Transitivity in Kabardian

Ranko Matasović University of Zagreb

In traditional grammars of Kabardian, transitive and intransitive verbs are represented as having different rules of case assignment, as well as different order of personal prefixes. This paper shows how both case assignment and order of verbal prefixes can be accounted for by an elegant set of rules within the framework of Role and Reference Grammar (RRG). It is also shown that in Kabardian, a large majority of transitive verbs are formed by lexical rules or morphological causativization from basic intransitives, and it is argued that there is a systematic correlation between Aktionsart and transitivity: intransitives are, as a rule, activity verbs, while their transitive correlates are active accomplishments.

Cette singularité (ergatif) tient, en gros, à ce que, là où nous pensons "je vois le livre", les Caucasiens pensent quelque chose comme "à-moi le-livre (il-m') est-en-vue" (G. Dumézil, cit. in Paris 1969: 159).

1. Introduction

Kabardian¹ is a NW Caucasian language spoken chiefly in the Kabardino-Balkar Republic in Russia. It has more than 400 000 speakers, and it is written in a modified Cyrillic script. It is an ergative head-marking language with a very complex verbal morphology, and very little nominal morphology. In this paper, I will offer a RRG account of case marking and verb agreement in Kabardian. It will be argued that this account is much simpler than the alternatives offered in traditional grammars,² or in the few works that examined the Kabardian verbal system from a more recent theoretical perspective.³ We shall also discuss how the distinction of transitive and intransitive

^{1.} I would like to thank Lemma Maremukova and Alim Shomahua who provided most of my Kabardian examples and helped me in learning that fascinating language. Thanks are also due to Karina Vamling, Ricardo Maldonado, Robert D. Van Valin, Jr., Dan Everett, Martin Haspelmath, Balthasar Bickel, and other participants of the RRG conference in Leipzig who discussed the Kabardian data with me.

^{2.} E.g., Abitov *et alii* (1957); Kardanov (1957); Šagirov (1967); Černý (1968); Paris (1969); Kumaxov (1971).

^{3.} E.g., Colarusso (1992); Catford (1975); Kumaxov & Vamling (1998); Hewitt (2005); Kumaxov & Vamling (2006).

verbs is realized in Kabardian, and point out why this feature of Kabardian grammar deserves attention of linguists working with RRG, and of typologists in general.

2. The traditional account of clause structure

Verbs with two arguments in their logical form have one of the two following constructions:

A: intransitive

- (1) (wa sa) wə-q'a-zə-wa you I 2sg.A-dir.-1sg.u-hit 'You hit me'⁴
- (2) (sa wa) sə-b-aw-bza
 I you 1sg.A-2sg.U-PRES.-cut
 'I cut you'

B: transitive

- (3) (sa wa) wə-s-łāģo-ā-ś (I you) 2sg.a-1sg.u-see-pret.-af. 'I saw you'
- (4) w-ay-s-t-ā-ś
 2sG.-3sG.A-1sG.U-give-PRET.-AF.
 'I gave him to you'
- (5) ābə syə txəl-ər 0-yə-h-ā-ś he-erg 1sg.poss book-nom 3sg.u-3sg.a-carry.away-pret.-af. 'He carried away my book'

In traditional grammars,⁵ it is stated that the first construction is intransitive, and the second transitive. The personal prefixes of the verb in the intransitive construction indeed have the same form as the personal prefixes in typical intransitive verbs taking only one argument, e.g., "sit", or "sleep". It is also claimed that the transitive and the

^{4.} The principles of transliteration from the Kabardian Cyrillic employed in this article are explained in my "Kabardian Grammar", available at my website (http://www.ffzg.hr/~rmatasov). They are essentially the same as the standard transliteration rules for Caucasian languages, as explained by J. Gippert in his *Caucasian Alphabet Systems Based Upon the Cyrillic script* (http://titus.uni-frankfurt.de/didact/caucasus/kaukschr.pdf). The major differences are: (1) glottalized consonants are transliterated as C' rather than Ç. (2) the palatal glide is transliterated as y, rather than j.

