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THE "DEPENDENT FIRST" SYNTACTIC PATTERNS IN KABARDIAN AND OTHER CAUCASIAN LANGUAGES[1]

1. Introduction

The purpose of this paper is to present data on a particular syntactic phenomenon in Kabardian, which is variously referred to as "backward control" and "long distance agreement" (Polinsky and Potsdam), "case and agreement climbing" (Johanna Nichols, following Spencer 1991), or "dependent first" pattern of case assignment viz. agreement (Matasović, in press). In this paper, this syntactic pattern will be referred to as "dependent first"; the Kabardian data will be compared typologically with similar constructions in other Caucasian languages, and we shall conclude with some speculations about possible areal influences which might have contributed to the spread of this phenomenon in Caucasian languages.

It is usually assumed that, in complex constructions involving a matrix and a linked core, the grammatical relations within the matrix core[2] are either independent of, or rather affect the grammatical relations of elements in the linked core. The "trigger" of grammatical processes across the linked cores is usually an element in the matrix core, not one in the linked core. That is, the verb in the matrix core will agree with its arguments (rather than with the arguments of the embedded verb), and its arguments will be assigned case by it, rather than by the verb in the dependent core. If there is influence, it will be from the grammatical relations in the matrix core to the grammatical relations in the linked core, e. g. in the Latin *accusativus cum infinitivo* construction:

(1) *Vid-e-o puer-um veni-re*
see-1sg.pres. boy-Acc. come-inf.
"I see the boy coming"

In this sentence the argument of the verb in the dependent core (*puer*) is in the accusative case, because it is at the same time the object of the verb in the matrix core. In most syntactic frameworks this is referred to as "raising", whether or not actual "movement" of syntactic elements is assumed (as in Generative Grammar).

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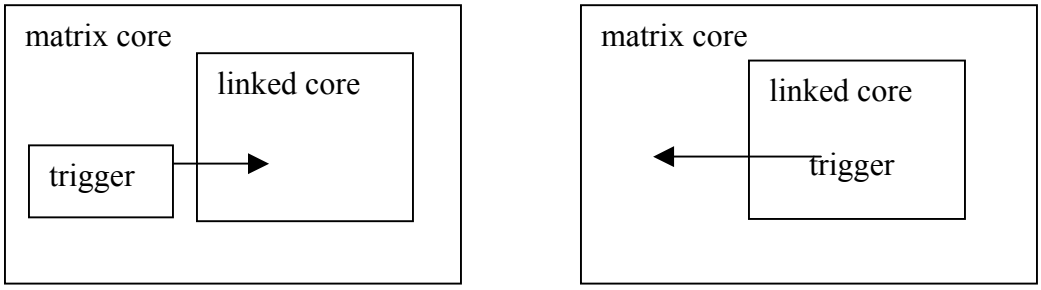
[2] For the terms *matrix core* and *linked core* see Van Valin & LaPolla 1997. These terms roughly correspond to main and subordinate clauses, but cores are narrower syntactic units than clauses, in that a core contains only the predicate with its arguments, without any adjuncts.

What we call the "dependent first" syntactic pattern is manifested through the influence of the grammatical relations in the dependent core on the grammatical relations in the matrix core. In "dependent first" syntactic patterns the grammatical relations in the linked core are parsed before the grammatical relations in the matrix core, and the trigger of a particular grammatical process (agreement or case assignment) is an element in the dependent core (Figure 1):



"Head first" syntactic patterns "Dependent first" syntactic patterns

(Figure 1)

The "dependent first" syntactic patterns are those in which the syntactic structure of the embedded cores affects the syntactic structure of the matrix cores. The "dependent first" pattern involves either a) case assignment to the shared argument by the verb in the linked core, or b) agreement of the verb in the main core with an argument in the linked core.

The pattern a) is exemplified by Kabardian:

(2) *ś'āla-r k'^{o}a-nwə 0-0-x^{o}ay-āt*
boy-NOM go-inf. 3sg.-3sg.-want-impf.
"The boy wanted to go"

(3) *ś'āla-m χədžabzə-r 0-yə-łāġ^{o}a-nwə x^{o}ay-āt*
boy-ERG girl-NOM 3sg.-see-inf. want-impf.
"The boy wanted to see the girl"

In (3), the shared argument (*ś'āla* "boy") is in the ergative case, because the linked (dependent) verb is transitive. If the linked verb is intransitive, the shared argument must be in the nominative (absolutive) case (2).

