## The semantics of Adyghe instrumental case

## 1. Setting up the problem

### 1.1. Background on Adyghe

Adyghe (or West Circassian) is one of the Circassian languages of the North Caucasian language family. It is spoken in the republic of Adygeya, in Krasnodarskij region in the south of Russia.
Adyghe has about 130 thousand speakers.

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Northwest Caucasian:
    Circassian
        West (Adyghe)
        East (Kabardian)
    Ubykh
    Abkhaz-Abaza
        Abkhaz
        Abaza
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The data discussed in this paper has been collected in the village Hakurinohable in Shovgen district (Abzakh dialect of Adyghe). The data was collected in the range of the fieldtrips organized by the Russian State University for the Humanities and lead by Jakov Testelec, Nina Sumbatova, and Svetlana Toldova.

Features of Adyghe:

- ergative
- free word order
- rich system of tenses
- polypersonal system of verbal agreement:
(1) š’ə-p-f-a-r-e-tə.

LOC-2SG-BEN-3PL-OBL-3SG-GIVE
'He's giving it to them instead of you there.'
Adyghe system of cases:

| Ergative | $-m$ |
| :--- | :--- |
| Absolutive | $-r$ |
| Instrumental | $-c \stackrel{c}{c} e$ |
| Adverbial | $-e w$ |

(2) hac̣̆e-m c̣̆'ale-r ә- е ес $_{w} \partial-$. GUEST-ERG BOY-ABS 3SG.A-SEE-PST
'The guest saw the lad.' (Rogava, Kerasheva 1966: 65)
(3) c̣̆'ale-r še-s-jə zawe-m ? ${ }_{\text {w }}$-ha-ь.
boy-ABS HORSE-SIT-SEQ war-ERG to-enter-PST
'The lad went to the war on horse.' (ibid.: 65)
(4) haleb ${ }_{w} \partial-r$ šež'əje-c̣'e ə-bzə-ь.
bREAD-ABS KNIFE-INS 3SG-CUT-PST
'He cut the bread with a knife.'

| č'alə-xə-r | $t_{w}$ əret-ew | qa- $\hat{S}_{w} \partial-x$. |
| :--- | :--- | :--- |
| BOY-PL-ABS | PAIR-ADV | DIR-DANCE-PL |
| 'The children are dancing in pairs.' |  |  |

### 1.2. Background on the Adyghe instrumental

> Formation of Adyghe instrumental
The Adyghe instrumental case is formed in two ways: first, the marker -ç'e can be added to a bare stem, and, second, to the stem with the ergative marker -m (which is called 'oblique stem' by some researchers).

| -č̣’e | INS |
| :--- | :--- |
| -m-ç̣'e | ERG-INS |

> Semantics of Adyghe instrumental
The grammars of Adyghe give a number of meanings that can be expressed by the instrumental, including prolative (1), instrumental (2), allative direction, adelative direction (3), destination (4), means of transport, cause, price, comparison, appositives etc. (see Rogava, Kerasheva 1966: 66, Kumakhov 1971).

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a. halewə-r šež’əje-ç̣’e ə-bzə-к. BREAD-ABS KNIFE-INS 3SG-CUT-PST
b. halewə-r šež’əje-m-ç̌e ə-bzə-к. bread-abs knife-Erg-INs 3SG-Cut-PsT
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He cut the bread with a/the knife.
(7) a. (ar) koridwero-ç̣'e $\mathrm{k}_{\mathrm{w}}$ а-ке. DEM-ABS CORRIDOR-INS GO-PST
b. (ar) koridwerə-m-č̣’e $\mathrm{k}_{\mathrm{w}} \mathrm{a}$-ке. DEM-ABS CORRIDOR-ERG-INS GO-PST
He went (somewhere) through a/the corridor.
(8) čəle-m-ç'e q-jə-čə-ь.

VILLAGE-ERG-INS DIR-3SG-ENTER-PST
He came from the village side (not from the village exactly).
(9) sweme ̂̂-jə-tfə-r xwez'ajənə-m-c̣̆'e mac̣̆'-ew.

Rouble 100-IfX-5-ABS host-ERG-INS FEW-ADV
500 roubles would be too few for the host. (Rogava, Kerasheva 1966: 66)
$>$ Outlining the problem: distribution of the $-c^{\prime} ’ / /-m-c_{c}^{\prime} ’$ variants:
The instrumental without ergative is unacceptable with plural nouns (see Rogava, Kerasheva 1966 e.a.)