^{5.} E.g., Kardanov (1957); Kumaxov (1989); Kumaxov (ed.) (2006).

intransitive constructions have different case-marking patterns, and different order of personal prefixes on the verb:

- a. In the intransitive construction, the subject is marked with the Nominative⁶ case (-r), and the (indirect) object with the Ergative/Oblique case (-m). The order of personal prefixes is 1. Subject; 2. (Indirect) object:
 - (6) *s'āla-r txəl-əm 0-y-aw-dža*boy-nom book-erg 3sg.-3sg.-pres.-read
 'the boy is reading the book'
 - (7) sə-w-aw-pł 'I see you' 1sg.-2sg.-pres.-see
- b. In the transitive construction, the subject is marked with the Ergative/Oblique case, and the direct object with the Nominative case; the indirect object, if there is one, gets the Ergative/Oblique case as well. The order of personal prefixes is 1. Direct object; 2. Indirect object; 3. Subject:
 - (8) *ś'āla-m txəl-ər 0-ya-dž* boy-erg book-nom 3sg.-3sg.-read 'The boy reads the book (thoroughly)'
 - (9) (sa wa) wə-s-lāġo-ā-ś 'I saw you' 1sg. 2sg. 2sg.-1sg.-see-pret.-Af.
 - (10) w-ay-s-t- \bar{a} - \acute{s} 'I gave you to him' 2sG.-3sG.-1sG.-give-pret.-Af.

Both the rules for verb agreement, and the case assignment rules, as stated in the traditional grammars, seem highly complicated. Surely a simplified account would be welcome.

Since some verbs taking two arguments (e.g., $d\check{z}\partial n$ "read") can be used in both the transitive and in the intransitive constructions, some linguists have suggested that the intransitive construction is actually antipassive.⁷ In the antipassive construction, the direct object of the corresponding active is demoted to the status of indirect object, or removed from the core of the clause, and the subject of the corresponding active is treated as the direct object (it gets the absolutive, viz. nominative case marking).

^{6.} The term "Nominative" is traditionally used in Kabardian grammars. "Absolutive" would be more appropriate from the typological point of view.

^{7.} E.g., Catford (1975). This analysis is accepted by Colarusso (1992) and Van Valin & LaPolla (1997: 124).

However, the Kabardian intransitive construction is unlike typical antipassives, because:8

- the prefix expressing the patient is not removed from the verbal complex in the intransitive construction (except in the 3rd person). Rather, it is still obligatorily marked on the verb as indirect object; in antipassives, the patients (undergoers of transitive verbs) are typically removed from the core of the clause.
- the intransitive construction is not morphologically or syntactically marked with respect to the transitive construction, which is the default with antipassive constructions.
- there are many intransitive verbs with the valency of 2 which do not have the corresponding transitive construction, e.g., plan "see", or wan "hit". Likewise, there are some transitive verbs that do not have the corresponding intransitive construction, e.g., h = n "carry", san "lead", or $l\bar{a}\dot{g}^o = n$ "see".

When there is alternation between transitive and intransitive forms of the verb built from the same root, there is usually a difference in meaning, too. Partly for this reason, Kabardian grammars treat such transitive and intransitive forms as belonging to different verbs (i.e., to different lexical entries). Usually the form ending in -a is transitive, while the form ending in -a is intransitive, e.g., However, this correlation is not absolute, so for example $p \rightarrow a \rightarrow a$ "hang" ends in -a, but it is an intransitive verb (there are many other such examples).

There is, however, a handful of underived transitive verbs, such as *hən* "carry", *zən* "sift", *yən* "smear", and *pxən* "tie"; these verbs do not have intransitive pairs (*han, *zan, etc.), but they are rather few in number.

3. A new proposal

Let us try to formulate the rules for the order of agreement prefixes more economically. In the transitive construction, in RRG terms, the order is:

Undergoer-Oblique core argument-Actor In the intransitive construction, the order is:

The only macrorole argument – Oblique core argument That is, the verbal complex has three prefix positions:¹⁰

^{8.} For a cross-linguistic definition of the antipassive see Dixon & Aikhenvald (1997).

^{9.} This is another reason why one should not treat the intransitives as antipassives, since valence-changing operations (grammatical voice) do not change the meaning of verbs to which they are applied. On the differences in meaning between transitive and intransitive verbs from the same verbal root see below.

^{10.} Actually, the number of personal prefix positions is larger, because oblique arguments can also be coded on the verb, but this is not relevant for our present discussion.

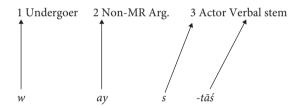
1: the lowest ranking macrorole argument 2: non-macrorole direct core argument; 3: Actor.

The position (1) is filled by the personal index that is coreferent with the lowest ranking macrorole argument of the verb. In the intransitive construction, it will be either the actor, or the undergoer (the only macrorole), while in the transitive construction, it will be the undergoer. The position (3) will remain unfilled in the intransitive construction, in which there is only one macrorole. The RRG analysis thus allows us to formulate a single rule to account for verb agreement in both transitive and intransitive constructions.

