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## **Slavic-style aspect in the Caucasus<sup>1</sup>**

Cross-linguistically, the expression of the aspectual opposition 'Perfective-Imperfective' by means of preverbs is a quite rare phenomenon; the label 'Slavic-style aspect' proposed for this derivational category reflects the fact that the Slavic language family (Russian above all) has, until recently, been the primary source of assumptions and data about aspect. However, similar systems are to be found also in other languages and language families, which can be compared and arranged along a scale according to their degree of grammaticalization. The present article is a first attempt to compare and describe typologically some aspectual or aspectual-like features of three languages spoken in the Caucasus, Russian, Georgian and Ossetic; it discusses their behaviour and illustrates some parameters of variation within this category. Further, the possibility of contact induced changes is briefly illustrated.

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### **1. Introduction**

1.1. In his pioneer work on aspect, Comrie provided a typological comparison of several unrelated, or genetically not directly related, languages, having preverbs or verbal particles with aspectual (Perfective) significance; he proposed to arrange them along a grammaticalization scale "according to the extent to which they have a fully developed system of oppositions between Perfective and Imperfective, starting with those languages with the least fully developed system [...]" (Comrie 1976: 93-94):

(1) English, German > Hungarian > Baltic > Georgian > Slavic.

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1 Slightly revised version of the paper read at the international "Conference on the Languages of the Caucasus", which was held in Leipzig (December 7-9, 2007) at the Max Planck Institute for Evolutionary Anthropology (MPI EVA).

The languages taken into consideration, which show, at least in some cases, a derivational expression of aspectual values, represent three major phyla: Indo-European (English, German, Baltic and Slavic), Uralic (Hungarian) and South Caucasian or Kartvelian (Georgian). Comrie did not mention another language, belonging to the Indo-Iranian branch of Indo-European, Ossetic, spoken in the Caucasus area like Georgian and, for more than two centuries, Russian. Ossetic too makes use of different preverbs of spatial origin and one suffix of unclear etymology in order to convey aspectual and actional meanings.

The purpose of the present article is to compare the behaviour of prefixed and unprefixed verb forms in these three languages, sharing a geographical and cultural contiguity, unfortunately, on some occasions of their past and recent history, with tragic consequences.

1.2. To avoid terminological and conceptual misunderstandings, I define as Slavic-style aspect<sup>2</sup> a system in which the grammatical opposition between Perfective and Imperfective, or the Transformativity [+T] as a lexical category, is expressed by means of a closed set of not predictable affixes of adverbial or prepositional origin, carrying a lexical and/or grammatical function, without temporal or modal restrictions. This is a short attempt to define the formal side of the story. Semantically, I adhere to the interpretation adopted by Johanson [2000: 135], according to which aspect generally operates in various dimensions of terminality. Adterminality is the relevant component of the Slavic-style aspect, and correlates usually, but not exclusively, with the transformative actional content of verbal lexemes: “Adterminality, +AD, envisages the event *ad terminum*, in the attainment of the relevant limit of its actional content. Since it operates on transformatives, this limit is a crucial one, generally the *terminus finalis*. By contrast, nonadterminality, –AD, disregards the attainment of a relevant limit. +AD denotes that the transformation is brought about, whereas –AD does not deny or exclude it”. In this semantic perspective, the Perfective has to be considered the marked member of the opposition: “[...] the Perfective always has perfective meaning, whereas the Imperfective may or may not have imperfective meaning” (Comrie 1976: 112)<sup>3</sup>.

Crosslinguistically, the Slavic-style perfectivity is peculiar for its being particularly sensitive to actionality distinctions, “traditionally connected with the inherent semantics of the verb as a lexical item” (Dahl 2000: 17). This correlation of aspect with the actional meaning of the verbs is emphasized by some linguists, claiming that the “Slavic languages represent a quite peculiar case, rarely manifested outside that language family” (Bertinetto 1997: 28)<sup>4</sup>. It should be borne in mind, however, that aspect, as a semantically very complex category, is tightly connected with the lexical meaning of the verbs it operates

2 To my knowledge, this term was first coined by Dahl [2000: 17].

3 The application of the markedness theory to the category of aspect has been criticized, among others, by Zaliznjak, Šmelev [2000: 16–17] and Ludwig [2001: 402].