Xalbad 1975, Zekokh 2002: the distribution of the two variants is regulated by the definiteness/indefiniteness of the noun: definite nouns follow the first pattern, and take the ergative + instrumental, while indefinite and generic nouns follow the second pattern, and only take the instrumental marker

$$
\begin{array}{llll}
\text { a. } & \text { ç̌’ale-r } & \text { txə } & \text { ješ'а-ь. }  \tag{10}\\
& \text { BOY-ABS } & \text { BOOK-ERG } & \text { READ-PST }
\end{array}
$$

The boy read a book.
b. c̣’ale-r tхәдә-m јез̆'а-ь. bOY-ABS BOOK-ERG READ-PST
The boy read the book.
However, cf. to the ERG of transitive verbs:
(11) c̣çale-r / 'c̣̆'ale pŝaŝe jebewə-ь.

BOY-ABS BOY GIRL KISS-PST
The boy kissed a/the girl. (Lilja Kholkina's examples)
Rogava, Kerasheva (1966: 66), Kumakhov (1971: 131), Kumakhov (1989: 24): certain meanings of the instrumental case show a strong preference towards the second pattern, i.e. ergative + instrumental marking:

- allative
(12) šak ${ }_{\mathrm{w}} \mathrm{e}-\mathrm{r}$ mezə-m $\mathrm{k}_{\mathrm{w}}$ a-ке.
hunter-abs forest-Erg go-pst
The hunter headed towards the forest. (Rogava, Kerasheva 1966: 66)
- destination
a. mə morkovkə-r
supə-m-č̣e mač̣e.
DEM CARROT-ABS
SOUP-ERG-INS FEW
b. ${ }^{?}$ ? mə morkovkə-r supə-č'e maç̌e.

There are too few carrots for the soup.

- adelative:
a. čəle-mc̣̆'e
q-јə-čə-ь.
village-erg-ins Dir-3gG-enter-Pst
b. * čəle-ç'e q-јə-čə-ь. village-ins Dir-3sG-Enter-PST

He came from the village side (not from the village exactly).
Hence, both noun (in)definiteness and the meaning of the construction play the role in $-c_{c}$ 'e/-mc̣̆'e choice.

## ? Why such a restriction is observed exactly with these meanings ?

$\rightarrow$ we propose a more detailed overview of the possible meanings of the instrumental in Modern Adyghe;
$\rightarrow$ we order the meanings of the instrumental along the typological patterns of case meaning development observed cross-linguistically;
$\rightarrow$ we explain the restriction observed in (13)-(14).

## 2. The meanings of the instrumental in Adyghe

Rogava, Kerasheva (1966), Kumakhov (1971), Xalbad (1975), and Zekokh (2002) give the following range of meanings that the instrumental can have:

1) tool (3): to cut bread with a knife;
2) time interval: in a year;
3) prolative: to go through the wood;
4) measuring unit: lit. to drink milk by cups;
5) cause;
6) subject in an antipassive construction (not observed in our data);
7) co-predicate: I know him as honest;
8) adelative: They heard voices from the side of the cafe;
9) destination, for animates only (9).
10) others (price, basis of comparison, manner adverbials, means of transport, source of information)

According to the possibility of taking both -ç̣'e and -mc̣̆'e marking, the meanings divide into 3 groups: the meanings that permit both the instrumental and the ergative + instrumental marking (the choice depending on the definiteness of the corresponding noun); the meanings that require the ergative + instrumental marking; the meanings that is treated differently by different native speakers: some of the speakers only accept the second pattern, while some of them accept both patterns (the judgment on the acceptability depends on the speaker).

There is a range of meanings that allows both types of marking:

- path (prolative)
(15) ar arke-m-ç̌e / arke-c้̣e je-ç̌ə-ь.

DEM-ABS ARC-ERG-INS ARC-INS 3SG-ENTER-PST
He went out through the arc.

- instrumental
(16) halé ${ }_{w} \partial-r$ šež’əje-ç̌'e/ šež’əje-m-c̣̆'e ə-bzə-ь.

BREAD-ABS KNIFE-INS KNIFE-ERG-INS 3SG-CUT-PST
He cut the bread with a knife.

- basis of comparison, time interval, material, etc.

Narrog 2007: Path (spatial, temporal) related to instrumental (means, manner)
The meanings related to the instrumental meaning

(fragment of the scheme given in Narrog 2007: 283)
instrumental: (16)
material:
(17) kartopə-r t $\chi_{w}$ ә-ç'e/m-č̣’e z-кеž’а-ке.