Let us analyze the following sentences with this structure in mind:

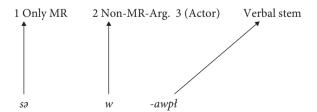
(11)
$$w$$
- ay - s - t - \bar{a} - \acute{s} 'I gave you to him' 2sg.-3sg.-1sg.-give-pret.-Af.

The marker -w- is in the first prefix slot, the slot of the lowest ranking macrorole, since it is the undergoer; the 3sg. marker -ay- is in the second slot, that of the non-macrorole direct core argument; and, finally, the 1sg. marker -s- is in the third slot, that of the actor:



(12) sə-w-aw-pł 'I see you, I'm looking at you' 1sg.-2sg. -pres.-see

Here, the first slot is filled by the marker of the lowest macrorole argument, which is also the only macrorole, namely the 1sg. marker sa-; the second position is filled by the 2sg. marker -w-, which is the direct core argument, but not a macrorole, because the verb plan is intransitive. Finally, for the very same reason the third slot (that of the actor) remains unfilled:



A similar set of rules will take care of the case assignment:

- 1. The lowest ranking macrorole in the clause is marked with the Nominative (-r);
- 2. All other core arguments are marked with the Ergative/Oblique (-m).

Here is how these rules would work for transitive and intransitive verbs, respectively:

- 1. If the verb is transitive:
 - a. assign the Nominative to the lowest ranking macrorole argument
 - b. assign the Ergative/Oblique to the other macrorole argument
 - c. assign the Ergative/Oblique to the non-macrorole direct core argument(s)
- 2. If the verb is intransitive:
 - a. assign the Nominative to the only macrorole argument
 - b. assign the Ergative/Oblique to the non-macrorole direct core argument(s)

We can test if these rules are correct by looking at causatives in Kabardian. The causative is formed with the prefix $-\dot{g}a$ -, and it is used to derive transitive verbs from intransitives, as well as ditransitive verbs from transitives:

- (13) *l'ə-m fəzə-m txəl-xa-r pśāśə-m 0-yə-rə-rəy-ġa-t-xa*man woman books girl 3.-3sg.-3sg.-2sg.-CAUS.-give-PL.
 ERG ERG NOM ERG

 'The man makes the woman give the books to the girl'
- (14) l'əźə-m ś'la-m χədžabzə-r yə-r-yə-ġa-h-ā-ś old man-erg boy-erg girl-nom 3sg.-3sg.-CAUS.-carry-pret.-Af. 'The old man made the boy carry the girl'

In the first example, the noun $tx \partial tx$ "books" is the lowest-ranking macrorole, Undergoer, and so gets the NOM by (1a); other nouns get ERG by the rules (1b) and (1c). In the second example, likewise, the girl ($\chi \partial dz \partial z \partial r$) is the lowest-ranking macrorole, and so it gets the NOM, while the other nouns are marked by ERG. The case assignment in causatives thus seems to work just as the theory would predict. However, let us look at the following example:¹¹

(15) yaġadžāk'ºa-m yadžāk'ºa-r wəsa-m q'-rə-y-ġa-dž-ā-ś teacher-erg pupil-noм poem-erg dir.-3sg.-3sg.-саus.-read-pret.-аf. 'The teacher made the pupil read the poem'

Why is *yadžāk'oa* "pupil" marked with the Nominative in this example, rather than *wəsa* "poem", which is the lowest-ranking macrorole of the verb? The answer is that the

^{11.} For more data consistent with this analysis see Kumaxov (ed.) (2006: 436).

underlying verb $d\bar{z}an$ "read", to which the causative prefix $\dot{g}a$ - is applied, is intransitive, and the macrorole assignment of this verb is preserved in the causative construction, therefore its only macrorole is in the Nominative. If the underlying non-causative verb is transitive, like $h \not = n$ "carry", then its lowest ranking macrorole ($\chi \not = d\bar{z}abz \not = r$ in (14)) gets the Nominative (by 1a), while the causee of the causative construction is in the Ergative/Oblique case (by 1b), because it is the other macrorole. The causer is always in the Ergative/Oblique case, because the derived causative verb is transitive. If we consider causatives as complex constructions involving nuclear juncture, it appears that in Kabardian the two nuclei remain independent with respect to case assignment to their arguments. What is typologically unusual is that the argument structure of the subordinated nucleus (the underlying verb) determines the macrorole assignment of the derived, main (causative) verb. Yet, as we shall see in the next paragraph, in other types of juncture in Kabardian, it is the dependent verb that can determine the case of the argument it shares with the main verb. Although typologically unusual, Kabardian seems to be consistent with respect to case assignment.