4 Cohen [1987: 30–31] and Tournadre [2004: 10–11] point out that Benveniste was the first linguist who made a strong statement about the rather idiosyncratic character of the Slavic aspect, cross-linguistically as well as within the Indo-European phylum.

on; this happens in a much more pervasive way in aspect prominent languages (Bhat 1999: 155).

1.3. As far as the Caucasus is concerned, this area is linguistically very complex, deserving the designation of 'mountain of tongues' which it received already in the Middle Ages. In the Caucasian languages – to be distinguished from the languages spoken in the Caucasus (Haarmann 2001: 209, Tomelleri 2008a: 144–145) –, spatial affixes denoting the direction of a movement are quite spread, for example in the West Caucasian languages (Rogova 1979, Keraševa 1988); however, verbal preverbs with aspectual and actional function are attested only in the South Caucasian (Kartvelian) languages<sup>5</sup>.

1.4. As a morphological device, prefixation is a typical feature of Indo-European word-formation (Senn 1949, Schmidt 1990: 599–601), but within this phylum the Slavic language family has to the largest extent grammaticalized preverbs to aspectual markers (Cohen 1989: 24–25).

Analogous considerations can be made for the South Caucasian languages<sup>6</sup>; here, the grammatical function of preverbs probably represents an independent development, whose roots go back to the common protolanguage, as in the case of Slavic. In Old Georgian, preverbs carried only a lexical meaning (Vešapidze 1967, Šanidze 1942, Palmajtis 1981: 45); the beginning of their grammaticalization is sporadically attested beginning with the XI century (Gecadze 1984: 267).

Unlike what we observe in the Slavic and Kartvelian language families, finally, Ossetic is the only Iranian language having developed this kind of derivational-like grammatical category (Ėdel'man 2002: 127); hence, Abaev [1965/1995: 343–354] and Ėdel'man [2002: 127] consider the aspectual value of preverbs, together with the Genitive-Accusative case marking on direct objects, to be a very old grammatical isogloss shared by Ossetic and Russian, which goes back to early contacts between Scythian and Eastern Slavs<sup>7</sup>.

This hypothesis is more appealing than convincing, as pertinently argued by Levitskaja [2004: 33]. Against it one can adduce the fact that in Ossetic there are very old prefixal formations which do not carry any aspectual function. In this regard, it is important to distinguish two functionally different layers of preverbs (Bielmeier 1981: 29–31): only those of the younger layer can express perfectivity, like *ny-* 'down' in the example (2b) below. Let's look, e.g., at the verb *æmbaryn* 'to understand' (2a), which can be traced back to the fusion (in Russian *sraščenie*) of the preverb *æm-* < \**ham-* and the root \**bher* (Abaev 1958/1996: 136). This verb is Imperfective; in order to perfectivize it, another preverb of the second layer must be added, in this case *ba-* 'into'.

5 I shall not discuss here the interesting case of South Tabassaran, which expresses perfectivity by means of a single preverb (Magometov 1956, Schmidt 1968: 212), as this case does not fit into the definition of Slavic-style aspect given above (§ 1.2.).

6 A detailed survey on them is provided by Boeder 2005, with a rich bibliography.

7 On prehistorical and historical contacts between Slavs and Iranians see Gołab [1992: 311–337] and Ėdel'man 2002.

There are also prefixed forms (2c), which, notwithstanding the fact that a preverb of the second layer is used (*ny-*), remain nevertheless, contrary to the expected effect (as in 2b), Imperfective (Levitskaja 2004: 33, Tomelleri 2008b: 32). The speakers are clearly no more aware of the compound character of such verbs and perfectivize them by adding another preverb of the second layer:

- (2) Preverbs in Ossetic<sup>8</sup> (Abaev 1965: 63–64)
- a. Iron: *æm-baryn* 'to understand' (IPFV) vs. *ba-mbaryn* 'id.' (PFV)
  - b. Iron: *fyssyn* 'to write' (IPFV) vs. *ny-ffyssyn* 'id.' (PFV)
  - c. Iron: *ny-gæryn* 'to burn' (IPFV) vs. *ba-nygæryn* (PFV)

These examples suggest therefore that the Slavic-style aspect, in Ossetic, has to be considered as a quite late development, not necessarily induced by contact with the Kartvelian languages rather than with Russian; this conclusion brings us to the next point.

