

Transitivity and Foregrounding in the North Caucasus

Author(s): Johanna Nichols

*Proceedings of the Seventh Annual Meeting of the Berkeley Linguistics Society* (1981), pp. 202-221

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via <http://linguistics.berkeley.edu/bls/>.

---

*The Annual Proceedings of the Berkeley Linguistics Society* is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.

## Transitivity and Foregrounding in the North Caucasus \*

Johanna Nichols  
University of California, Berkeley

Hopper and Thompson (1980) establish cross-linguistic covariance among a number of tense-aspect, referentiality, and valence properties, labeling the whole Transitivity.<sup>1</sup> Transitivity, they argue, is crucially correlated with, and motivated by, discourse foregrounding. If the relation between Transitivity and foregrounding is indeed a causal one, then we should expect to find that correlation in any language, whether or not we find other instances of Transitivity covariance. In particular, if a language has verbal forms specialized for discourse backgrounding, then we must expect to find lower Transitivity in those verb forms. The lower Transitivity could show up paradigmatically, in the distribution of grammatical categories available to those verb forms; or it could show up syntagmatically, in the text frequency with which the specialized forms exhibited certain Transitivity properties. We could expect, for instance, to find that the verb forms in question were used with objects less often than were verb forms not specialized for backgrounding, or that they paradigmatically lacked object agreement found in other verb forms of the language.

This paper presents an instance of what we would not expect to find: systematically higher Transitivity in verb forms specialized for backgrounding. This claim is based on a survey of prose texts in Chechen, a language of the North Central Caucasian, or Nakh, linguistic family; and it is corroborated by a text from a related language, Batsbi. These languages differ considerably from those surveyed for discourse features by Hopper and Thompson (1980:283ff.), in their verbal morphology, their use of clause chaining, their SOV typology, their pervasive morphological and syntactic ergativity.<sup>2</sup> Of these properties, it appears that the existence of overtly marked clause chaining and its language-specific interaction with narrative structure is responsible, perhaps solely responsible, for the association of high Transitivity with backgrounding.

This study differs from Hopper and Thompson 1980 in the goal and the object of its analysis. It is concerned with describing the morphosyntax and grammatical categories of language-specific verb forms and the relation of this grammatical patterning to discourse organization. (A long-range goal is to determine statistical trends that may be diagnostic for historical and typological classification.) The notion of Transitivity is important in that it provided a hypothesis to test and suggested that certain patternings were typologically interesting; but it is not the object of analysis. For Hopper and Thompson, of course, it is Transitivity that is the object of analysis.

The verb forms in question are specialized for use in clause-chaining constructions. They appear in what are variously called

non-final, or medial, or chained clauses and are usually regarded as nonfinite, while the final, or main, verbs are clearly finite. I will call the chained forms conjunct verb forms (or converbs); the clause headed by a converb is a conjunct clause. The finals I will call variously main and finite.

(1) shows a simple two-clause sequence of conjunct and main clauses in Chechen. The initial zero shows that Equi applies to the coreferential actant in a same-subject conjunct clause.

(1)	Chechen	∅	áraválla	vešína	dá	gira
			went out	brother	father	saw
			<u>converb</u>	(dat)	(nom)	<u>main verb</u>
			'having gone out, brother saw father';			
			'brother went out and saw father'			

Converbs as a morphological class give every indication of being specialized for backgrounding, in that they have only relative, and not absolute, categories of tense-aspect, mood, and person. While finite verbs have a number of tense-aspect categories which can refer to absolute past, present, and future time, converbs distinguish only what I will call (following Kurylowicz 1964: Ch. 3) anterior vs. simultaneous aspect categories: anterior converbs have the effect of sequencing the event relative to the following clause and can be rendered 'having VERB-ed'; simultaneous converbs are non-sequencing and can be translated 'while VERB-ing'.<sup>3</sup> (An anterior converb is shown in (1).) These are, as is well known, relative rather than absolute tense categories. In addition, converbs lack evidential categories available to main verbs. These evidential categories refer to the speaker's relation to the event and are thus absolute. To the extent that they mark switch reference,<sup>4</sup> converbs may be said to signal relative person. In short, converbs are designed for identifying events only in relation to other events, which is to say that they are paradigmatically specialized for backgrounding.

The fact that converbs are paradigmatically specialized for backgrounding does not mean that they are paradigmatically specialized for low Transitivity: overall, their inventory of grammatical categories is neutral with regard to Transitivity. (For instance, the aspect categories include both anterior, which is equivalent to Hopper and Thompson's punctual and thus of high Transitivity; and simultaneous, which is non-punctual and thus has low Transitivity.) Below I will show that, syntagmatically, converbs indeed tend to be used for backgrounding; and that furthermore, also syntagmatically, they tend to have consistently and significantly higher Transitivity than main verbs. In other words, verb forms which are paradigmatically specialized for, and syntagmatically used for, backgrounding have high Transitivity relative to verb forms paradigmatically specialized and syntagmatically used for foregrounding. All of this points to deficiencies in the usual approach to backgrounding and foregrounding.

I will use the standard generic term grounding to subsume backgrounding and foregrounding. It proved necessary to distinguish two levels of grounding. Text-level grounding involves the structure of the entire story: introductory, scene-setting, and closing sections, as well as asides, are backgrounding, and the narrative episode or episodes containing plot are foregrounding. Episode-level grounding occurs within episodes: although the entire episode is plot in some sense, some predications actually advance the plot, giving new information, while others add incidental information or restate known events. Plot-advancing clauses are episode-level foregrounding; incidental or old information is episode-level backgrounding. Schematically, the grounding structure of a narrative text is:

text background  
 text foreground = episode(s):  
     episode background  
     episode foreground

The fact that there are two levels of grounding means that it does not suffice to ask simply whether a clause is foregrounded or backgrounded.