The following examples involve core cosubordination with the verb *x*⁰*ayən* "want":

- (16) *ś'āla-r k'oa-nwə 0–0-xrºay-āt* boy-nom go-inf. 3sg.-3sg.-want-impf. 'The boy wanted to go'
- (17) *ś'āla-m ҳədžabzə-r 0-yə-lāgoa-nwə 0-0-xoay-āt* boy-erg girl-nom 3sg.- 3sg.-see-inf. 3sg.-3sg.-want-impf. 'The boy wanted to see the girl'
- (18) *ś'āla-r* χədžabzə-m yawa-nwə 0–0-x°ay-āt boy-nom girl-erg hit-inf. 3sg.-3sg.-want-imf. 'The boy wanted to hit the girl'

All of the preceding examples involve the control construction, which is realized as a core juncture. The matrix verb x^oayan "want" is intransitive, cp. $\pm \sqrt[3]{a}a^2 + tx + \sqrt[3]{a}x^0ayat$ "the boy wanted a book", with the subject $\pm \sqrt[3]{a}a^0$ in the Nominative, which is expected with an intransitive verb: 12 the linked verb t^0ayan "to see" (in 17), however, is transitive, and the subject of the verb t^0ayan in that example is in the Ergative/Oblique. What transpires from the adduced examples is that only the argument structure of the linked verb is relevant for case assignment; if the linked verb is (M-)intransitive (e.g., t^0an "go", t^0an "hit"), its only argument will be the single macrorole, and hence in the Nominative case; if it is transitive (t^0ayan "see"), its lowest ranking macrorole argument will be in the Nominative case. The macrorole status of the arguments of the dependent verb is preserved in the main core, hence the single argument of the verb

^{12.} For the syntactic constructions this verb can occur in, see Kumaxov & Vamling (1998: 189–192).

in the matirx core will get the case of the argument of the verb in the linked core it is coreferent with. Therefore, both the argument marked with the Ergative/Oblique and the one marked with the Nominative can be the "subject" (the only M-argument) of the intransitive matrix verb $x^oayən$ "want". To test this hypothesis, let's take another transitive verb, hən "carry", and put it into the dependent core:

(19) *ś'āla-m txələ-r yə-hə-nwə x°ay-ā-ś* boy-erg book-nom 3sg.-carry-inf. want-pret.-af. 'The boy wanted to carry the book'

As we see from the example above, ś*āla* gets the Ergative/Oblique because it is the Actor of the *linked* verb $(h \ni n)$, not the Nominative, because it is the subject of the matrix verb $x^o ay \ni n$. This is parallel to the case marking pattern we saw above with the causatives, which we interpreted as involving nuclear juncture. In both types of junctures, then, Kabardian marks the argument of the main clause with the unexpected case. This may have something to do with the fact that Kabardian is, like other NW Caucasian languages, rather consistently head-marking. ¹³

As Robert D. Van Valin, Jr. points out to me (p.c.), another important issue here is the domain of case assignment. In English, as well as in Kabardian, the domain of case assignment is the clause, rather than two separate cores as, e.g., in Icelandic. ¹⁴ In English, which is an accusative language, only one NP in the whole clause can be the highest ranking macrorole, and get the Nominative case, and this is the subject of the matrix verb. All other NPs in the clause get the case of the other macrorole argument, which is the Accusative. In the ergative language Kabardian, on the other hand, only one NP in the core can be the lowest ranking macrorole, and get the Nominative case. This will be the subject (the lowest ranking MR argument) of the linked verb. Other NPs, including the subject of the matrix verb, will get the Ergative/Oblique case, except in the case when the subject of the matrix verb is coreferent with the subject of the linked verb in the Nominative. In Kabardian, in contrast to English, the case assignment rules first check the argument structure of the linked verb, and then the argument structure of the matrix verb of the clause. The case assigned to the arguments of the linked verb is then assigned to the co-referent argument of the matrix verb. ¹⁵

^{3.} For the typological parameter of Head- vs. Dependent-marking see Nichols (1992).

^{14.} For examples showing that case assignment in Icelandic applies to separate cores, rather than to the whole clause, see Van Valin & LaPolla (1997: 568–581). See also Van Valin (2005: 241–243).