1.5. Besides the typological approach, an areal perspective has been invoked; Lindstedt [2001: 776], e.g., identifies a Central and Eastern Europe area in which the Slavic-style aspect is clearly dominant. Thus, it is legitimate to compare the Slavic-style aspect in these three languages from both a typological and an areal perspective. On this point there are, however, some critical opinions, which can be formulated as follows: to which extent can we rely on morphological similarity and areal contiguity?

1.6. Maslov [1985: 40–41] and Johanson [2000: 69] argue against a confusion between aspect as a view-point operator and actional content of the verbal lexeme (limitedness or transformativity). Both the Slavic perfective form and the transformative lexemes signal a crucial limit, but only the former implies the actual attainment of this limit; formal identity or similarity does not automatically imply that the functional behaviour should be the same. In addition, Johanson asserts that the allegedly unitary term Slavic-style aspect in fact covers a wide range of quite different phenomena; he does not even agree with the idea that the grammaticalization of the perfectivity through prefixation could be seen as a Sprachbund phenomenon (Johanson 2000: 139–140).

On the other hand, the history of the Slavic and Kartvelian languages points to the fact that aspect and actional content are both diachronically and synchronically strongly intertwined: “[...] +T-marking may be said to represent a preaspectual stage, since it may develop diachronically into view-point marking” (Johanson 2000: 69). The Slavic-style aspect derives from the grammaticalization of phase structure markers (+T), the so-called *bounders* (Bybee et al. 1994: 87–88), “which, focusing on the *finis* or the *initium*, explicitly signal the notion of a crucial limit which the basic actional phrase does not

8 Ossetic has two major dialects, Iron, on which the standard language is based, and Digor; for a characterization of the language see Erschler [2009: 419–420].

contain” (Johanson 2000: 68). Historically, the bounders go back to prepositions and/or adverbs, carrying a spatial meaning. The evolution chain is usually described in the following way:

(3) Diachronic chain

Lexical (spatial meaning) > transformativity markers (bounders) > grammatical items (aspectual and temporal function).

As we have observed, the Perfective member of the Slavic-style aspectual opposition usually, but not always, indicates the very attainment of an inherent limit (+AD); from a diachronic point of view, the implicature of the transformativity markers (presence of a limit to attain) evolved into the implicature of the actual attainment of the limit (Breu 1992: 121–122).

Synchronically, it is perhaps better to consider aspect and actional content as two distinct elements within one phenomenon, because of the interaction between lexicon and aspect: the aspectual meaning is the result of their interaction (Majsak 2005: 295), as proposed in several selection theories of aspect (Smith 1997, Breu 2000a). As a grammatical category, aspect operates on different actional distinctions with various semantic meanings<sup>9</sup>.

1.7. The morphological and semantic data gathered from Russian, Georgian and Ossetic provide us with a rich basis for trying to establish linguistically relevant and typologically interesting differences or similarities within the Slavic-type aspect. I am not looking for universal tendencies, nor aiming to give an answer to the question whether the Slavic-style aspect is a case of prototypical aspect or not; I am rather interested in finding out correlations between the differences we can observe at the levels of form and content within this derivational type of grammatical category. There are, however, some methodological problems.

1.8. In the grammaticalization process of the Slavic-style aspect there is no erosion of the lexical elements when they assume a new, more abstract and generalized (grammatical) meaning, the process involves “a mere alteration in distribution and functions, a change from lexical to grammatical status without any change in external form” (Lehmann 2004: 169). Therefore, trying to identify language change phenomena, we cannot rely on formal changes of the items to be examined<sup>10</sup>.

Where we can rely on a rich written documentation, the reading and linguistic interpretation of the sources demands careful and deep philological

9 For a deeper insight into the aspectual correlation in Russian see the semantic classification of verbs proposed by Zaliznjak, Šmelev [2000: 61].

10 Only the possibility of inserting an element between the verbal preverb and the verbal root, and perhaps the preverb separation in Hungarian and German, could be regarded as a remnant of the older adverbial/prepositional function of preverbs (see below § 2.10); this first phenomenon, known in the scientific literature as *tnesis*, is well attested in Old Georgian, Digor and other Indo-European languages (Schmidt 1969 and 1988, Thordarson 1982: 257).

analysis; further, comparing the so-called Protoprofective and Protoimperfective contexts in order to recognize significant shifts and transformations in the meaning and use of formally identical forms (Kukuškina, Ševeleva 1991: 40–41, Bermel 1997: 8 and 119), we should not yield to the temptation of superimposing modern distinctions over the interpretation of older facts, not conforming to the picture of the modern stage of the language under investigation.

