structure properties (Haspelmath 2009: 13–14; Iemmolo 2010), given that direct objects tend to be new, or focal, or of low accessibility (Du Bois 2003). Cf. also attempts to incorporate functional-typological concepts like iconicity, economy etc. within the formal framework via Optimality Theory in Aissen (2003) and de Hoop & Malchukov (2008).

However, the Circassian-style DNM does not seem to synchronically fulfill any obvious functional role:

- if the transitive A is already marked, distinguishability comes "for free" regardless of the presence vs. absence of overt case marking on the P;
- if agentive participants of multivalent predicates tend to be topical and definite, then functional or frequency considerations predict that they would get extra marking when focal or indefinite/non-specific just the opposite to what we find in Circassian;
- certain higher-animacy nominals such as proper names and inalienably possessed kinship terms do not get any overt case marking as well (46), but there is no indication that such contexts impede processing or are dispreferred (probably due to word order freezing effects, which, however, require further investigation).

## (46) Standard Adyghe

- in general, in Circassian discourse unmarked non-specific NPs occur **less frequently** than case-marked nominals, especially in positions other than the transitive P probably like bare common nouns in English. Paradoxically, it is rather the **absence** of case-marking that serves to unequivocally signal indefiniteness/non-specificity, while presence of case-marking is often compatible with both interpretations (cf. Lander 2012a: 79; Polinsky & Caponigro 2011: 75).
- **⊃** The typologically non-trivial situation in Circassian can be the result of an unusual combination of cross-linguistically recurrent features:
- overt definiteness/specificity (DP) marking vs. zero coding of the lack thereof (NP)
   (Dryer 2013);
- affixation of definite determiners (ibid.);
- reduced case distinctions with indefinite/non-specific nominals or, conversely, presence of overt case marking only with determiners (cf. Pamir languages).

Can Circassian Absolutive and Oblique case markers be considered suffixed articles distinguishing case (as is proposed e.g. by Kumaxov 1971: Ch. 2)? Probably not synchronically, because they are clearly distinct from phrase-initial deictic determiners (which go back to Common Circassian just like the case markers) — or is it a case of multiple determiners (Alexiadou 2014)?

Anyway, we believe that the Circassian DNM poses interesting problems for formally as well as functionally oriented theories of both case-marking and noun phrases, and therefore should be taken into account.

#### **Abbreviations**

ABS — absolutive; ACC — accusative; ADD — additive; ADV — adverbial; ART — article; AUX — auxiliary; BEN — benefactive; CAUS — causative; CNV — converb; DAT — dative; DCL — declarative; DEF — definite; DEM — demonstrative; DIR — directional preverb; DYN — dynamic; ELAT — elative; EMPH — emphatic; ERG — ergative; F — feminine; FCT — factive; FRQ — frequentative; FUT — future; GEN — genitive; INS — instrumental; IO — indirect object; IPF — imperfect; LNK — linking morpheme; LOC — locative; M — masculine; NOM — nominative; MAL — malefactive; NEG — negation; NIM — nimifactive; OBL — oblique; PL — plural; POSS — possessive; POT — potential; PR — possessor; PST — past; RE — refactive; REL — relativizer; SG — singular.

#### References

Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. *Natural Language and Linguistic Theory* 21(3), 435–448.

Alexiadou, Artemis. 2014. *Multiple Determiners and the Structure of DPs*. Amsterdam, Philadelphia: John Benjamins.

Arkadiev, Peter. 2006. Dvuxpadežnye sistemy v indoiranskix jazykax: Tipologičeskaja perspektiva (=Twoterm case systems in the Indo-Iranian languages: A typological perspective). In: M.N. Bogoljubov (red.), Indoiranskoe jazykoznanie i tipologija jazykovyx situacij. Sbornik statej k 75-letiju professora A.L. Grjunberga (1930–1995) (=Indo-Iranian linguistics and the typology of linguistic situations. Studies for the 75<sup>th</sup> anniversary of Professor A.L. Grjunberg). Saint-Petersburg: Nauka, 74–92. (Unpublished English version available at http://www.inslav.ru/images/stories/people/arkadiev/Arkadiev2CaseSystemsIndo-IranianLENCA2.pdf)

Baker, Mark. 2011. On the syntax of surface-adjacency: The case of pseudo noun incorporation. Ms., Rutgers University.