The pattern b) is exemplified by Tsakhur (data from E. Kalinina and Kibrik 1999):

(4) *jed-ē jiq' ha=w=?-u GaTi=r=xyn-na.*
mother-ERG broth.3 3=make-PF 2=finish.PF-AA
"Mother finished making broth."

The verb "finish" in (4) agrees with the unexpressed argument belonging to the class 2 (feminines), which is also the subject of the dependent core (*jed-ē* "mother").

(5) *jed-ē jiq' ha=w=?-u GaTi=p=xyn-na.*
mother-ERG broth.3 3=make-PF 3=finish.PF-AA
"Mother finished making broth"

In (5), the matrix verb agrees with its own absolutive argument, i. e. with its complement, which takes the agreement markers of the class 3 (the default agreement pattern in this language). This is, then, the usual "head first" pattern.

In the usual pattern of gender agreement in complex constructions, the matrix verb first checks its own arguments for agreement controllers[3], while, in the typologically rarer pattern observed in Tsakhur, the matrix verb first "scans" the linked core, and agrees with its "subject" (in Tsakhur it is the absolutive argument, which may be unexpressed). Here again we can speak about the "head first" and "dependent first" pattern of agreement: in the dependent first pattern, the argument structure of the dependent (linked) core is scanned first for agreement controllers, while in the more usual "head first" pattern, the matrix core is scanned first, and the "trigger" of agreement (the controller) is in the matrix core.

Before proceeding, one caveat is in order. Since case assignment and gender agreement are very different syntactic phenomena on any account, many linguists would probably argue that the phenomena discussed here actually have very little in common, and are best treated separately.

Moreover, as Polinsky (2003) notes, constructions involving "dependent first agreement patterns" ("long distance agreement" in her terminology) may actually be structurally very diverse, and the same holds for constructions with "dependent first case assignment" (Kibrik 1987). In some examples involving "dependent first" agreement, the controller and the target of agreement are actually in the same clause, whereas in others they are in distinct clauses. Similarly, in "dependent first" case assignment, two possibilities arise: firstly, the argument shared by the matrix verb and the linked verb can be structurally in the matrix clause, so that its case is assigned by the argument in another clause (the linked clause); secondly, the shared argument can be in the linked clause, so that its case is assigned locally by the linked verb. Both types of "dependent first" pattern are attested in Kabardian, and other Caucasian languages, but the cross-clausal pattern of case assignment and agreement are much rarer. In this paper we will not distinguish between these two types of "dependent first" syntactic patterns, since to do so properly would require much more detailed syntactic analyses of the Caucasian languages than are currently available[4]. For the purposes of the present investigation it will be assumed that a construction exhibits the "dependent first" pattern if the following conditions are met:

a) there is a structure with a matrix verb taking a linked core as its complement;

[3] For the terms "controllers" and "targets" of agreement see Corbett 2006.

[4] Moreover, whether the triggers and targets of case assignment and agreement are in the same clause, or in a different one, can depend on the particular theory of syntax one works with, especially on whether "empty", "deleted" and "underlying" syntactic elements are admitted. This paper aims at being strictly theory neutral.

b) the form of (at least) one element in the matrix core depends on the form of an element in the linked core (the "trigger" of the "dependent first" pattern).

The constructions in question can still be (and indeed are) very diverse, but I believe the phenomenon of DF is still well defined.

2. Classes of verbs taking "dependent first" in Kabardian:

In Kabardian, the "dependent first" pattern of case assignment is attested in many verbs taking complex complements. It occurs both with verbs with obligatory control (such as "want", "begin"), and with those for which control configurations are not obligatory ("know", "say"). Moreover, we have this pattern both with verbs with actor control (e. g. "promise") and those that have undergoer control[5] ("persuade"). Kabardian complementation has been extensively discussed in Kumaxov & Vamling 1998, and the following overview of verbs showing "dependent first" is largely based on that work.