Moreover, do we have at our disposal enough historical information about contacts in this area, in order to exclude from, or include in the discussion contact induced phenomena? This is particularly difficult in the case of Ossetic, classified in the Soviet linguistic tradition as young written language (*mladopiš'mennyj jazyk*), which is geographically isolated from the other languages of the Iranian group and has for many centuries been in contact with Caucasian languages<sup>11</sup>.

1.9. The next problem can be formulated as follows (Wiemer 2008a: 383): how representative is the Russian system for the Slavic-style aspect? In other words, can Russian legitimately represent the Slavic-style aspect? If we deny, as Johanson does, the existence of an unitary aspectual system, we clearly cannot accept this silent assumption as the starting point of our study. In fact, it is a well known fact that within the Slavic group a great amount of differentiation can be observed (Dickey 2000, Petrušina 2000). An unavoidable bias in the interpretation of the facts through the structure of Russian and similar models is also due to the former Soviet (now Russian) scientific literature, mainly devoted to study of the Russian system. Actually, the description of aspect in Georgian and Ossetic has been usually carried on within the framework of Russian, without taking a glance at the South Slavic Languages, which in some cases provide a better touchstone for typological comparison. However, as we are concerned also with areal questions, a comparison with the Russian facts is at least reasonable, a necessary but not sufficient condition.

1.9.1. In his analysis of perfectivity, Dahl [1985: 74–75] underlines the idiosyncratic character of Slavic, selecting the Imperfective form in a prototypically Perfective context (see also Tournadre 2004: 32):

- (4) Question: 'What activity was your brother engaged in yesterday?'
- |         |                    |               |
|---------|--------------------|---------------|
| English | He wrote letters   | (PFV, –INTRA) |
| Greek   | Égrapse ġrámata    | (PFV, –INTRA) |
| Italian | Ha scritto lettere | (PFV, –INTRA) |
| Russian | On pisał pis'ma    | (IPFV, –AD)   |

The comparison between Russian, on the one side, and the West European languages, on the other, allows us to postulate the existence of two different types of aspect. The Slavic-style aspect and the Aorist–Imperfect opposition of

11 Erschler 2009 provides an updated and critically well-balanced overview on contact of Ossetic with the surrounding languages.

the Romance type differ semantically from each other, without being totally incompatible. In the Romance type, the Perfective–Imperfective distinction is restricted to Past time reference; marked member of the aspectual opposition is the Imperfective, where the Perfective underlines the external temporal limits of a situation, viewing it as a single, indivisible whole, complete but not completed (Comrie 1976: 18, Guentchéva 1990: 35).

In the Slavic-style aspect, instead, the Perfective–Imperfective opposition does not undergo any temporal or modal restriction; it is neutralized only in the Present, which is semantically incompatible with the idea of completed situation, with the exception of the coincidental use of the Perfective with performative verbs. The Slavic perfectivity selects the inherent limit(s) and is not employed to denote the activity in which a person was engaged in (the so called *general-factual meaning*); only the so-called limitative and perdurative Aktionsart(s) resemble very much the Romance Perfective (–INTRA)<sup>12</sup>. In both aspectual systems, the Imperfective (–AD vs. +INTRA) can present a state of affairs as an open interval which serves as a frame for another event (*backgrounding* function within the Incidence scheme). To catch the semantic differences, Lindstedt [2001: 775] has suggested distinguishing between *material bound* and *temporal bound*: “A material bound presupposes telicity and entails a temporal bound”, but the contrary is not true.

For a semantic characterization of the difference between the Aorist of Imperfective (–INTRA) and Perfective verbs (+AD) in Georgian, Nebieridze [1987: 137] draws a very similar distinction: “amit’om tu sruli asp’ekt’i c’q’vet’il asp’ekt’sac gulisxmobs, c’q’vet’ili asp’ekt’i ar gulisxmobs srul asp’ekt’s – thus, if the Perfective aspect (= Slavic-style, V.S.T.) presupposes the interrupted (= Romance type, V.S.T.), the interrupted aspect does not presuppose the Perfective”. This is only to stress the fact that in Georgian, like in Bulgarian and Macedonian, the two aspect systems coexist, forming an interesting interplay.