Bossong, Georg. 1985. Empirische Universalienforschung: Differentielle Objektmarkierung in den neuiranischen Sprachen. Tübingen: Narr.

Bossong, Georg. 1998. Le marquage différentiel de l'objet dans les langues d'Europe. In: Jack Feuillet (ed.), *Actance et Valence dans les Langues de l'Europe*. Berlin, New York : Mouton de Gruyter, 193–258.

Colarusso, John. 1989. East Circassian (Kabardian dialect). In: Hewitt (ed.) 1989, 261–355.

Colarusso, John. 1992. A grammar of the Kabardian language. Calgary: University of Calgary Press.

Colarusso, John. 2006. Kabardian (East Circassian). München: LINCOM Europa.

Comrie, Bernard. 1979. "Definite" and "animate" direct objects: a natural class? *Linguistica Silesiana* 3, 13–21.

Dalrymple, Mary & Irina Nikolaeva. 2011. *Objects and information structure*. Cambridge: Cambridge University Press.

Danon, Gabi. 2001. Syntactic definiteness in the grammar of Modern Hebrew. Linguistics 39(6), 1071–1116.

Dayal, Veneeta. 2011. Hindi pseudo-incorporation. Natural Language and Linguistic Theory. 29(1), 123–167.

de Hoop, Helen & Andrej Malchukov. 2007. On fluid differential case marking: a bidirectional OT account. *Lingua* 117, 1636–1656.

de Hoop, Helen & Andrej Malchukov. 2008. Case marking strategies. Linguistic Inquiry 39(4), 565-587.

de Swart, Peter. 2007. Cross-linguistic Variation in Object Marking. Utrecht: LOT Publications.

Dixon, Robert M.W. 1979. Ergativity. Language 55(1), 59–138.

Dodyxudoeva, Lejla R. 2000. Pamirskie jazyki (= Pamir languages). In: Rastorgueva et al. (eds.) 2000, 170–174.

Dryer, Matthew S. (2013). Definite articles. In: Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at http://wals.info/chapter/37.)

Du Bois, John. 2003. Argument structure: Grammar in use. In: John Du Bois, Lorraine Kumpf & William Ashby (eds.), *Preferred argument structure: Grammar as architecture for function*. Amsterdam, Philadelphia: John Benjamins, 11–60.

Edel'man, Džoj I. 1966. Jazguljamskij jazyk (= The Yazghulāmī Language). Moscow: Nauka.

Edel'man, Džoj I. 1971. Jazguljamsko-russkij slovar' (= A Yazghulāmī-Russian Dictionary). Moscow: Nauka.

Edel'man, Džoj I., Jusufbekov Š.P. 2000. Šugnanskij jazyk (= The Šughnī language). In: Rastorgueva et al. (eds.) 2000, 225–242.

Enc, Mürvet. 1991. The semantics of specificity. Linguistic Inquiry 22/1, 1–25.

Fajzov M. 1966. *Jazyk rušancev sovetskogo Pamira* (=The Language of the Rošani of the Soviet Pamir). Dušanbe: Akademija Nauk Tadžikskoj SSR.

Fauconnier, Stephanie & Jean-Christophe Verstraete. 2014. A and O as each other's mirror image? Problems with markedness reversal. *Linguistic Typology* 18(1), 3–49.

Gorbet L.P. (1976). A Grammar of Diegueño Nominals. New York, London: Garland.