A) Verbs without obligatory control

(6) *ś'āla-m* *zə-f'-aw-ś'ə-ž* *f'əwa ya-dža-wə*
boy-ERG refl.-vers.-pres.-do-back well 3sg.-learn-ger.
"The boy imagines he is learning well"

In (6), the linked verb is intransitive; although the matrix verb is transitive, the shared argument can be in the Nominative, assigned to it by the linked verb (7):

(7) *ś'āla-r* *f'əwa ya-dža-wə* *zə-f'-aw-ś'ə-ž*
boy-NOM well 3sg.-learn-ger. refl.-vers.-pres.-do-back

Other verbs that do not occur in obligatory control structures show the DF pattern, e. g. *ś'an* "know", *ś'ažən* "remember", *žyə?an* "say", *šənan* "be afraid", etc.

B) Verbs with obligatory control, with only one possible controller

I. Verbs of wanting (desiderative verbs):

(8) *ś'āla-r* *k^{o}a-nwə* *x^{o}ay-āt*
boy-NOM go-inf. want-impf.
"The boy wanted to go"

(9) *ś'āla-m* *χədžabzə-r* *yə-łāġ^{o}a-nwə* *x^{o}ay-āt*
boy-ERG girl-NOM see-inf. want-impf.
"The boy wanted to see the girl"

[5] For the terms "actor control" and "undergoer control" see Van Valin & LaPolla 1997 and the theory of obligatory control exposed there.

(10) *ś'āla-r χədžabzə-m ya-wa-nwə x^{o}ay-āt*
boy-NOM girl-ERG hit-inf. want-impf.
"The boy wanted to hit (at) the girl"

The case marking of the shared argument (*ś'āla*) in the preceding examples depends on the argument structure of the linked verb; if the linked verb is transitive, the shared argument is in the Ergative case; if it is intransitive, it gets the Nominative case.

II. Phasal verbs:

(11) *ɬ' ə-r / ɬ'ə-m šxa-n yə-wəx-ā-ś*
man-NOM/man-ERG eat-inf. 3sg.-stop-pret.-aff.
"The man finished eating"

The shared argument in (11) may be in the Nominative because the linked verb is intransitive. However, the matrix verb is transitive, so the shared argument can also be in the Ergative.

III. Modal verbs

(12) *ɬ'ə-r / ɬ'ə-m k'^{o}a-n łač'-ā-ś*
man-NOM/man-ERG go-inf. be.able-pret.-aff.
"The man was able to go"

The shared argument may be in the Nominative because the linked verb is intransitive, although the matrix verb is transitive, and normally assigns the Ergative case to the shared argument. It must be added that my informant does not accept the sentence (12) with the DF pattern (with the shared argument in the Nominative), but see Kumaxov & Vamling 1998: 267ff.).

IV. Verbs of intention

(13) *ɬ'ə-r / ɬ'ə-m ya-źažə-nwə yə-mwərād-ś*
man-NOM/ERG 3sg.-go.away-inf. 3sg.-intention-aff.
"The man intends to go away"

Here the shared argument is in the Nominative, while the matrix verb is transitive. This is because the linked verb is intransitive. However, "head first" pattern is possible (Kumaxov & Vamling 1998: 278). Again, my informant accepts only the HF pattern (with *ɬ'əm*), and considers the DF variant (with *ɬ'ər*) ungrammatical. It may be that the DF pattern is losing ground with younger speakers, especially those whose speech is heavily influenced by Russian.

B) Verbs with obligatory control - actor control verbs

(14) *ɬ'ə-r q'a-k^{o}a-nwə sə-q'-yə-ġag^{o}əġ-ā-ś*
man-NOM dir-go-inf. 1sg.-dir.-3sg.-promise-pret.-aff.
"The man promised me to come"

The shared argument is in the Nominative because the linked verb is intransitive.

C) Verbs with obligatory control - undergoer control verbs

(15) *ɬ'ə-m wəna-r yə-ś'ə-nwə fəzə-m*
Man-ERG house-NOM 3sg.-make-inf. woman-ERG

q'-yə-ġa-da?^{o}-ā-ś
dir.-3sg.-caus.-hear-pret.-af.
"The woman persuaded the man to build the house"

In (15), the shared argument (*ɬ'ə* "man") is in the Ergative case, because it is the subject of the transitive verb *ś'ən* "do, build" in the linked core, rather than in the Nominative, as the direct object (Undergoer) of the matrix verb.

It can be concluded from the examples listed (and there are many more in Kumaxov and Vamling's 1998 monograph), that the DF case assignment is very widespread in Kabardian, occurring with a large number of verbs.