The principal diagnostic criterion for types of grounding is the narrative time frame. Text-level backgrounding includes predications standing outside narrative time (asides, morals) and those which establish narrative time (introductory, scene-setting clauses) or move out of it (conclusions). Text-level foregrounding is entirely within narrative time. Thus a clause is episode-level, but not text-level, backgrounded if it gives accessory information (which makes it backgrounded) but is situated entirely in narrative time (which means it is text-level foregrounded). An example is the descriptive sequence given below as (13): the clauses are descriptive, thus not directly plot-advancing, thus background; but all are within narrative time, thus text-level foregrounded. All of these distinctions pertain only to narrative, since no direct speech was analyzed.

Clauses were examined for four Transitivity properties based on but not identical to those of Hopper and Thompson. Aspect is the distinction of anterior from simultaneous, marked overtly only on converbs although contextually available to main verbs as well. In the examples below, converbs ending in -na or -ca(-) (Chechen) or -no (Batsbi) are anterior; those in -s are simultaneous. Agency refers to semantic roles rather than (as for Hopper and Thompson) to properties such as human, animate, etc. of their fillers. Since in these tales virtually all participants are humans, no significant differences in animacy, etc. arise within texts. (Even the text-level backgrounded clauses were predicated of humans for the most part.) Semantic role frames do, however, vary systematically, and this is what the criterion of agency reflects.

Valence is the number of terms — syntactically governed actants — in the clause, with the Equi-deleted one restored. Restoration of zeroes allows us to analyze an example like (2)

(2)  $\emptyset$  having hit his friend, he felt sad

as having a two-place verb in the first (conjunct) clause and a one-place one in the second. Restoration of zeroes is necessitated by language typology. For a clause-chaining language, if we allow Equi to lower the valence, then we have a priori prejudged the issue of valence in backgrounded clauses, since (as will be shown) it is exactly the conjunct clauses that undergo Equi and tend to be backgrounded. (The zeroes are countable in any event by Hopper and Thompson's explicit criterion of restorability: 284.) The restriction of valence to terms alone forces us to regard sentences like (2a)

(2a)  $\emptyset$  having hit his friend twice yesterday with a stick, he felt sad

as having the same valence structure as (2). Now, plainly the first clause of (2a) is more salient and more suitable for foregrounding than the first clause of (2); and plainly this is due to the addition of the adverbials to (2a). This means that the higher number of actants is associated with foregrounding, as predicted by Hopper and Thompson. However, there are two reasons for not including adverbials in valence for this study. First, proliferation of adverbials as in (2a) does not occur in my corpus. This means that the observation about (2a) may be correct for the interpretation of English sentences, but there is no evidence that it is relevant for the generation of Chechen or Batsbi texts. Second, the decision to exclude adverbials was originally based on practical considerations: there was occasional ambiguity as to which clause an adverbial belonged to; also, since these languages have ad-verbal directional and locative elements which are cognate to preverbs, it was often unclear whether such ad-verbal elements should be regarded as components of verbal morphology or as independent elements filling valence places. Eliminating adverbials from consideration reduced the incidence of unclear cases. The goal of a verb of motion was counted as an adverbial rather than as an object, for the same reasons.

Finally, by transitivity (see again note 1) is meant the analog to Indo-European government of the accusative direct object. In Chechen a verb is transitive if it has an ergative subject; intransitive if it has a nominative subject; inverse otherwise.<sup>5</sup> Higher text frequency of transitives is a Transitivity property. (For Batsbi, which has ergative subjects for many intransitive verbs, the case of the object must also be incorporated into this definition.) (3) gives examples of these verb classes.

The criterion of transitivity is not to be confused with valence: valence counts the number of overt, anaphorically zero, and Equi-deleted terms without asking about verb types, while transitivity is a purely lexical property of verb stems. If a transitive

verb was used without an object (e.g. 'while talking, ...'), that occurrence was still counted as transitive, although the valence was reduced to one place, namely the subject.

(3) Chechen verb classes

transitive:	den	'kill'	+ Ergative	+ Nominative
	túoxan	'hit'	+ Ergative	+ Dative
intransitive:	xilan	'be'	+ Nominative	
	dálan	'go out'	+ Nominative	(+ Oblique)
	qíeran	'be afraid'	+ Nominative	+ Ablative
inverse:	diezan	'like'	+ Dative	+ Nominative
	xilan	'have'	+ Genitive	+ Nominative

The four Transitivity criteria are summarized in (4).

(4) criterion	more Transitive		less Transitive
aspect	anterior		simultaneous
agency	agent subject		other role as subject
valence	high valence		low valence
transitivity	transitive	inverse	intransitive

These four criteria will be used to test the following six Transitivity features of Hopper and Thompson: participants (reformulated here as valence), aspect, volitionality (as agency), agency (reinterpreted here as semantic role), punctuality (as aspect), kinesis (included in transitivity). My four features, and the notion of Transitivity they define, are explicitly language-specific and therefore allow us to decide difficult cases by recourse to formal marking. To some extent they set up in advance covariance among factors other than discourse grounding, thus facilitating the task of testing for grounding-Transitivity correlations alone. They shift the focus of investigation from Transitivity to grammatical categories. (For instance, both transitivity and valence point to language-specific lexical classification of verbs: transitivity is a lexical category; valence refers to terms, and the question of what is a term and what is an adverbial is a matter of lexical specification.)

Three of Hopper and Thompson's Transitivity properties were not surveyed here. Affirmation and mode were not counted because the incidence of negation and marked moods in these texts is too low to provide meaningful comparisons. Individuation of objects was not tested because it presupposes valence and transitivity and describes their unmarked patterns rather than pointing directly to grounding properties.