- Grossman, Eitan. 2015. No case before the verb, obligatory case after the verb in Coptic. In: Eitan Grossman & Martin Haspelmath (eds.), *Egyptian-Coptic Linguistics in Typological Perspective*. Berlin, Boston: De Gruyter Mouton, 203–225.
- Hardy, Donald E. 1988. The Semantics of Creek Morphosyntax. PhD Thesis, Rice University.
- Hardy, Donald E. 2005. Creek. In: Heather Kay Hardy & Janine Scancarelli (eds.), *Native languages of the Southeastern United States*. Lincoln, London: Univ. of Nebraska Press, 200–245.
- Haspelmath, Martin. 2009. Frequency vs. iconicity in explaining grammatical asymmetries. *Cognitive Linguistics* 19/1, 1–33.
- Hewitt B.George, ed. 1989. The indigenous languages of the Caucasus, Vol. 2. The North West Caucasian Languages. Delmar, NY: Caravan.
- Iemmolo, Giorgio. 2010. Topicality and differential object marking: Evidence from Romance and beyond. *Studies in Language* 34(2), 239–272.
- Iemmolo, Giorgio. 2011. *Towards a typological study of differential object marking and differential object indexation*. Tesi di dottorato, Università degli studi di Pavia.
- Jakovlev Nikolaj F. & D.A. Ašxamaf. 1941. *Grammatika adygejskogo literaturnogo jazyka* (= A grammar of Standard Adyghe). Moscow: Izdatel'stvo AN SSSR.
- Kamali, Beste. 2008. Phases of incorporation and a three-way distinction for direct objects (in Turkish). Talk given at the 5th Workshop of Altaic Formal Linguistics. SOAS. London. 2008.
- König, Christa. 2008. Case in Africa. Oxford: Oxford University Press.
- Korotkova, Natalia & Yury Lander. 2010. Deriving suffix ordering in polysynthesis: Evidence from Adyghe. *Morphology* 20, 299–319.
- Kozinskij, Isaak Š. 1982. Variativnost' v kodirovanii dopolnenij i svjazannye s nimi universalii (= Variation in object encoding and the universals related to it). In: V.M. Solncev (ed.), *Variantnost' kak svojstvo jazykovoj sistemy* (= Variation as a property of linguistic systems). II. Moscow: Nauka, 130–132.
- Kumakhov, Muxadin A. & Karina Vamling. 2009. Circassian clause structure. Malmö: Malmö University.
- Kumaxov, Muxadin A. 1971. *Slovoizmenenie adygskix jazykov* (=Inflection in the Circassian languages). Moscow: Nauka.
- Kumaxov, Muxadin A. ed. 2006. Kabardino-čerkesskij jazyk (= The Kabardian language). Nal'čik: El-Fa.
- Lahaussois, Aimée. (2002). Aspects of the Grammar of Thulung Rai: An Endangered Himalayan Language. PhD Thesis, University of California, Berkeley.
- Lander, Yury A. (2012a). Reljativizacija v polisintetičeskom jazyke: adygejskie otnositel'nye konstrukcii v tipologičeskoj perspektive [Relativization in a polysynthetic language: Adyghe relative construction in typological perspective]. PhD thesis, Russian State University for the Humanities, Moscow.
- Lander, Yury A. (2012b). Nominal complexes in Adyghe: between morphology and syntax, Handout of the talk given at *Typology, Theory: Caucasus*, Istanbul, Boğaziçi University, December 2012.
- Lander, Yury A. & Alexander B. Letuchiy. 2010. Kinds of recursion in Adyghe morphology. In: Harry van der Hulst (ed.), *Recursion and Human Language*. Berlin, New York: Mouton De Gruyter, 263–284.
- Lander, Yury & Yakov Testelets. 2006. Nouniness and specificity: Circassian and Wakashan. Paper presented at *Universals and Particulars in Parts-of-Speech Systems*. University of Amsterdam.
- Leonetti, Manuel. 2004. Specificity and object marking: the case of Spanish a. Catalan Journal of Linguistics 3, 75–114.
- Letuchiy, Alexander B. 2012. Ergativity in the Adyghe system of valency-changing derivations. In: Gilles Authier & Katharina Haude (eds.), *Ergativity, Valency and Voice*. Berlin, New York: Mouton de Gruyter, 323–354.
- Ljutikova, Ekaterina A. 2012. Variativnoe markirovanie objekta i problemy padeža. (= Variation in the marking of objects and the problems of case.) Ms.
- Luqo Injīl. 2001. Luqo Injīl (= The Gospel of Luke in Shughnī). Moscow: Instituti tarjumā Kitobi Muqadas.
- Massam, Diane. 2001. Pseudo noun incorporation in Niuean. *Natural Language and Linguistic Theory* 19(1), 153–197.
- Massam, Diane. 2009. Noun incorporation: Essentials and extensions. *Language and Linguistics Compass* 3(4), 1076–1096.
- Matasovič, Ranko. 2008. A short grammar of Kabardian. 6th print. Zagreb.
- Miller A. (2001). A Grammar of Jamul Tiipay. Berlin, New York: Mouton de Gruyter.
- Næss, Åshild. 2004. What markedness marks: The markedness problem with direct objects. *Lingua* 114, 1186–1212.
- Öztürk, Balkız. 2005. Case, referentiality and phrase structure. Amsterdam, Philadelphia: John Benjamins.
- Paris, Catherine. 1989. Esquisse grammaticale du dialecte abzakh (tcherkesse occidental). In: Hewitt (ed.) 1989, 155–260.