3. Restrictions on "dependent first" in Kabardian

In Kabardian, the verb in the linked core can assign the case to the shared argument only when a) the argument is unambiguosly in the linked core, or b) its structural position is ambiguous, i. e. it can be both in the linked and in the matrix core. If, however, the shared argument is unambiguously in the matrix core, then it must be assigned case by the matrix verb, i. e. "dependent first" is impossible, as in (16):

(16) *ɬ'ə-m /(*-r) yə-wəx-ā-ś šxa-n*
man-ERG/(*-NOM) 3sg.-begin-pret.-aff. eat-inf.
"The man finished eating"

In (16), the linked core cannot be split, syntactically, by the matrix verb, which means that the shared argument must be structurally in the matrix core, preceding the matrix verb which has to assign it its case, hence the usual "head first" pattern. The same restriction on the possibility of "dependent first" applies to other verbs with obligatory control. "Dependent first" is usually a possibility whenever the shared argument *can* be interpreted as being in the dependent (linked) core.

"Dependent first" also appears to be obligatory with some verbs and some word orders. With some verbs it is impossible to split the matrix core with the linked core and have "head first" (Kumaxov & Vamling 1998: 229):

(17) *ā-bə/*ā-r* *txəłə-r* *yə-txə-n* *ma-šəna*
he-ERG/*he-NOM book-NOM 3sg.-write-inf. 3sg.pres.-be afraid
"He was afraid to write the book"

The matrix verb in (17) is intransitive, but with this word order it cannot assign the Nominative case to the shared argument. Both "head first" and "dependent first" are possible, however, if the shared argument is between the two cores, so its structural position is ambiguous:

(18) *ma-šəna ā-bə/ā-r* *txəłə-r* *yə-txə-n*

There is some evidence that the "dependent first" pattern is related to information structure. This can be seen in the following examples:

(19) *ś'āla-m* *χədžabzə-r* *yə-łāġ^{o}a-nwə* *x^{o}ay-āt*
boy-ERG girl-NOM 3sg.-see-inf. want-impf.
"The boy wanted to see the girl"

According to my informants, (19) is the most natural answer to the question "Who wanted to see the girl", so that "boy" (*ś'āla*) is clearly focal; if answering the questions such as "Whom did the boy want to see?", or "What did the boy want to do?" my informants showed no preference for either the "dependent first", or "head first" construction, which is also possible:

(20) *ś'āla-r* *x^{o}ay-āt* *χədžabzə-r* *yə-łāġ^{o}a-nwə*
boy-NOM want-impf. girl-NOM 3sg.-see-inf.
"The boy wanted to see the girl"

This problem clearly needs a more detailed study, but it appears that the word order in which the "dependent first" pattern is preferred is the one in which the shared argument is focal, rather than topical. According to the data presented in Kumaxov & Vamling 2006: 111ff., focal elements must be preverbal in Kabardian. When this is combined with the prohibition against the splitting of the linked core, we get the following possibilities:

A) NP_{FOCAL} V_{LINKED} V_{CORE}

B) NP_{FOCAL} V_{CORE} V_{LINKED}

In the configuration A), if the focal element is the shared argument, it will naturally be interpreted as being in the same clause as the linked verb, and be assigned case by it, so we'll have the "dependent first" pattern. In the configuration B), if the focal element is the shared argument, it cannot be interpreted as being in the same clause as the linked verb, because this

would imply the splitting of the linked core, which is not permitted in Kabardian. Therefore, the "dependent first" pattern will be impossible with the configuration B). The "head first" pattern will, however, still be possible, i. e. the matrix verb can assign the case to the shared argument.

To conclude, then, the "dependent first" pattern of case assignment in Kabardian is strongly constrained by word order. It appears that case assignment is, as a rule, strictly local in that language, which means that the shared argument can be assigned the case by the linked verb only if it can be interpreted as being in the linked core. In some cases, as the preceding examples show, it appears that "dependent first" can be obligatory.

4. The "dependent first" syntactic pattern in other Caucasian languages

Constructions involving "dependent first" are attested in a number of languages of the Caucasus, including Kabardian's closest relative, Adyghe. Let us look at some examples, starting with Adyghe:

I. Adyghe (data from Sergey Say)

ахэ-мэ сэ с-а-щэ-н-эу фежьа-гъэ-х
(20) *āxa-ma sa s-ā-śa-n-aw fayźā-ġa-x*
they-ERG I 1sg.abs-3pl.-lead-fut2-conv. begin-past-3pl.
"They began to lead me"

The shared argument in (20) is in the Ergative case, although the matrix verb is intransitive, and would require its subject in the Nominative (Absolutive). This is because the linked verb is transitive, so its subject has to be in the Ergative.