In all tales surveyed, Hopper and Thompson's correlation of backgrounding and lower Transitivity is strongly supported for text-level grounding. Introductory, concluding, and stage-setting passages contain mostly intransitive verbs and inverse verbs of a stative type such as 'have', typically in an imperfective tense —

low-Transitivity properties. (5) and (6) are typical examples. The verbs are underlined in these and further examples.

(5) Chechen (introduction to text shown in (10) below)

Zurab qoluš dieš vara,  
Z. stealing doing was (Aux)

cq'a-a ditan uojla jácara.  
(not) once to quit thought was not (inverse)

Zuraban dikin govr jara, ...  
Z. (gen) good horse was (inverse)

'Zurab was a thief and had no intention of quitting. Zurab had a good horse...'

(6) Batsbi (introduction to text cited in (12), (13) below)

Báčbi kiko? lamų nax dar.  
Batsbi in old mountain people was/were  
times

Bar naxn bédę co bagino bar.  
plains men (dat) except neg see (inverse) was (Aux)

'The Batsbi used to be a mountain people. Only men would ever see the plains.'

As shown in these examples, text-level backgrounding tends to be marked by short, choppy sentences with finite verbs and by the absence of clause chaining. (Another salient marker is the use of verb tenses formed with auxiliaries. These are imperfectives, including progressives and frequentatives. In this corpus, such tenses occur only in text-level backgrounded passages.) This is in sharp contrast to episode-level backgrounding, which, it will be shown, tends to be marked by clause chaining.

It was shown above that in terms of their paradigmatic categories converbs are specialized for backgrounding. Below it will be argued that syntagmatically, too, they gravitate toward backgrounded clauses and become grammaticalized as a backgrounding device. First their Transitivity properties must be established. Text frequencies for agency, valence, and transitivity are summarized in the Appendix. Table 1 of the Appendix shows values for all verbs in the corpus; Table 2 subtracts the verbs 'say', etc. Table 2 was compiled because the verbs 'say', etc. are frequent enough in both backgrounded and foregrounded functions, and both as converbs and as main verbs, that they could level out relevant statistical clusterings. In fact Table 2 does show greater discrepancies between converbs and main verbs in all categories, relative to Table 1. However, Table 2 is not necessarily the more accurate indicator of Transitivity correlations in the corpus:

indirect objects tend to be overt with verbs of saying more often for main verbs than for converbs, and since the overt indirect object counts as a valence place, Table 2 — by removing instances of such objects used with main verbs — is obscuring a Transitivity property of main verbs.

The Appendix counts verbs in text-level foregrounded passages only. (To include text-level backgrounded clauses in the counts would actually increase the differences between main verbs and converbs, spuriously strengthening the claims made below in that it would add more low-Transitivity main verbs like those of (5) and (6). It would vitiate the entire survey, however, by mixing the very levels of grounding which the survey separates.) It counts only texts representing a uniform grammar, one in which conjuncts function as in (7)-(9) below. (The source of (7)-(9) is shown as text 3 of the Appendix.)

The Appendix shows that, of the Transitivity features, main verbs have agent subjects somewhat more often than converbs do, but converbs have higher average valence and are more often transitive. In other words, main verbs are slightly ahead in one Transitivity property, while converbs clearly outrank them for two. Aspect is not compared in the Appendix because converbs and finites have different aspect categories, as mentioned above. In fact, 86% of the converbs in the corpus are in the anterior aspect; and of those that are in the simultaneous aspect perhaps half can be analyzed as adverbial constituents of clauses rather than as independent chained clauses, as is discussed below. Conjunct clauses, then, strongly incline toward Transitivity in aspect, although converbs and main verbs cannot be directly compared for aspect. The remainder of this paper illustrates these findings and interprets their relation to backgrounding.

In (7), a passage from a Chechen text, conjunct clauses are clearly being used for backgrounding. (This and following examples are given in translation only.<sup>6</sup> Backgrounded verbs are underlined once, foregrounded verbs twice. The right columns show, first, whether the verb is a converb (C) or main verb (M); second, the verb form itself, with endings normalized by restoration of voiceless vowels; and, third, the tense-aspect category. In the latter connection, it is worth pointing out that evidential categories such as witnessed and inferential lack the usual evidential force in narrative passages.)

(7) Chechen: Selection from 'How Mullah Nasreddin fooled everyone', El'darxanov 1900:22ff. (selection from p. 25)

1	When some time <u>passed</u>	C	jəl'χaḡ	anterior
2	the man, coming home, <u>found</u>	C	karajna	anterior
3	that his wife, having been <u>tricked</u> ,	C	ʕiexa-a	jina anterior
4	had <u>sent away</u> his cart and oxen,	C	digna	anterior
5	and <u>went off</u> after Mullah Nasreddin.	M	vaxana	inferential
6	<u>Going</u> ,	C	vŭŭdas	simultaneous
7	he <u>came</u>	M	qäšna	inferential
8	to <u>a man</u> standing with a goathide on his head.			

(7), cont.

9	<u>Going up</u> to him,	C	t'e-a	vaxana	anterior
10	he <u>asked</u> him,	M	xáttina		inferential
11	"...?", <u>having said</u> .	C	álla		anterior
12	"...", that one <u>said</u> .	M	álla		inferential
13	"...", when hej <u>told</u> himj,	C	álčah		anterior
14	when hej <u>took off</u> the goathide	C	dša-a	jeqqina	anterior
15	and <u>looked</u>	C	hšščah		anterior
16	and <u>found</u>	C	karajna		anterior
17	his flock <u>driven off</u> ,	C	digna		anterior
18	he <u>acknowledged</u> himself tricked.	M	vícira		witnessed

Much of this passage is recapitulation: earlier in the story Mullah Nasreddin has tricked a woman into giving him her husband's cart and oxen, gone off with them, tricked a shepherd into covering his head with a goathide, and made off with the sheep while the shepherd's eyes were covered. Clauses reporting these known events are old information, thus episode-level backgrounded; and it is exactly these backgrounded clauses that appear as conjuncts: 1-4 and 14-17. (Conjunct clauses 6, 9, 11, and 13 repeat the immediately preceding main verbs and are thus also old information.) The new addition to the plot in this passage is the fact that the woman's husband sets off in pursuit of Mullah Nasreddin, meets the shepherd and explains the situation to him, whereupon the shepherd realizes he has been tricked.<sup>7</sup> Exactly these new developments are reported with main verbs. In this passage, then, episode-level backgrounding takes the form of the reporting of already-known plot, and is neatly correlated with conjunct form.