1.9.2. In this regard, it would surely be useful to compare typologically the Georgian data with the South East Slavic languages, sharing with Georgian not only the preservation of the synthetic Past forms (Imperfect and Aorist), but also the modal evolution of the resultative Perfect to an evidential form (Christophe 2005). On the older system (Aorist–Imperfect opposition) the new one (Slavic-style aspect) was superposed, giving rise to a semantic conflict, or aspectual crossing, with four possibilities:

- (5) Aspectual crossing
- |                     |               |
|---------------------|---------------|
| Imperfective Aorist | (–AD, –INTRA) |
| Perfective Aorist   | (+AD, –INTRA) |

12 This function was carried out, in the Slavic languages, by the Aorist form, which has survived only in few modern languages, like Bulgarian. Dahl 1985 excludes the Bulgarian Imperfective Aorist from his comparison, but does mention it in the discussion of the Slavic languages (on p. 74 and 77).

Imperfective Imperfect (–AD, +INTRA)  
 Perfective Imperfect (+AD, +INTRA)

The first one has a very restricted use, expressing a succession of iterated attempts at doing something (iterative–conative meaning):

(6) Imperfective Aorist (Gecadze 1984: 265)

mxat'var–ma	surat–i	xat'–a
painter–ERG	picture–NOM	paint(IPFV).II–3SG>3

'A/The painter was engaged in the painting of a/the picture  
 (Russian translation: 'Xudožnik risunok risoval', lit. 'Xudožnik risoval, no ne dovel risunok do konca')

The second one is the more common perfective form, with emphasis on the attainment of both the material and temporal bounds:

(7) Perfective Aorist (Gecadze 1984: 265)

mxat'var–ma	surat–i	da–xat'–a
painter–ERG	picture–NOM	PFV–paint.II–3SG>3

'A/The painter painted a/the picture' (Russian translation: 'Xudožnik risunok narisoval')

The third one is the more common Imperfective form, where both the material and the temporal bounds are not reached:

(8) Imperfective Imperfect (Mač'avariani 1974: 120)

P'et're–Ø	saxl–s	a–šen–eb–d–a
P'et're–NOM	house–DAT	V–build–I–IMPF–3SG>3

'P'et're was building a house'

The fourth one has basically a modal meaning, being used as a Conditional form, but can also denote a serial occurrence of events in the past, which on every single occasion are brought up to the end. When it denotes habitual-ity in the past, it is more often than not accompanied by the adverb *xolme* 'usually':

(9) Perfective Imperfect (adapted from Tschenkéli 1958/I: 107)

masc'avlebel–i	da–c'er–d–a	(xolme)	c'inadadeba–s	dapa–ze
teacher–NOM	PFV–write–I.IMPF–3SG>3	ADV.usually	sentence–DAT	table–LOC

'The teacher used to write a sentence on the table'

The correlations between the two aspect oppositions (Slavic-style and Romance type) can be well compared with the situation we observe in Bulgarian:

(10a) Aspectual crossing in Georgian

Imperfective Aorist (–AD, –INTRA)	delimitative or iterative/conative
Perfective Aorist (+AD, –INTRA)	unmarked Perfective
Imperfective Imperfect (–AD, +INTRA)	unmarked Imperfective
Perfective Imperfect (+AD, +INTRA)	habitual or modal (Conditional)

(10b) Aspectual crossing in Bulgarian

Imperfective Aorist (–AD, –INTRA)	delimitative or iterative/conative
Perfective Aorist (+AD, –INTRA)	unmarked Perfective
Imperfective Imperfect (–AD, +INTRA)	unmarked Imperfective
Perfective Imperfect (+AD, +INTRA)	habitual (only in subordinated clauses)

In any case, in the history of Slavic languages we observe a strong tendency towards a simplification of this quadripartite system through conflation of the old Aorist–Imperfect opposition within the new Perfective–Imperfective one (Tomelleri 2003: 192–193).

1.10. Taking into account the criticism by Maslov, Johanson, and in order to avoid misunderstandings, the label of compound forms (preverb + verb), PFV, must be understood as formally “prefixed” rather than as semantically Perfective. In the following exposition I shall briefly compare the following formal, syntactic, semantic and pragmatic features of prefixed vs. unprefixed verbs, giving some insights into the aspectual differences between the three languages under examination:

(11) Typologically relevant features

- 1) Formal expression
- 2) Aspect and time reference
- 3) Empty preverbs
- 4) Non perfectivizing preverbs
- 5) Syntactic restrictions
- 6) Semantic restrictions
- 7) Pragmatic restrictions
- 8) Extension of the category
- 9) Suffixation
- 10) Tmesis

## 2. Comparison

### 2.1. Formal expression

The category of aspect in Russian is more complex (*složnyj*), multifarious (*raznoobraznyj*) and developed (*razvityj*) than in Georgian (Goletiani 1970: 212); the same can be said with reference to Ossetic.