As in Kabardian, the choice of head first / dependent first pattern of case assignment depends largely on word order. Therefore, the same meaning is expressible with the "head first" pattern, with the shared argument in the Nominative (Absolutive), assigned by the matrix verb.

ахэ-р фежьа-гъэ-х сэ с-а-щэ-н-эу
āxa-r fayźā-ġa-x sa sā-śa-n-aw
they-abs begin-past-3pl.abs I 1sg.abs-3pl.erg-lead-fut2-conv

II. Lezgian (data from M. Haspelmath)

(21) *Ajal-ar q̃ uğ wa-z baš lamiš -na.*
[child-PL play-INF] begin-AOR
"The children began to play."

(22) *Nabisat.a wič i-n ktab k'el-iz baš lamiš -na.*
[Nabisat(ERG) self-GEN book read-INF] start-AOR
"Nabisat started to read her book."

As can be seen from the above examples, the case marking of the shared argument varies according to the transitivity of the linked verb. According to Haspelmath, this is the "lexical idiosincrasy" of this verb; there is another verb meaning "to begin" which has the usual, "head first" case marking pattern. It must be noted, however, that there exists another syntactic analysis for the examples (21) and (22), offered by A. Kibrik. According to him, the matrix verb in these examples takes only one argument, namely the clausal complement, and its meaning is, roughly, "It begins to X", so that there is no argument sharing in the sentences (21) and (22). If this is the correct analysis, then there is no DF case assignment in those examples.

III. Tsakhur (data from E. Kalinina and A. Kibrik)

(23) *bajram GaTi=r=xyn-na o=r=k'un.*
Bajram.1 1=finish.PF-AA 1=write.PF
"Bajram finished writing."

Tsakhur has "dependent first" both with respect to case assignment and class agreement. In (23), the proper name *Bajram* is in the Absolutive case, because the linked verb is intransitive. In the next example (24), with the transitive linked verb, the shared argument ("mother", *jed*) is in the Ergative.

(24) *jed-ē jiq' ha=w=?-u GaTi=p=xyn-na.*
mother-ERG broth.3 3=make-PF 3=finish.PF-AA
"Mother finished making broth"

In the last example, the matrix verb ("finish") agrees with the direct object of the linked verb, i. e. with the noun "broth", which belongs to class 3. This is, then, the DF agreement pattern. The alternative "head first" pattern is also possible, with the matrix verb agreeing with its own infinitival complement (belonging to class 2 by default):

jed-ē jiq' ha=w=?-u GaTi=r=xyn-na.
mother-ERG broth.3 3=make-PF 2=finish.PF-AA
"Mother finished making broth."

Note, however, that in the examples showing both "dependent first" and "head first" agreement, the shared argument is in the ergative, i. e. we have only "dependent first" case assignment.

IV. Tsez (data from M. Polinsky, E. Potsdam and A. Kibrik)

In Tsez, "dependent first" patterns are very similar to those in its distant relative, Tsakhur. At least two verbs, *oqa* "begin" and *ič̄a* "continue" exhibit the "dependent first" pattern[6]. The next example illustrates case assignment by the linked verb:

[6] According to Potsdam & Polinsky, there might be more such verbs in the language, but it is certain that not all matrix verbs exhibit it.

(25) *kid-bā čorpa bod-a y-oqsi*
girl-ERG soup.ABS make-INF 2cl.-began
"The girl began to make soup."

The shared argument in (25) is in the Ergative, because the verb in the linked core is transitive (despite the fact that the matrix verb would require it to be in the absolutive case). The matrix verb agrees with the unexpressed absolutive argument of the matrix verb, which is *kid* "the girl"; it cannot agree with *čorpa*, the argument of the linked verb, which means that here the DF agreement is impossible:

(25a) *kid-bā čorpa b-od-a y-oqsi/*b-oqsi*
girl.ERG soup.III.ABS III-make-INF II-began/*III-began
"The girl began to make soup."

However, other matrix verbs do allow the dependent-first pattern of agreement (Polinsky & Potsdam 2006).