POTATO-ABS OIL-INS/ ERG-INS 1SG-ROAST-PST
I roasted potatoes on oil.
means of transport:
(18) avtobus-č̣'e/ -m-ç'e $\mathrm{k}_{\mathrm{w}}$ а-ве.

BUS-INS ERG-INS GO-PST
He came by bus.
duration:
(19) taqjeq-jə-pṣ̂ə-č̣'e sə-qe-k. ${ }_{\mathrm{w}} \mathrm{e}-$ ž' $^{\prime} \partial-t$.

MINUTE-IFX-10-INS 1SG-DIR-GO-INTF-FUT
I'll return in 10 minutes.
cause/reason:

1SG-POSS-MAKE.MISTAKE-VN-INS 1SG-DIR-ENTER-PST 2PL-TO
I came to you because of a mistake.
manner:
a. č'alə-xə-r $\mathrm{t}_{\mathrm{w}} ə r e t ə-c ̧ ้ e ~ q a-\hat{S}_{\mathrm{w}} \partial-x$. BOY-PL-ABS PAIR-INS DIR-DANCE-PL
b. č'alə-xə-r $t_{w} ə r e t-e w ~ q a-\hat{S}_{w} \partial-x$. BOY-PL-ABS PAIR-INS DIR-DANCE-PL
The children are dancing in pairs.

Ganenkov 2002: an elaborated analysis of the path meaning:
PATH: prolative (along, across, through) (15)
object of change

Conference on the Languages of the Caucasus
Max Planck Institute for Evolutionary Anthropology
(22) tхə $\lambda ə-r$ karandaš-ç̌e / -m-c̣'e zep $\lambda j \partial \chi_{w} \partial-ь$.

BOOK-ABS PENCIL-INS ERG-INS CHANGE-PST
He exchanged the book for a pencil.

## price

(23) mər $s_{w} ə m-j ə-s ̌ '-c ̧ ้ e /-m-c ̧ ้ ' e ~ q e-s-s ̌ ' e f e-ь . ~$

DEM-ABS ROUBLE-IFX-3-INS ERG-INS DIR-1SG-BUY-PST
I've bought it for 3 roubles.

## model

| se | xabze-č'e/ | -m-č'e | zeč''erjə | s-ŝ̀ə-ве. |
| :--- | :--- | :--- | :--- | :--- |
| I | LAW-INS | ERG-INS | ALL | 1SG-DO-PST |

I've done everything as the law demands.

## time interval

mef-jə- ${\underset{\mathrm{t}}{\mathrm{w}}}$-čče tadež' $\quad$ se-qe- $\mathrm{k}_{\mathrm{w}} \mathrm{e}-$ ž'e-š't.
DAY-IFX-2-INS 1PL+TO 1SG-DIR-GO-INTF-FUT
I'll return home in 2 days.
basis of comparison
s-šə jə $\quad$ es-jə-çe səš’ nah-jə nahə-ẑ.

1SG-BROTHER YEAR-IFX-INS I THAN-\& THAN-OLD
My brother is one year older than me.

## indication

| sə | Wə | $w-j \partial-k_{w} \mathrm{a}-\underset{\mathrm{c}}{ } \mathrm{e}-$ çce | wə-qə-ડ̣̂ə-ž’ə-ь. |
| :---: | :---: | :---: | :---: |
| I | You | 2SG-POSS-GO-DN-INS | 2SG-DIR-KNOW-INTF-PST |
| Я тебя узнала по походке. |  |  |  |

level (lit. the water comes to the knees)
point of contanct (to hold by the hand)
intermediary (lit. to give someone a book through/by a friend)
theme (to talk/think/... about)
Hence, these are meanings that take both the $-c c^{\prime}$ 'e and the -mč’e variants. The distribution of the variants in (16)-(27) is determined by the definiteness of the noun (as argued in cited sources), cf.:
a. $\mathrm{K}_{\mathrm{w}}$ әб $\lambda$ абә-č'е
qว-k. $\mathrm{k}_{\mathrm{w}} \mathrm{a}-\mathrm{b}$.
ROAD-ERG-INS DIR-GO-PST

He came to the village walking along one of the paths.

qә-k. ${ }_{\text {w }}$ а-ь.
ROAD-ERG-INS
DIR-GO-PST

He came to the village walking along the old (well-known) path.
This is sometimes interfering with the information structure of the sentence:
a. c̣’ale-m ha-r čapse-çe r-je-pxe. BOY-ERG DOG-ABS ROPE-INS 3SG-3SG-TYE

He is tying the dog with a rope.
b. č̣ale-m ha-r čapse-m-c̣e r-je-pxe. BOY-ERG DOG-ABS ROPE-ERG-INS 3SG-3SG-TYE
It is with a rope that he is tying the dog.