(12) Formal parameters of aspectual/actional opposition

	Russian	Georgian	Ossetic
(1) Prefixation	+	+	+
(2) Suffix change	+	–	–
(3) Loss of the suffix	+	–	–
(4) Suffix change and ablaut	+	–	–
(5) Stress shift	+	–	–

(6) Suppletivism	+	+	+
(7) Suffixation	+	–	(+)

The richness of morphological devices in Russian (and Slavic), however, cannot be used as an argument for the earlier appearance of the category. In fact, the Georgian system is at the same time formally simple but chronologically quite old, the Russian one is very complex and not less old; on this formal basis it is impossible to make a statement about the period of the rise of prefixation as an aspectual pattern in Ossetic.

## 2.2. *Aspect and time reference*

The expression of the Perfectivity–Imperfectivity opposition is/is not restricted to past time reference:

### 2.2.1. Past time

Georgian –, Russian +, Ossetic +, (Bulgarian +)

Typologically, the Perfective–Imperfective distinction in the Future is a rare phenomenon (Tournadre 2004: 40, n. 57). In Russian, the imperfective Future is a periphrastic form (*budu* + Infinite of the imperfective form), which arose not before the end of the 15th century (Borkovskij, Kuznecov 1963: 287). This form is opposed to the non–Past Perfective, being described in the grammars as a Future. In modern Georgian, the Future, historically a prefixed form of the Present tense, is usually Perfective (Tschenkéli 1958/I: 83–84); only with a small number of verbs can the imperfective meaning too be expressed (Rudenko 1940: 239). In Ossetic and Bulgarian, instead, the Future derives from a periphrastic form with an auxiliary meaning ‘to want’, and is morphologically uniform irrespective of aspect (Tomelleri 2009: 259 and below § 2.2.3.).

### 2.2.2. Aorist–Imperfect opposition

Georgian +, Russian –, Ossetic –, (Bulgarian +)

Are we allowed to interpret this feature in the sense that in Georgian and Bulgarian (and Macedonian) the aspectual distinction is less grammaticalized than in languages which have given up the synthetic past forms? Johanson [2000: 28] betrays the Perfective–Imperfective opposition in Bulgarian as actional rather than aspectual, probably because of the preponderance of the Aorist–Imperfect opposition. It is perhaps better to maintain that the total or partial loss of the older Aorist/Imperfect system necessarily leads to a redistribution of aspecto-temporal values within the younger Perfectivity/Imperfectivity opposition. The evidence from Ossetic, possessing a single Past tense form, is not relevant here.

### 2.2.3. Prefixed non-Past forms > Future

Georgian +, Russian +, Ossetic –, (Bulgarian –)

In Georgian and Russian prefixed non-Past forms refer to a point on the temporal axis which is posterior in relationship to the time of the utterance: the attainment of the limit is located after the speech act. In Ossetic and Bulgarian, prefixed Present forms share with their Georgian and Russian equivalents the incapability of presentness: they cannot be used to denote a current action (Koschmieder 1929/1971: 34). In Ossetic, a prefixed non-Past form is usually interpreted with a serial meaning, and features the same meaning as the secondary Imperfectives of Bulgarian (Tournadre 2004: 31). We can conclude that in all these languages prefixed forms cannot carry any actual-processual meaning, with the notable exception of motion verbs in Ossetic and Georgian (§ 2.4.).

Besides that, we observe that in Ossetic and Bulgarian “there is a periphrastic Future for both aspects, so that the Perfective Present is not a Future Tense, as it is in East and West Slavonic” (Comrie 1976: 67, n. 1, talking about the South Slavic languages). The following correlation in terms of relative chronology can be posited: the periphrastic Future is older than the grammaticalization of the Slavic-style aspect (shift from Present to Future tense).