^{15.} Similar, "dependent first" strategies of case-assignment seem to exist in other ergative languages, e.g., Enga and Newari (for examples, see Van Valin & LaPolla 1997: 580). However, this typological parameter (head first/dependent first) is not necessarily related to case marking. In the NE Caucasian language Tsez (Polinsky & Potsdam 2002) there is a construction, in which the verb in the main clause shows unexpected gender agreement with the argument it shares

4. Typological and theoretical implications

Some traits of Kabardian morphosyntax that might appear unusual at first sight are not so surprising after all:

- 1. There is a homonymy of case endings, because the marker -*m* marks both the Ergative and the Oblique, i.e., both the actor of transitive verbs and the indirect core arguments; however, such a homonymy is rather common. The Ergative case is used to mark other semantic roles (besides the actor of transitive verbs) in many ergative languages (e.g., in Dyirbal).
- 2. Kabardian does not have any voice operations (no passive or antipassive), but such languages are also well-attested, e.g., Lakhota.

However, Kabardian is indeed typologically unusual in the following respects:

A number of verbs with the semantic valence of 2 have only one macrorole (i.e., they are M-intransitive), 16 whereas verbs with the same meaning are otherwise treated as transitives cross-linguistically. Verbs meaning "hit", "catch", "eat", "kiss", "lick", "wait", "want", "move", "call", "ask", "catch", "touch", and "do" can all be (M-) intransitive in Kabardian. 17 In my opinion, this means that the usual remedy applied by RRG for treating verbs with quirky transitivity - specifying the exceptional M-transitivity (in terms of the number of macroroles) in the lexical entry - is difficult to apply in this language, because it appears that M-transitivity would have to be specified for each verb in the language. Unlike in most other languages, M-transitivity is not really predictable from the logical structure of the verb in Kabardian. At least in some cases, it appears that the intransitive member of the pair of semantically bivalent verbs differing in transitivity is an activity verb, whereas the transitive member of the pair is an active accomplishment verb. This is especially easy to see with the verbs of consuming, e.g., šxan "eat" (intransitive) vs. šxən "eat" (transitive). The intransitive verb, šxan, cannot be used with the adverbial phrase qana śəmə?aw "completely, thoroughly", which indicates that it is an activity verb; on the other hand, the transitive member of the pair, šxən, can be freely

with the verb in the dependent clause. Maybe both the Kabardian and the Tsez constructions could be subsumed under the notion of "backward control" (Polinsky & Potsdam 2002, 2006), which may be an areal feature of the languages of the Caucasus. This possibility will be investigated elsewhere.

^{16.} The distinction between (syntactic) transitivity and M-transitivity is not useful in Kabardian, since in that language all NPs expressing core arguments can be ommitted. In this sense, there are no syntactically transitive verbs in the language.

^{17.} Cp. Klimov (ed.) (1978: 59) for another list of such verbs and a comparison with similar intransitive constructions in other Caucasian languages.

used with that adverbial phrase.¹⁸ The transitives are therefore likely to be active accomplishments. Apart from the verbs of consuming, it appears that the opposition of activities and active accomplishments plays a role in other pairs of transitives and intransitives; namely, the intransitive members of the pair often denote an uncompleted action or activity, whereas the transitive members of the pair imply that the action has been completed, or thoroughly performed:

- (20) xa-m q' ° əpšxa-r yə-dzaq'a(r) dog-erg bone-nom 3sg.-gnaw 'The dog is gnawing the bone (to the marrow)'
- (21) xa-r q' ° əpšxa-m y-aw-dzaq'a(r) dog-nom bone-erg 3sg.-pres.-gnaw 'The dog is gnawing at the bone'
- (22) *ś'āla-r txəl-əm y-aw-dža* intransitive verb boy-nom book-erg 3sg.-pres.-read 'The boy is reading the book'
- (23) *ś'āla-m txəl-ər ya-dž*boy-erg book-nom 3sg.-read transitive verb
 'The boy is reading the book (to the end)'¹⁹
- (24) *pxāśa-r pxa-m yə-x^oa* intransitive verb carpenter-NOM plank-ERG 3sG-set 'The carpenter is setting the planks'
- (25) *pxāśa-m pxa-r yə-xºa* transitive verb carpenter-erg plank-nom 3sg.-set 'The carpenter is setting the planks'

The implication of the sentence (27) is that the carpenter is going to finish setting the planks, whereas there is no such implication in (26).²⁰

As can be gathered from the examples above, there is a correlation of transitivity and telicity of the action, and, likewise, there is a correlation of intransitivity with atelicity of the action. Here one must recall that activities are atelic, whereas active accomplishments are telic, and this is reflected in the lexical decomposition of these two Aktionsarten. If our analysis of the examples above is correct, Kabardian would be a language in which the difference of two Aktionsarten (activities vs. active accomplishments) is systematically reflected as a difference in M-transitivity, which is a

^{18.} I have checked this with my informants for a dozen verbs, and the rule seems to hold without exception.