(8) is a passage from the same text, in which the conjunct clauses are more subtly backgrounded.

(8) Chechen: *ibid.* (selection from p. 24)

1	When he <u>saw</u> them	C	bajčah		anterior
2	he <u>left</u> the carts and flock,	C	sovčajna		anterior
3	<u>jumped</u> into the nearby river,	C	iqqina		anterior
4	and <u>stood</u>	M	dša-húttina		inferential
5	<u>leaning</u> as though holding the bank up.	C	taťajna		anterior

Mullah Nasreddin, driving his stolen cart, has just seen nine carts and drivers approaching. He gets off, jumps into the river, and stands holding the riverbank up. He then persuades the men to hold the bank for him, and steals their carts. Clause 1 repeats a preceding sentence. Although clauses 2 and 3 are new and in some sense involved in the plot, only stood (leaning), clause 4, is crucial to subsequent developments. This clause has a main verb. The others are backgrounded in that they describe minor, unimportant events which explain how Mullah Nasreddin got to the riverbank; and they are conjunct. Clause 5 may well be a phrase,

i.e. a constituent of a clause rather than an independent chained clause: it functions as a manner adverbial to stood. This means it is not merely backgrounded but completely removed from the grounding structure, since only clause predicates participate in the grounding opposition.

(9) is a third passage from the same text, one in which conjuncts are not backgrounded.

(9) Chechen: *ibid.*

1	Having <u>taken</u> their carts,	C	jʃsna	anterior
2	and <u>driven</u> the flock ahead,	C	dʃqina	anterior
3	on <u>went</u> Mullah Nasreddin.	M	yaxana	inferential
4	<u>Going</u> ,	C	íexuʃ	simultaneous
5	he <u>came</u> to a village,	M	qʃsna	inferential
6	<u>sold</u> the carts, oxen, and sheep,	C	dʃxkina	anterior
7	<u>kept</u> the goods,	C	ditina	anterior
8	<u>bought</u> a stall,	C	jʃsna	anterior
9	<u>laid</u> out the goods,	C	dillina	anterior
10	<u>became</u> a merchant,	C	xilla	anterior
11	and <u>settled</u> down to live.	M	xiʔna	inferential

While the men hold the riverbank, Mullah Nasreddin steals their carts, travels to another village, sells the carts and livestock, purchases a merchant's stall with the proceeds, puts the remaining stolen goods up for sale, and settles down to life as a merchant. Conjunct clauses 1-2 and 6-10 are all reported quickly and without elaboration, but they are all new and all plot-advancing. The decision to make 'went' (3), 'came' (5), and 'settled' (11) main verbs, and the others conjuncts, is evidently not based on foregrounding. The sole function of the main-conjunct opposition here seems to be chunking (paragraphing): a narrative stretch can be broken into manageable chunks by the use of main verbs. The choice of main or conjunct form is arbitrary as far as grounding is concerned, but is motivated by other considerations: here, chunking links into a single chain events which happened in the same place. The sentence consisting of clauses 1-3 happens in one place, 4-5 in another, and 6-11 in yet another.

In (9) there is one conjunct which is not part of the grounding structure: íexuʃ 'going' (line 4). This verb represents a constituent of a clause rather than an independent chained clause: its effect is that of a manner adverbial or other ad-verbal element adding deictic or directional information to the neutral verb 'arrive' of 5. The construction 'going, arrived' appears frequently enough in these texts to be taken as a unit rather than as a clause sequence.

(9) serves to illustrate valence and transitivity patterns revealed in Tables 1 and 2. (9) is atypical of the corpus as a whole in that in (9) all predicates, conjunct and main alike, have agent subjects. All conjuncts are formally anterior and semantically sequenced, with the exception of íexuʃ 'going' in line 4,

which is phrasal. (All but íexuš are rendered with perfectives in El'darxanov's Russian translation.) In (9) the main verbs are all intransitives ('went', 'arrived', 'settled'), while all but one of the conjuncts are transitive. Not all clause chains in the corpus have transitive conjuncts and intransitive main verbs, but the Appendix shows that this pattern is frequent. (9) simply exaggerates patterns evident in the Appendix and in the survey of aspect in converbs discussed above.

(10) shows a Chechen text from another source, in which the function of converbs differs from what we have seen so far.

(10) Chechen: Uslar 1888:122ff.

1	Zurab <u>was</u> a thief	M	vara	imperfective
2	and <u>had</u> no intention of quitting.	M	jácara	imperfective
3	Zurab <u>had</u> a good horse;	M	jara	imperfective
4	<u>stolen</u>	C	lač'q'ajna	anterior
5	by someone (it's not <u>known</u> who)	C	xuʔuš	simultaneous
6	it <u>disappeared</u> .	M	jajn	immediate past
7	Zurab <u>looked</u> everywhere for it;	M	lixira	witnessed
8	he couldn't ( <u>didn't</u> ) <u>find</u> it.	M	karajna	inferential
9	Zurab <u>got</u> sad,	M	xilin	immed. past
10	thought (' <u>did</u> a thought'),	C	uojla jina	anterior
11	<u>said</u> , "..." <sup>8</sup> [compassion]	M	elin	immed. past
12	God <u>came</u> to mind,	M	vieʔan	immed. past
13	he (Zurab) <u>said</u> , "..." <sup>8</sup> [repentance]	M	elin	immed. past
14	Then Zurab <u>became</u> a good, God- fearing man.	M	xilin	immed. past

At the text level in (10) we see intransitive main verbs marking backgrounded clauses: introductory clauses 1-3 all have forms of 'be' (recall that 'have' is simply 'be' with inversion in Chechen).