The next example illustrates the DF agreement pattern in Tsez:

(26) *enir užā magalu bāc'ruł b-iyho*
mother boy bread(cl.3) ate cl.3-know
"The mother knows the boy ate the bread"

Here the matrix verb "to know" agrees with the absolutive object of the linked verb ("eat"), so it has the prefix of the 3rd class *b-*. Polinsky and Potsdam argue that this pattern is possible only if the argument with which the matrix verb agrees is topical. If it is not, then the "head first" pattern is obligatory:

(27) *enir užā magalu bāc'ruł r-iyxo*
"The mother knows the boy ate the bread"

Here the matrix verb agrees with the default class of clausal complements (class 4), expressed by the prefix *r-*.

V. Chiragh dialect of Dargwa (data from A. Kibrik)

(28) *ruče učile r-iXIi r-urXar*
sister.ABS brother-ERG 2-guard(inf.) 2-can
"Brother can guard sister"[7]

In (28), the matrix verb *urXar* receives the 2nd class agreement prefix because the object of the linked verb is feminine (class 2).

VI. Hinukh (data from A. Kibrik)

[7] Kibrik interprets the sentence as passive ("Sister can be guarded by brother"), but it is unclear why, since the verb does not carry any passive morphology.

(29) *uži-qo* *k'$_o$ezi r-iqiš* *ešu* *zok'a*
boy-poss. can 4cl. sister (abs.) beat.inf.
"It is possible for boy to beat sister"

(30) *uži* *k'$_o$ezi iqiš iL'a*
boy(abs.) can 1cl. go-away (1cl.)
"It is possible for boy to go away"

In the first sentence (29) the shared argument (*uži*) is in the possessive form, because the linked verb is transitive. If, however, the linked verb is intransitive (as in 30), the case of the shared argument must change to absolutive. Hinukh also has DF in gender agreement (Diana Forker, p. c.).

VII. Ingush (data from Johanna Nichols)

In Ingush, two modal verbs show the "dependent first" pattern of case assignment. One of them is *d.ieza* "must, ought to, is obligated, needs to, should"

(31) *Massa* *cho baaqqa* *bieza* ***sy****?*
how_many hair B.take.INF B.should 1s.GEN
"How many hairs must I take? How many hairs are supposed to be taken?"

(32) *Massa cho baaqqa bieza* ***aaz****?*
how_many hair B.take.INF B.should 1s.ERG
"How many hairs should I take? How many hairs do I need to cut (in order to do such and such)?"

The example (32) illustrates the DF pattern of case assignment ("case climbing" in Nichols' terminology): the shared argument (I) is in the ergative, because the linked verb is transitive. (31) shows the more usual HF pattern, but with a slight difference in meaning.

"With only two verbs known to take both patterns it is difficult to generalize with confidence about the semantic difference, but it appears that the constructions with case climbing have to do with contingencies applying to whole situations while those with case assignment have to do with obligation, ability, appropriateness, etc. applying to an individual." (Nichols, MS)

(33) *Hwa* *ruuchka* *hwa'ieca* *megag****b****ii* ***aaz****?*
2s.GEN pen(B) DX-take.INF may.FUT.B 1s.ERG
"May I take (borrow, use) your pen?"

In the example (33) the modal verb *meg* agrees in noun class (B) with the object (the absolutive argument) of the dependent verb "take". This is the "dependent first" pattern in agreement. The shared argument is in the Ergative, because the dependent verb is transitive.

An interesting parallel exists between modal verbs in Ingush and Kabardian. The verbs meaning "should" change their meaning from objective to subjective modality depending on the control pattern. In Kabardian, the verb *x^{o}ayn* means "have to, be obliged to" if used exclusively in constructions with "dependent first" pattern:

ār *k'^{o}a-n x^{o}ay-ā-ś* "he had to go"
he-NOM go-inf. have.to-pret.-aff.

In this sentence, all permutations of the word order are possible, but the shared argument must be in the Nominative, i. e. its case is assigned by the dependent verb, which is intransitive. If the dependent verb is transitive, the shared argument gets the Ergative case:

Pśāśa-m pis'mo yə-txə-n x^{o}ay-ā-ś
girl-ERG letter 3sg.-write-inf.-have.to-pret.-aff.
"The girl had to write a letter"

This is then one case where "dependent first" pattern is obligatory in Kabardian, and does not depend on word order. The modal verb *x^{o}ayn* "must, ought to" does not inflect for person, and has to follow the linked verb, forming with it, as it were, a complex predicate.