^{19.} My informants tell me that this sentence can also mean "the boy is studying the book".

^{20.} See Kumaxov (1971), cp. also Kumaxov & Vamling (2006: 10–14).

prediction of RRG.²¹ Moreover, this difference in Kabardian seems to be expressed overtly in the morphosyntax of the two main verb classes. However, this is just a working hypothesis in need of further substantiation.

2. Another typological peculiarity of Kabardian is that verbs are rendered intransitive when the potential prefix is added.²² The potential prefix $(-x^o - a^a)$ expresses the subject's ability to perform an action.

```
(26) w-ya-s-tə-r-q'əm2sG.-3sG.-1sG.-give-pres.-NeG.'I do not give you to him'
```

(27) wə-s-x^oə-ya-tə-r-q'əm 2sg.-1sg.-pot.-3sg.-give-pres.-neg. 'I cannot give you to him'

In (26), the verb (tən "give") is transitive, so the 1sg. Actor prefix (-s-) is in the slot next to the verbal root. In (27), on the other hand, the verb is rendered intransitive by the adding of the potential prefix $(-x^{o}\partial_{-})$, so the prefix of the 1sg. now indexes the nonmacrorole core argument, and is separated from the root by the potential prefix and the 3sg. prefix (-ya-). In RRG, affixes expressing the subject's ability to perform an action should be treated as modality operators, 23 and operators generally do not change the argument structure of the verb. In Kabardian, it appears that this is what the potential prefix $-x^{o}$ does. It could be argued, perhaps, that this prefix also has an Aktionsartchanging function, i.e., that it changes non-state predicates (activities, accomplishments, etc.) into state predicates, which are, as a rule, intransitive in Kabardian. Doing something may be an action, or an accomplishment, but being able to do something is rather a state, the participants of which are unaffected by the corresponding action. For example, if Bill is affected by hitting in the sentence John hits Bill, it is unaffected in John is able to hit Bill, and this seems to be the logic behind the intransitivizing function of the Kabardian potential prefix $-x^{o}\partial$. If this analysis is correct, it only supports our thesis that transitivity is closely connected to Aktionsart in Kabardian.

3. There are very few underived transitive verbs in Kabardian; nearly all transitives are derived from intransitives by adding the causative suffix $-\dot{g}a$ -, or from inherently neither transitive nor intransitive roots by adding the transitivizing suffix $-\partial$ -, as in the pairs dan "to sew at, to be involved in sewing" vs. $d\partial n$ "to sew", or k'^oan "go" vs. $k'^o\partial n$

^{21.} See Van Valin & LaPolla (1997: 153); Van Valin (2005: 63-64).

^{22.} Cp. Kumaxov (ed.) (2006: 257).

^{23.} Cp., e.g., Van Valin (2005: 9).

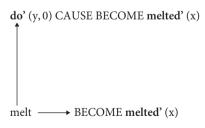
"to pass",²⁴ or *šxan* "eat at" vs. *šxən* "eat", *l'an* "die" vs. *l'ən* "kill", *thaśan* vs. *thaś'ən* "wash", *bzan* vs. *bzən* "cut", *than* vs. *thən* "read", *śəpan* vs. *śəpən* "collect",²⁵ etc.

There is, however, a handful of underived transitive verbs, such as *hən* "carry", *zən* "sift", *yən* "smear", and *pxən* "tie"; these verbs do not appear to have intransitive pairs (*han, *zan, etc.), but they are rather few in number.

In RRG, the transitivity of a verb can be determined by looking at its logical form; if the default principles are overridden, one has to specify the macrorole transitivity (the number of macroroles a verb takes) separately. However, it is claimed that the number of verbs with exceptional M-transitivity is always rather limited.