The narrative consists of a single episode: horse thief Zurab has his own horse stolen; he searches unsuccessfully for it, grieves, experiences compassion for victims of thefts (including his own), repents, and becomes a good man. (His compassion and repentance are expressed in direct speech, omitted in lines 11 and 13.) The plot consists of Zurab's loss (line 6), grief (9), compassion (11), repentance (12, 13), and change (14). These are clearly foregrounded, and they are all main verbs. (I have counted as foregrounded the verbs of speech introducing crucial plot advancements, as in lines 11 and 13.)

Of the non-foregrounded clauses, three (4, 5, and 10) are conjunct. Let us first look at their aspect. The first verb, 'stolen' (line 4), is in the anterior form, and clearly denotes a sequenced event. The next, xuʔuš 'knowing', is in the simultaneous form and does not refer to a sequenced event. Like the simultaneous conjunct 'going' in text (9), ca xuʔuš 'not knowing' is probably best viewed as phrasal than as a genuine chained clause. The sentence in Chechen is:<sup>8</sup>

(11) (= (10.4-6)) Chechen:

iz	ḥan	lač'q'ajna	ca xu <sup>u</sup> š	riemara	jajn
it	who	stole	not knowing	from herd	disappeared
(nom)	(erg)	(converb)	(converb)		(main verb)

'Stolen by someone, it disappeared from the herd',

'Someone stole it and it disappeared...'

Taken together with ḥan 'who' (erg.), 'by whom', the converb phrase ca xu<sup>u</sup>š forms a complex indefinite pronoun 'by it's-not-clear-whom', i.e. 'by somebody'. (Uslar's Russian translation, which attempts to be literal, has byv ukradena neizvestno kem 'having been stolen it's-not-known by whom'.) The third conjunct in the passage is the phrase vojla jina (line 10) 'having thought', lit. 'having done (made) a thought', which is also formally anterior and semantically sequenced. In summary, those conjuncts which clearly function as clauses rather than as phrases are clearly sequenced, and formally anterior.

There are two clauses which are backgrounded yet contain main verbs: 'looked' (line 7), 'didn't find' (8). Unlike the conjuncts, these are not sequenced. Following the disappearance of his horse, Zurab searches unsuccessfully for it. The search and the failure to find the horse are of course not sequenced with respect to each other (since the finding never took place). Nor are they sequenced relative to Zurab's getting sad (line 9, the following clause): he was presumably sad during the search. This means that those backgrounded clauses which are not sequenced are not conjuncts but finite. Apparently for this speaker conjuncts can mark backgrounding only if the backgrounded clauses are sequenced. Main verbs are used for foregrounded events and for non-sequenced episode-level backgrounded events. (They are also used for text-level backgrounding, as in lines 1-3. These clauses, too, are not sequenced.)

Usage in the Chechen texts may be summarized as follows. Overall, conjuncts are favored in backgrounded clauses, but they are not simply a backgrounding device. In the first text (passages (7) to (9)) conjuncts may have only a chunking function, or they may be used for backgrounding. They tend to be sequenced and formally anterior, and to have high valence and transitivity. In the second text ((10)) conjuncts are plainly not a chunking device. They are a backgrounding device, but with aspect conditions on their use: they can be used for backgrounding only if they are sequenced. Aspect, in the form of this sequencing constraint, has changed from an incidental (though salient) property of conjuncts into an essential condition on their use. And backgrounding has changed from a frequent property of conjuncts into their main grammatical function (with the aspect condition entailing that only, but not all, backgrounded clauses will in fact appear as conjuncts.<sup>9</sup> For both text types, conjuncts tend to contain more transitive verbs, and to have a higher average valence, than do main verbs. Summarizing, the grammatical apparatus

marking text-level backgrounding in the first text (choppy sentences, low-Transitivity main verbs) is also used for episode-level backgrounding in the second text.

The related language Batsbi differs from Chechen in having innovated, under Georgian influence, a full set of coordinating and subordinating conjunctions for use with finite verbs. Consequently it has alternatives to clause chaining and choppy sentences. Nonetheless, usage in the text surveyed here, an ethno-historic narrative, is parallel to that of the second Chechen text. (12) is a narrative episode consisting of sequenced events: the story of a migration is told as a series of stopping points.

(12) Batsbi: 'The Batsbi migration to the lowlands', Dešeriev 1953:349ff.

1	The women <u>filled</u> baskets and sacks	C?	duc'doir <sup>10</sup>	witnessed
	with food,			
2	<u>put</u> them on their backs,	C	doxk'ina	anterior
3	<u>drove</u> the livestock ahead;	C	láxk'ino	anterior
4	<u>crossing</u> Qadui Pass	C	sodot'eno	anterior
5	they <u>came</u> to stop at Alaznistavi.	M	dáʎor	witnessed
6	<u>Moving</u> on from there,	C	hábino	anterior
7	<u>going up</u> Mount Saq'or,	C	haldilino	anterior
8	they <u>came</u> to Kupra-died-place.	M	dáʎor	witnessed
9	(Aside: No one remembers the route now.)			
10	From Kupra-died-place they <u>came</u>	M	dáʎor	witnessed
	to Tbatani.			
11	From there <u>---</u> to Alvani. 11	M	∅ (gapped)	(witnessed)
12	They first <u>founded</u> a settlement	M	billeno	recent past
	in Kakliane.			