## 3. Explanation of the -č' $\mathrm{C} /-\mathrm{m}{ }^{\prime}$ ' e distribution

Puzzles:
(30) sweme ŝ-jə-tfə-r $x_{w}$ ez'ajənə-m-c̣'e mač̣'-ew

| (çəf-m-e) | qə-zer-a-? ${ }_{\text {w }} \mathrm{e}-\mathrm{re}-\mathrm{m}-\mathrm{ç}^{\prime} \mathrm{e}$ | njewaš' | a-r | qe- $\mathrm{k}_{\mathrm{w}} \mathrm{e}-$ š't-ep |
| :---: | :---: | :---: | :---: | :---: |
| (HUMAN-ERG-PL) | DIR-MREL-3PL-SAY-DYN-ERG-INS | TOMORROW | DEM-ABS | DIR-GO-FUT-NEG | As to rumours, he won't come.


| (c̣əf-m-e) | qə-zer-a-? ${ }_{w}$ e-re-m-č̌'e |
| :--- | :--- |
| (HUMAN-ERG-PL) | DIR-MREL-3PL-SAY-DYN-ERG-INS |
| As to rumours, he won't come. |  |

$q \partial \hat{s}_{w} \mathrm{e}-\mathrm{n}$-č̣e azamat čefə.

DANCE-POT-INS AZAMAT GLAD
Azamat likes dancing.
a-r $\quad \operatorname{me-g}_{w} \partial \hat{S}_{w} e \quad$ xə-m zerə-k ${ }_{w}$ e-š'tə-m.
DEM-ABS DYN-REJOICE SEA-ERG MREL-GO-FUT-ERG
He rejoices because he's going to travel to the sea.
The sources cited argue that the ergative + instrumental marking most often indicates the Allative and Adelative, as well as the Destination meanings (see in section 1.2). The question arises, why exactly these meanings are treated differently from all the others.
Our data:
adelative - č'e totally excluded
allative and destination - č'e marginally possible

- point of contact:
(34) c̣'ale-m čemə-r $\quad$-bž'aq ${ }_{w} \mathrm{e}-\mathrm{xe}-\mathrm{m}$ č̣'e/ $^{*}$-c̣̆'e r-jə-рхә-в. BOY-ERG COW-ABS 3SG-HORN-PL-ERG-INS INS 3SG-3SG-TYE-PST (The boy is fooling around), he's tying the cow by the horns.
- reference point
(35) ふ̌'anə-m-č̣e / ?̌̌’ane-c̣'e pš'erəš'e.

DRESS-ERG-INS DRESS-INS FAT
She's too fat for a/this dress.

- audio/video source:
(36) $\mathrm{t}_{\mathrm{w}}$ əčanə-m-ç'e /*-ç'e wered qe-? ${ }_{\mathrm{w}} \partial$ SHOP-ERG-INS /*-INS SONG INV-SAY
The music is heard from the shop.
- stimulus of emotions (33)
- theme
(37) biologije-m-c̣̆'e urok (*č̣'e)

BIOLOGY-ERG-INS LESSON
a lesson on biology

- parentheticals (31).

Ganenkov (2002):
PROLATIVE $\rightarrow$ ALLATIVE

$$
\rightarrow \text { ADELATIVE }
$$

ADELATIVE $\rightarrow$ Stimulus of emotion, Source (audio/video), Theme, Point of contact, Paretheticals

ALLATIVE $\rightarrow$ Destination (future situation) -> Reference point by evaluation
Hence, we get the following picture on the distribution of -c̣'e/-m-c̣'e:


The groups of meanings imposing restrictions on the acceptability of the first pattern (instrumental without ergative) are adelative and allative. Both of them develop from the prolative meaning. Such a semantic shift is attested in a number of languages, see Ganenkov 2002. The restrictions on the first pattern can be interpreted in terms of the grammaticalization
theory, proposed in (Traugott, Heine 1991): the ergative $-m+$ instrumental $-c ̌ e$ on definite expressions has grammaticalized as a special marker of adelative -mc̣ce. Then this marker has given rise to a range of meanings, common for the adelative markers in different languages of the world (see the typological data in (Ganenkov 2002)). The allative -mc̣e must have been involved in the process of grammaticalization separately from the adelative block. Probably, its status as allative marker has not stabilized in Modern Adyghe.

## 4. References:

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