Van Valin (2005: 47) assumes that verbs differing in M-transitivity can be derived from each other by lexical rules; this is how the systematic relationship between activities (e.g., drink beer) and active acomplishments (e.g., drink two beers) in English is captured. Van Valin (2005: 47) also claims that "it is not necessarily the case that there is a single logical structure underlying all of the uses of a particular verbal lexical item". But, if this is so, one wonders what part of the logical structure is actually stored in the lexicon, and what part of it can be derived by lexical rules. It is also argued (Van Valin 2005: 47) that detransitivizing affixes, e.g., in Slavic and Romance, are used to cancel parts of logical structure of verbs, namely the CAUSE logical operator. Thus, the causative Croatian verb topiti "melt" becomes intransitive when the reflexive-intransitive clitic se is added to it, so that the causative operator is cancelled in the derived intransitive topiti se "melt, become melted". However, one must note that the lexical rule for cancelling a logical operator at the same time renders the verb intransitive, i.e., changes the argument structure of the verb. One wonders, then, what piece of information is actually stored in the lexicon with the basic lexical entry: is it the information about the verb's argument structure, or rather its operator structure, or both (since in many cases the two are not independent of each other)?

Should we assume that the argument structure is dependent on the logical operator structure in the lexical representation of verbs? Perhaps the lexicon should be represented as a network of lexical representations, interrelated by lexical rules. In this case, relationships between semantically related verbs differing in M-tranisitivity could be represented along the following lines:



^{24.} Cp. Kumaxov (1971: 194–197)

^{25.} For a collection of such pairs see Kumaxov (1981: 231–234).

This scheme indicates that the English verb *melt* has two uses – it can be both transitive and intransitive, with no formal difference whatsoever. This would also be the representation of the Kabardian "labile" verbs, such as $?^oan$ "thresh". On the other hand, Kabardian van is intransitive, but it can become transitive by adding the causative prefix $\dot{g}a$ -, and this is captured by the following lexical rule:

The relationship between the "anticausative verbs", or derived intransitives, and the basic transitives from which they are derived, would also be captured by a lexical rule. Romance and Slavic languages achieve the "anticausativization" by adding the reflexive marker (cp. Croatian *se*, or German *sich*) to transitives. Croatian *topiti* "melt (transitive)" vs. *topiti se* "melt (intransitive)", would have the following representation:

$$+$$
 -se topiti \longrightarrow do' (y, 0) CAUSE BECOME melted' (x) \longrightarrow BECOME melted' (y)

The problem is now – how to represent lexical entries that are neither transitive nor intransitive by themselves, but get different transitive or intransitive affixes, e.g., Kabardian tx- "read"? Here is a suggestion:

In this scheme, the verb does not receive *any* lexical representation before the application of some lexical rules. In Kabardian, the number of such verbs is exceptionally large, but they exist in many languages, cp. e.g., German *versinken* "sink (intransitive)" vs. *versenken* "sink (transitive)", differing only in ablaut. Haspelmath (1993) and Comrie (2006) call such verbs "equipollent".

This basically means that, at least in some cases, it is not the verbal *root* that is assigned a logical form, but rather the verbal *stem*, already modified by some affixes. The lexicon should not be viewed as a storehouse, or a repository of words, but as a highly structured network of morphemes and their combinations. I do not think that

^{26.} The term "labile", as applied to verbs that have both transitive and intransitive uses is somewhat problematic (cp. Hewitt 1982), but it has been adopted by Haspelmath (1993) and Comrie (2006), among others.

this way of representing the lexicon is in any way theoretically problematic, or incompatible with the RRG style of lexical decomposition.²⁷

5. Conclusion

When we are claiming that Kabardian has almost no primary transitive verbs, all we are saying is that the lexical entries for Kabardian verbs are rather unlike those of English *melt* and Croatian *topiti* "melt". Regardless of whether our analysis of Kabardian is correct or not, it raises an important theoretical question: can there be human languages with no transitive verbs, or, to be more precise, languages in which all transitive verbs would be derived from intransitives by morphological or syntactic rules?

The lack – or very near lack – of underived transitive verbs appears to be rather rare typologically, but it has been reported for a number of languages, e.g., Boumaa Fijian (Dixon 1988), Tarascan (Ricardo Maldonado, p.c.), and the Salish languages (Dan Everett, p.c.). Whether a clear example of such a language can be found or not, it appears that it is theoretically possible. Languages like Kabardian or Boumaa Fijian appear to be very close to this idealized prototype without underived transitive verbs.

In such languages the (M-)transitivity of a verb does not seem to be readable from the lexical entry, as most syntactic theories assume. However, the information about the (M-)transitivity of each *verbal form* is indeed contained in the lexicon, but this information is available only after the application of some lexical rules, by which the form in question is derived from the basic lexical entry. Our investigation of Kabardian verbal system leads us to conclude that languages differ considerably in the way these lexical rules are organized, as well as in the way the M-transitivity can be read off the lexical representation of their verbs.