The main verbs are: 'came' (5), 'came' (8), 'came' (10), gapped 'came' (11), 'founded' (12). Since this is a migration, it is the verbs of motion and the founding of a village that are foregrounded. The other clauses are conjuncts, and backgrounded in that they convey accessory information: loading up, passing landmarks. All clauses are sequenced. All have agent subjects. Several of the conjuncts, but only one main verb (the last one, in clause 12), are transitive.

In the second episode, (13), the migration continues. (Actually, the narrative is somewhat inexplicit, and it is not clear whether we are dealing with the second phase of the migration or with a transitional lifestyle involving seasonal migration to summer pastures.) The passage is descriptive of life enroute, so all clauses are episode-level backgrounded. Yet all but one are main verbs.

(13) Batsbi (ibid.)

1	In Pankisia they <u>were afraid</u> to	M	co dahralo	remote
	go up off-trail.			past
2	The people and livestock <u>hid</u>	M	leč'q'laralo	remote
	in the bushes.			past

(13), cont.

3	In camp the people would <u>mow</u> the grass	C	dahjacinó	anterior
4	and <u>make</u> a path.	M	tagboiralo	remote
5	From there they would <u>go</u> to the camp.	M	čuíxralo	remote
6	Around (it) people <u>stood</u> watch over the camp.	M	uittralo	remote

What distinguishes (13) from (12) is that the clauses of (13) are not sequenced: the actions may have been overlapping, simultaneous, or repeated (they are translated here as though repeated), but they do not define a chain of sequenced events. There is one chained clause, which is sequenced: line 3. The remaining verbs are finite. These two passages suggest that there is a sequencing constraint on conjuncts in Batsbi much like that of the second Chechen text: conjuncts are used in (12), where there is sequencing, and not (except for line 3) in (13), which is not sequenced. They are used in clauses which are both background and anterior.

A minimal pair showing that conjuncts have backgrounding functions is (14) and (15):

(14) Batsbi (ibid.)

Macne	ʋ'óruv	Ságirta	<u>joxjie</u> ,
when	stream (erg)	S.	destroyed (M, immediate past)
éhat	duq xalx	jaxk'e	Áluin.
then	much people (erg)	came	to A.

'When a mountain stream destroyed Sagirta [place name],  
then many people came to Alvani.'

(15) Batsbi (ibid.)

Ságirta	ʋ'óruv	<u>joxjieno</u>	jéxc'at'q'a	so	da.
S.	stream(erg)	destroyed	120	years	is/are
		(C, anterior)			

'It's been 120 years now since the stream destroyed Sagirta.'  
'Since the stream destroyed Sagirta 120 years have passed.'

Both sentences describe the same event: a mountain stream floods and destroys a place named Sagirta. This is a salient event which advances the plot (it triggers further migration). On the first mention (in (14)), when it is new information, it is expressed with a finite verb and subordinating conjunction. On the second mention (in (15)), when it is old information, it is conjunct.

In summary, Batsbi and the second Chechen text exhibit a restriction of conjuncts to backgrounded clauses, with the condition that the backgrounded clauses must be sequenced. For both

of the Chechen texts and for Batsbi, conjuncts center on backgrounded clauses, are or must be sequenced, include more transitives, and have higher average valence than main verbs. In this Batsbi text converbs have an average valence of 2.12, main verbs 1.96, although the text is too short for the figures to be reliable.

I suggest that the higher valence and transitivity of conjunct clauses in Chechen and Batsbi are due to four factors:

Thematization: In these texts, only humans (and an occasional monster or supernatural) have transitive verbs or agentive verbs predicated of them. In Chechen and Batsbi, episodes and clause chains are normally predicated of human participants. This entails that episodes will contain a high proportion of transitive, multi-place, and agentive verbs, although it does not predict differences in transitivity, valence, or agentivity between episode-level backgrounded and foregrounded, or conjunct and main, clauses. In other words, this principle accounts for the high valence and transitivity of conjuncts, but not for the lower figures for main verbs. The next three factors account for the lower valence and transitivity of main verbs.

Final stativation: Episodes, and clause chains, often end on a scene or state of affairs rather than on an event or an action. This means that the final clause is often stative, thus intransitive. Examples are (8), (9), (10). It is obvious that whole texts tend to end on scenes or states; these are text-level backgrounded clauses which serve the function of moving out of narrative time and summarizing it in relation to real time ('and they lived happily ever after', 'and that's why bears have no tails'). But it is interesting that within narrative sections episodes also often end on scenes. The final clause of an episode is clearly part of the plot, thus episode-level foregrounded; it is situated in narrative time, thus text-level foregrounded; yet it is a scene. This tendency increases the frequency of intransitive, one-place foregrounded verbs.

Chunking: Chunking appears to group together events which happen in the same place. This increases the probability that verbs of motion, which are intransitive and one-place, will figure prominently in at least text-level and probably also episode-level foregrounding. In Chechen and Batsbi, with some frequency, the final clause of a chain, or a lone main clause, tends to be a verb of motion. Examples are (12) and lines 1-3 of (9). The decision to organize chunks in this fashion may be language-specific, since there is no obvious reason why it could not be the first clause of each chunk rather than the final clause that contains the verb of motion. Whatever its motivation, this organization increases the number of intransitive and one-place verbs among foregrounded and chain-final, thus main, verbs.

Avoidance of control ambiguities: Main-clause actants control important reference-maintaining devices: Equi, cross-clause reflexivization, switch reference. Identification of targets (conjunct-clause actants) of these processes is usually straightforward,

since the targets are marked by zero or reflexive form; but the identification of controllers (main-clause actants) of the same processes is not straightforward, since controllers are not formally marked and the languages do not restrict control of these processes to particular syntactic relations or morphological forms (for control in Chechen see Nichols 1980). Thus a final transitive clause will contain two potential controllers and may be ambiguous, while a final intransitive clause contains only one possible controller and is unambiguous. To be sure, clause chains ending in transitive verbs do occur in texts and were easy to elicit; but avoidance of control ambiguity may have some statistical effect on the choice of verb type.