- Payne, John R. 1989. Pāmir Languages. In: Rüdiger Schmitt (ed.). *Compendium Linguarum Iranicarum*. Wiesbaden: Ludwig Reichert, 417–444.Rogava Georgi V. & Zejnab I. Keraševa. 1966. *Grammatika adygejskogo jazyka* (= A grammar of Adyghe). Krasnodar, Majkop: Krasnodarskoe knižnoe izdatel'stvo.
- Pereltsvaig, Asya. 2006. Small nominals. Natural Language and Linguistic Theory 24(2), 433-500.
- Polinsky, Maria & Ivano Caponigro. 2011. Relative embeddings: A Circassian puzzle for the syntax/semantics interface. *Natural Language and Linguistic Theory* 29/1, 71–122.
- Rastorgueva Vera S., Džoj I. Edel'man, Vjačeslav V. Moškalo (eds.). 2000. *Jazyki mira. Iranskie jazyki. III. Vostočnoiranskie jazyki* (= Languages of the World. Iranian Languages. III. East Iranian Languages). Moscow: Indrik.
- Serdoblol'skaja, Natalia V. & Julija L. Kuznecova. 2009. Dvojnoe padežnoe markirovanie: unikal'nyj slučaj adygejskogo jazyka (= Double case marking: A unique case in Adyghe). In: Testelec (ed.) 2009: 166–200.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In: R.M.W. Dixon (ed.), *Grammatical categories in Australian Languages*. Canberra: Australian Institute of Aboriginal Studies, 112–171.
- Smeets, Rieks. 1984. Studies in West Circassian phonology and morphology. Leiden: Hakuchi.
- Smeets, Rieks 1992. On valencies, actants and actant coding in Circassian. In: B. George Hewitt (ed.), *Caucasian perspectives*. München, Newcastle: LINCOM Europa, 98–144.
- Stilo, Don. 2009. Case in Iranian: From reduction and loss to innovation and renewal. In: Andrej Malchukov & Andrew Spencer (eds.), *The Oxford Handbook of Case*. Oxford: Oxford University Press, 700–715.
- Sweet, Henry. 1985. An Icelandic Primer. With Grammar, Notes and Glossary. Oxford: Clarendon.
- Testelec Jakov G. ed. 2009. *Aspekty polisintetizma: Očerki po grammatike adygejskogo jazyka* (= Aspects of polysynthesis: Studies in Adyghe grammar). Moscow: RSUH.
- Xalbad T.X. 1975. *Vyraženie kategorij opredelennosti i neopredelennosti v abxazo-adygskix jazykax* (=The expression of the category of definiteness and indefiniteness in the Abkhaz-Adyghe languages). Tbilisi: Mecniereba.