However, *x^{o}ayn* can also mean "want", but then it can occur in sentences with both "dependent first" and "head first" patterns:

(8) *ś'āla-r* *k'^{o}a-nwə* *x^{o}ay-āt*
boy-NOM go-inf. want-impf.
"The boy wanted to go"

(9) *ś'āla-m* *χədžabzə-r* *yə-łāǧ^{o}a-nwə* *x^{o}ay-āt*
boy-ERG girl-NOM 3sg.-see-inf. want-impf.
"The boy wanted to see the girl"

This is in full accordance with Nichols' observation about Ingush, where "the constructions with case climbing have to do with contingencies applying to whole situations while those with case assignment have to do with obligation, ability, appropriateness, etc. applying to an individual." (Nichols, p. c.).

VII. Mingrelian (data from George Hewitt)

(34) *mu-s* *re o.rt.u.kə.ni*? "What (is it that) are you doing?"
what-DAT it.is you-do-it-SUB

(35) *mu* *re*?
what(.NOM) it.is "What is it?"

(36) *mu-s* *o.rt.u.k*
what-DAT you-do-it "What are you doing?"

In the first example (34), which means strictly "What is it that you are doing?", the case on the interrogative is determined not by the copula (which demands a Nominative) but by the linked verb (whose subordinate status is shewn by the ending *-ni*), which takes a Dative. Note that *mu re ortukəni* (with the usual "head first" case assignment) is also possible.

VIII. Archi (data from Zaira Khalilova)

(37) *lšet'u-l l-iq'-še goli uža bataxu y-acc-u*
Mother/obl.-Lat. cl.4-know-pres. cop. boy-Erg. bread(cl.5) cl.5-eat-pst.part.
"Mother knows that the boy ate bread"

(38) *lšet'u-l y-iq'-še goli uža bataxu y-acc-u*
Mother/obl.-Lat. cl.5-know-pres. cop. boy-Erg. bread(cl.5) cl.5-eat-pst.part.

As in the example (26) from Tsez above, in (38) the matrix verb "to know" agrees with an argument (the "direct object") of the linked verb (*bataxu* "bread", which belongs to the gender 5). This is DF in gender agreement. In (37), on the other hand, we have the usual HF pattern with the default agreement marker (gender 4) on the matrix verb. Z. Khalilova (MS and p. c.) argues that the choice of the DF agreement pattern in Khwarshi is conditioned by the information structure: the argument which triggers agreement in the linked core must be either focal or topical.

5. Preliminary conclusions

1. "Dependent first" appears to be an areal phenomenon in North Caucasian languages; it is unattested in the southern Abkhaz-Adygheian languages (Abkhaz, Abaza), at least according to G. Hewitt (1987 and p.c.). It occurs marginally in Mingrelian, but not in Georgian, and for Bats, Svan, and Laz I have no data. It remains to be seen if this phenomenon exists in some of the southernmost Nakh-Dagestanian languages (Tabasaran and Udi), but data gathered in Kibrik 1987 and other sources show that "dependent first" occurs in most (if not all) Daghestanian languages. Within NE Caucasian, it is attested in all primary branches: certainly in Ingush and Chechen[8] (Nakh), Tsakhur[9], Kryts[10], and Lezgian (Lezgic), Tsez[11], Hunzib[12], Hinukh[13], Tindi[14], Khwarshi[15], Godoberi[16], Akhvakh[17], and Bezhta[18] (Avar-Andi-Tsez), and Dargwa[19] (Lak-

[8] Johanna Nichols, p. c.
[9] Kibrik 1987: 154.
[10] Kibrik 1987: 152-3.
[11] Kibrik 1987: 149.
[12] Kibrik 1987: 151.
[13] Kibrik 1987: 146, 169.
[14] Kibrik 1987: 148.
[15] Khalilova 2007 and p. c.
[16] Kibrik (ed.) 1996: 175-197 and Haspelmath 1999.
[17] Denis Creissels, p. c.
[18] Kibrik 1987: 158.
[19] Kibrik 1987: 157.