These four factors could well account wholly for the high Transitivity of conjuncts and the corresponding low Transitivity of main verbs. This might be taken to imply that there is a positive correlation between Transitivity and foregrounding even at the episode level, but that it happens to be obscured by independently motivated principles of thematization, stativation, chunking, and avoidance of control ambiguities. But such a statement no longer makes a claim for covariance. The fact is that Transitivity properties are not diagnostic of foregrounding in Chechen and Batsbi; on the contrary, at the episode level some of them are diagnostic of backgrounding or of the morphological specialization of verb forms for backgrounding.

Recall that the first Chechen style uses choppy finite sentences in text-level, but not episode-level, backgrounding, and the second style uses them also in some episode-level backgrounding. Recall also that text-level backgrounding tends to involve stative, non-sequenced verbs, and that in the second style it is precisely the non-sequenced episode-level backgrounded clauses which appear as finite verbs. This means that in the second style text-level and episode-level backgrounded clauses begin to look alike: this style is eliminating the formal differentiation of episode-level from text-level grounding. Viewed typologically, this development suggests that there may be languages which do not formally differentiate levels of grounding at all. It could be that in such languages the clustering of Transitivity properties will also follow a simple one-dimensional distinction of backgrounding from foregrounding. The very structure of narrative in such languages could be based on a one-dimensional system of grounding. It may be that the languages surveyed by Hopper and Thompson are of this type, and that this typological fact is responsible for our discrepant Transitivity-grounding correlations. There are two reasons why linguistics has so far been unable to approach this essentially empirical question.

First, most linguistic work has not adequately distinguished grammatical from metagrammatical phenomena. Aspect, agency, valence, and transitivity as established above are grammatical phenomena: they enter directly into language-specific descriptions. Rules refer directly to them: for example, in Chechen, morphological rules for verbal inflection refer to aspect; case-assignment

rules refer directly to agency (and other semantic roles); rules for verbal agreement refer to transitivity; and so on. But the notion of Transitivity is a metagrammatical one: no language-specific rule of grammar refers to Transitivity or assigns it; it is rather a generalization over a number of grammatical patternings.

This means that only grammatical patterning can be empirically described. A statement of its relation to the metaprinciple of Transitivity presupposes empirical description. The present study has redefined grounding and Transitivity criteria, with the goal of analyzing language-specific grammatical structure rather than Transitivity per se. Consequently, in contrast to Hopper and Thompson, it does not simply relate, on the one hand, a single notion of linguistic form/content to, on the other, Transitivity. Rather, it establishes language-specific correspondences between grammatical form and grammatical categories. It then asks which grammatical categories have high Transitivity. Finally, it relates the Transitivity of grammatical categories to grounding at particular levels. The result is an empirical assessment of the relation between grammatical structure, discourse grounding, and Transitivity. Only in this way can Transitivity be refined and tested. A first priority for linguistic typology should be distinguishing grammatical and metagrammatical phenomena.

Second, the one-dimensional view of grounding that seems to be standard in linguistic works was inadequate for analyzing even the uncomplicated narratives examined here. To make sense of the relation between formal marking, Transitivity, and grounding in Chechen and Batsbi it was necessary to distinguish text-level from episode-level grounding. Furthermore, within episode-level clause sequences we had to distinguish clause-level predicates (episode constituents) from phrase-level predicates functioning as manner adverbials (clause constituents), which do not participate in grounding. One can only assume that more complex narrative involves more levels of grounding, within each of which formal marking and clustering of Transitivity properties could be used to different ends. In addition, as suggested above, individual languages and individual narrative traditions may differ in the number of levels used. A first priority for discourse grammar should be clearer linguistic definitions of grounding and levels of grounding, based on close language-specific analysis.

#### Footnotes

\* Field work on Chechen and Batsbi was made possible by a grant from the International Research and Exchanges Board and by sabbatical leave from the University of California, Berkeley during 1979-80. I am grateful to both of these institutions for their support, and to Tbilisi State University for hospitality and facilities. Above all I am grateful to my linguistic consultants. In a general way, and especially in its distinction of levels, this paper owes much to the work of Robert Van Valin and William

Foley, whom I thank for communication on a variety of topics (none of them including this paper, however). The distinction of grammar from metagrammar is the insight of Igor Mel'čuk, who has also influenced this study but had no direct input into it. Heartfelt thanks to Orin Gensler for extensive comments and editorial suggestions.

1 The capital T is Hopper and Thompson's. Below I will use the term Transitivity in their sense; but transitivity, without the capital letter, will be used in the traditional sense of government of the accusative direct object and its analogs.

2 The term canonical ergativity is applied to such languages by Kibrik 1979.

3 This does not mean that there are only two converb forms, anterior and simultaneous. Both types, particularly the anterior, subdivide into a number of converb forms translatable 'when...', 'although...', 'before...', 'since...', 'just as...', etc. Many of these are transparently agglutinated forms composed of basic converbs plus case, postpositional, and other endings.

4 Some converbs favor coreference between conjunct and main-clause actants; some favor lack of coreference. The relation of such systems to classical switch reference will be explored in a later paper.

5 The terms subject and object are for convenience only: they refer to what appears as subject or object in most English translations. Word order, control properties, and native intuitions suggest that these do in fact label subjects and objects respectively; of the usual morphological criteria for subjecthood, case is complicated by ergativity and inversion, and there is no verbal agreement in person. Incidentally, I use nominative (following Russian descriptions) rather than absolute for the unmarked case, on the grounds that it is indeed the citation form.