Appendix

Abbreviations of glosses:

A = Actor

AF. = affirmative

CAUS. = causative

ERG = ergative/oblique

IMPF. = imperfect

NEG. = negation

NOM = nominative

PL. = plural

POT. = potential

PRES. = present

^{27.} For a similar approach to lexical rules see Van Valin (to appear).

INF. = infinitive REFL. = reflexive U = Undergoer PRET. = preterite sg. = singular

References

- Abitov, M.L. et al. 1957. Grammatika kabardino-čerkesskogo literaturnogo jazyka. Moscow: AN SSSR.
- Catford, I. 1975. Ergativity in Caucasian languages. North Eastern Linguistic Society Papers 6: 37–48.
- Colarusso, J. 1992. A Grammar of the Kabardian Language. Calgary: University of Calgary Press.
- Černý, V. 1968. Verb class system in Circassian. An attempt of classification of Circassian verbal forms. *Archiv Orientalný* 36: 200–212.
- Comrie, B. 2006. Transitivity pairs, markedness, and diachronic stability. *Linguistics* 22(2): 303–318.
- Dixon, R.M.W. 1988. A Grammar of Boumaa Fijian, Chicago IL: The University of Chicago Press.
- Dixon, R.M.W. & Aikhenvald, A.Y. 1997. A typology of argument-determined constructions. In *Essays on Language Function and Language Type Dedicated to T. Givón*, J. Bybee et al., 71–113. Amsterdam: John Benjamins.
- Haspelmath, M. 1993. More on the typology of inchoative/causative verb alternations. In *Causatives and Transitivity*, B. Comrie & M. Polinsky (Eds), 87–120. Amsterdam: John Benjamins.
- Hewitt, G. 1982. Antipassive and 'labile' constructions in North Caucasian. *General Linguistics* 22: 158–171.
- Hewitt, G. 2005. Northwest Caucasian. Lingua 115: 91-145.
- Kardanov, V.M. 1957. Grammatičeskij očerk kabardinskogo jazyka. In *Kabardinsko-russkij slovar*', M.L. Apažev et al., 489–576. Moscow: Gosudarstvennoe izdateľstvo inostrannyx i nacionaľnyx slovarej:
- Klimov, G.A. (Ed.) 1978. Strukturnye obščnosti kavkazskix jazykov. Moscow: Nauka.
- Kumaxov, M.A. 1971. Slovoizmenenie adygskix jazykov. Moscow: Nauka.
- Kumaxov, M.A. 1981. Sravnitel'no-istoričeskaja fonetika adygskix jazykov. Moscow: Nauka.
- Kumaxov, M.A. 1989. Sravniteľno-istoričeskaja grammatika adygskix (čerkesskix) jazykov. Moscow: Nauka.
- Kumaxov, M.A. & Vamling, K. 1998. *Dopolnitel'nye konstrukcii v kabardinskom jazyke*, Lund: Department of Linguistics, Lund University.
- Kumaxov, M.A. & Vamling, K. 2006. *Èrgativnost' v čerkesskix jazykax*, Malmö: School of International Migration and Ethnic Relations.
- Kumaxov, M.A. (Ed.) 2006. Kabardino-čerkesskij jazyk (I-II). Nalchik: Izdatel'skij centr Èl'-Fa.
- Nichols, J. 1992. Linguistic Diversity in Space and Time, Chicago IL: The University of Chicago
- Paris, C. 1969. Indices personnels intraverbaux et syntaxe de la phrase minimale dans les langues du Caucase du nord-ouest. *Bulletin de la Société de linguistique de Paris* 64: 104–183.

Polinsky, M. & Potsdam, E. 2006. Expanding the scope of control and raising. MS submitted to *Syntax*.

Polinsky, M. & Potsdam, E. 2002. Backward control. Linguistic Inquiry 33: 245-282.

Šagirov, A.K. 1967. Kabardinskij jazyk. In *Jazyki narodov SSSR*, *T. IV Iberijsko-kavkazskie jazyki*, V.V. Vinogradov (Ed.), 165–183. Moscow: Nauka.

Van Valin, R. 2005. Exploring the Syntax-Semantics Interface. Cambridge: CUP.

Van Valin, R. To appear. Lexical representation, co-composition, and linking syntax and semantics. MS available from the RRG website.

Van Valin, R. & LaPolla, R. 1997. Syntax. Cambridge: CUP.