Dargwa). It is probably also attested in Lak, Hinalug, Khvarshi, Rutul, Budukh, Avar, Chamalal, and Aghul, although I don't have clear examples (Kibrik often notes that verbs in those languages behave analoguously to the ones from which he cites examples). I also lack data for Andi, Karata, Udi, Bagulal, Archi, and Botlikh. The areal distribution of this phenomenon today does not have to correspond with its original distribution, because of prehistoric language shifts and expansions of certain language branches in the Caucasus region (see Nichols 2004) for the northward expansion of Nakh). However, from the data gathered so far it appears that we are dealing with an areal phenomenon of the North, rather than the South Caucasus. The following picture shows the approximative borders of the phenomenon in the Caucasus (languages with "depended first" case assignment are circled in red; the area circled in blue represents languages where the "dependent first" gender agreement occurs):

Picture 1: The approximative areal distribution of DF in the Caucasus

2. As can be seen from the map, in certain languages "dependent first" is expressed in case assignment (e. g. in Kabardian, Adygheian), while in others (e. g. in Tsez, Tsakahur, and Ingush) it is expressed in both case assignment and class agreement. Of course, this is partially a consequence of the fact that Adyghean and Kartvelian languages do not have gender agreement,

and that some NE Caucasian languages lost it. Here is a table of languages with the two types of "dependent first pattern":

	DF in case assignment	DF in gender agreement
A) *NW Caucasian*		
Kabardian	+	-
Adyghe	+	-
B) *Kartvelian*		
Mingrelian	+ (marginally)	-
C) *NE Caucasian*		
Chechen	+	+
Ingush	+	+
Bezhta	?	+
Tsez	+	+
Khwarshi	+	+
Hinukh	+	+
Hunzib	+(?)	+
Tindi	+	+
Dargwa	+	+
Tsakhur	+	+
Kryts	+(?)	+
Lezgian	+	-

(Table 1: DF case marking and agreement in Caucasian languages)

3. There are some notable differences in the attested use of the DF pattern in various Caucasian languages. The "dependent first" pattern appears to be lexically restricted in NE Caucasian, i. e. only a small number of verbs appears to have this pattern in each language. Almost all the verbs that show this phenomenon in NE Caucasian are modals and phase verbs[20] (i. e. verbs with obligatory control with a single possible controller), while in NW Caucasian the DF pattern is not lexically restricted, occurring in many (probably most) verbs with obligatory control, including actor and undergoer control verbs, as well as with verbs that do not have obligatory control. However, DF seems to be closely tied to word order in NW Caucasian, and possibly focus structure which determines the word order ("dependent first" case assignment is possible only in certain word order configurations). Influence of information structure on the use of "dependent first" syntactic pattern is documented for at least two NE Caucasian language (Tsez and Khwarshi). The following table attempts to show the differences between the DF patterns in a number of languages:

[20] In the data presented in Kibrik 1987, I found that only Hinukh has "dependent first" gender agreement with "affective verbs" (verbs of wanting and fearing). Most other examples of "dependent first" in NE Caucasian involve phase and modal verbs, but Tsez and Khwarshi also have the DF gender agreement with the verbs of knowing (see the examples above).

	Tsakhur	Tsez	Lezgian	Ingush	Kabardian
lexically restricted	+	+	+	+	-
in class agreement	+	+	-	+	-
in case assignment	+	+	+	+	+
depends on word order	?-	?-	?-	?-	+
depends on topicality (information structure)	?	+	?-	-	?
can be optional	+	+	-?	+	+

(Table 2: Differences in the DF patterns)

Finally, it must be admitted that the "dependent-first" syntactic pattern is defined here in a rather abstract way, and that the concrete constructions found in the Caucasian languages vary to a great extent. It could be argued that the notion is too vague, and that the phenomena compared are actually too diverse to be subsumed under a single notion, in which case it would not make sense to consider such phenomena as results of areal convergence[21]. However, I believe it is still worth mentioning that, even if defined in such an abstract manner, the "dependent first" syntactic pattern is virtually limited to the group of languages spoken on the northern slopes of the Caucasus, and the closest languages that might exhibit the same phenomenon are not found anywhere near that area. If the DF pattern is really an areal phenomenon in the North Caucasus, one wonders whence it spread: was it from the NW Caucasian languages to the Nakh-Daghestanian languages, or vice versa? This question, however, cannot be answered at present.

[21] The phenomenon is not mentioned in Klimov (ed.) 1978. It has not, to my knowledge, been treated in the context of Caucasian areal and contact linguistics so far.

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