6 Apart from facilitating exposition, translations make it possible to use such sources as the El'darxanov collection without deliberating over whether, how, and to what extent to normalize El'darxanov's deficient spelling. (The Uslar texts are well written but show dialect differences and thus also require normalization. I have normalized at least the endings in most examples.) The first sentence of (7) (clauses 1-5), transliterated and partly normalized, appears as follows (parenthesized numerals refer to the clauses of (7)):

Ça xan jılçah, c'a veʔanču stagana šien stérçi,  
one time passed (1) home coming man(dat) his(refl) oxen

vordan zudan ŷiexa-a jina, digna-a karajna,  
cart wife tricked (3) sent (4) found (2)

mól Nesertina t'eħa yaxana.  
M. N. after went (5)

'Some time passed, and the man, coming home, found that his wife had been tricked and had sent off his cart and oxen, and he set off in pursuit of Mullah Nasreddin.'

In my transliteration, c', t', etc. are glottalized; h and ç are pharyngeals; ɸ, ɸ are front rounded, ɸ̄, ɸ̄ are front rounded and long; the acute accent marks length and the absence of the accent means either that the vowel is short or that it is not known to be long.

Readers may observe that the anterior converb in -na (-la, etc.) is identical to the inferential past finite. Although the forms are identical, there is never doubt as to whether the clause is conjunct or main: particles, certain word-order patterns, and the presence or absence of Equi and reflexivization make the clause type clear.

7 In these stories direct speech is usually used to indicate a character's realization of a situation, as well as communication among characters. The realization or communication is plot-advancing, although the speech itself is not. I have therefore counted the preceding 'said', 'asked', etc. as foregrounded.

8 Initial iz 'it' (nom.) is probably not the object of laç'q'ajna 'stole' but the subject of the main verb ajin 'disappeared', moved to the beginning of the clause chain as is typical. The object of laç'q'ajna 'stole' is Equi-deleted, with overt iz as controller.

9 These statements imply that the first text represents a chronologically earlier stage than the second. In fact the two texts were published at about the same time (1900 and 1888). The evidence for the historical ordering of the styles cannot be presented here.

10 Conjunct if Dešeriev's analysis of the form as participial is correct. The ending is that of the witnessed past, which is used for sequenced foregrounded clauses in the same passage. Therefore if the form is conjunct it must be anterior.

11 Notice that a foregrounded clause may contain a zero verb due to gapping or the like.

## Appendix

### Text frequencies for agency, valence, and transitivity: Chechen, first style

The three texts summarized in Tables 1 and 2 are the first three texts from El'darxanov 1900. Text 3 is the source of passages (7)-(9) above. Texts 1-2 are not illustrated above. Passages (10)-(11) above are from a text not counted for this Appendix.

All three texts are representative of a single grammatical style, that of (7)-(9): in all three of them, converbs are used for backgrounding and sometimes for chunking, and the aspect constraint, which precludes use of converbs in non-sequenced backgrounded clauses in (10)-(11), is not evident. Text 1 is a didactic folk tale, text 2 an epic myth, and text 3 a humorous story.

Note should be taken of the anomalous figures for valence and transitivity of text 1 in Table 1: whereas for the other texts converbs have higher valence and transitivity, for text 1 converbs

have slightly lower figures in these areas. This is due to the fact that text 1 is a story in which there is no movement from place to place and the narrative involves mostly conversation and other interactions among participants. This means that verbs of speech are very frequent in the text, especially as main verbs; and motion verbs (which tend to be main verbs in other texts) are infrequent. In Table 2, where verbs of speech are removed, the ratios for text 1 are normal.

Tables 1 and 2 show that agency is high for all verbs, and somewhat higher in main verbs than converbs; while valence and transitivity are high for converbs. The discrepancies in valence and transitivity are apparently greater than that for agency. In other words, converbs clearly outrank main verbs for two Transitivity properties, while main verbs slightly outrank converbs for another Transitivity property.

Table 1: All verbs.

Text	Verb type	No. of tokens	Agent subject	Average valence	No. of transitives
1	C	26	19 (73%)	2.08	19 (73%)
	M	11	11(100%)	2.18 *	9 (81%)
2	C	26	22 (85%)	1.50	12 (46%)
	M	25	22 (88%)	1.36	7 (28%)
3	C	35	32 (91%)	1.80	25 (71%)
	M	21	19 (90%)	1.67	12 (57%)
total	C	87	73 (84%)	1.79	56 (64%)
	M	57	52 (91%)	1.63 *	28 (49%)

Table 2: Verbs other than 'say', 'ask', etc.

Text	Verb type	No. of tokens	Agent subject	Average valence	No. of transitives
1	C	18	11 (61%)	2.00	9 (50%)
	M	5	5(100%)	1.80 *	3 (60%)
2	C	21	17 (81%)	1.38	7 (33%)
	M	21	18 (86%)	1.19	3 (14%)
3	C	29	26 (90%)	1.80	19 (66%)
	M	15	13 (87%)	1.27	6 (40%)
total	C	68	54 (79%)	1.72	35 (51%)
	M	41	36 (88%)	1.29 *	12 (29%)

Notes:

C = converb, M = main verb

\* marks figures which rise by .01 to .02 if unclear cases are included.

## References

- Dešeriev, Ju. D. 1953. Bacbijskij jazyk. Moscow: AN.
- El'darxanov, T. 1900. Čečenskie teksty. SMOMPK 22:3.1-40.
- Hopper, P., and S. A. Thompson. 1980. Transitivity in grammar and discourse. *Lg.* 56:2.251-99.
- Kibrik, A. E. 1979. Canonical ergativity in Daghestan languages. In F. Plank, ed., *Ergativity*. New York: Academic Press.
- Kuryłowicz, J. 1964. The inflectional categories of Indo-European. Heidelberg: Winter.
- Nichols, J. 1980. Control and ergativity in Chechen. CLS 16.
- Uslar, P. K. 1888. Čečenski jazyk. (Ėtnografija Kavkaza: Jazykoznanie, 2.) Tbilisi: Kavkazskij Učebnyj Okrug.