The state of affairs in Ossetic could be used as a typological support to the inner Slavic relative chronology, recently proposed by Andersen [2009: 133]: “Still, if the Perfective/Imperfective aspect had been grammaticalized first, it would then be natural for future-time reference to be primarily an implicature of the Perfective Present, and an auxiliated Prospective would be called for only with Imperfective verbs (as in East Slavic). This suggests that the relative chronology was the reverse in South Slavic: the de-modal Prospective auxiliaries were established before the Perfective/Imperfective distinction was grammaticalized”. In this perspective, the development of a new temporal category could have prevented the prefixed non-Past forms from being interpreted as Future. Anyway, the shift from Present to Future time reference has to be seen as a secondary development, as suspected by Holisky [1981: 135, n. 13] with regard to Georgian prefixed verbs: “A topic for further study is whether reference to future time is the basic meaning of these particular Futures, or whether this meaning is an implied one, resulting from accomplishment meaning of verbal root plus marker of completion (preverb)”. The idea that the Future meaning in Russian Perfectives forms developed later was maintained by Forsyth [1972: 498], according to whom “The regular specialised use of the perfective present to express future actions was probably only a late crystallisation of an already established principle of aspectual opposition, and did not itself play an essential part in the establishment of this principle”.

### 2.3. *Empty preverbs* (préverbes vides)

Georgian +, Russian +, Ossetic +, (Bulgarian +)

The combination of preverbs with verbs denoting atelic processes, like ‘to write, to eat, to do’ and other similar diffuse lexemes, seems to produce Per-

fective forms which do not differ lexically from the simple verbs from which they are derived; if the preverb has lost its spatial meaning and developed into a perfectivity marker, it can be deemed empty (Dickey 2006: 105). The Perfective form is considered to be semantically equivalent to the Imperfective one, the preverb has therefore only a grammatical function:

(13) Empty preverbs

Russian	<i>delat'</i> 'to do' (IPFV)	>	<i>s-delat'</i> 'id.' (PFV)
Georgian	<i>ak'etebs</i> 'X does Y' (IPFV)	>	<i>ga-ak'etebs</i> 'X will do Y'
Ossetic	<i>kænyyn</i> 'to do' (IPFV)	>	<i>s-kænyyn</i> 'id.' (PFV)

There is, however, no general agreement about the existence of empty preverbs; Isačenko [1968: 361–363], e.g., argues that in alleged aspectual pairs like *pisat'/na-pisat'* 'to write' the preverb *na-* cannot be considered deprived of any semantic content, because it clearly expresses a resultative nuance (“Bedeutungsschattierung des “erreichten Resultats der Handlung”, p. 362). The existence of empty preverbs, although still controversial, is usually seen as a clear indicator of grammaticalization of the Perfectivity/Imperfectivity opposition, gradually emancipating itself from the lexical (actional) meaning. Not less interesting is the case of preverbs which, by retaining their original (spatial) meaning, do not carry any grammatical information (§ 2.4).

#### 2.4. Non perfectivizing preverbs

Georgian +, Russian –, Ossetic +, (Bulgarian –)

I do not consider here the prefixed imperfective forms, which are lexical borrowings, in Russian as well as in Georgian, from the old bookish (church) language (Tomelleri 2007: 299), nor, in Ossetic, the old preverbs of the first and sometimes also second layer, which the speakers do not recognize as such (see § 1.4).

In Georgian, adding a preverb to verbs of movement does not trigger Perfectivity: such compound forms do not show any incapability of presentness. In example (14), both forms have a processual meaning, irrespective of the presence of a preverb in the second one:

(14) Georgian verbs of movement (Boeder 2005: 33)

<i>prinavs</i> (IPFV)	<i>mo-prinavs</i> (IPFV)
'it is flying'	'it comes flying here'

To find out whether a preverb has aspectual meaning or not, descriptive grammars of Georgian make use of a temporal test: if, by adding a preverb, the form changes time reference (from Present to Future), the verb is aspectual, i.e. the preverb expresses Perfectivity; if not, the verb is anaspectual (*uaspekt'o*), i.e. Imperfective (Šanidze 1973: 266).

An analogous situation is attested also in Lithuanian, where preverbs saving their spatial meaning can refer to an on-going situation: “the perfective-imperfective is often expressed by the opposition of tense forms. Many verbs with preverbs denoting the direction or modifying the verbal meaning in some

other way, have a perfective meaning in past and future tense forms but they are imperfective in the present” (Ambrazas 1997: 235, Senn 1949: 406)<sup>13</sup>. Arkad’ev (2009: 79) proposes, for this aspectual opposition of prefixed motion verbs, the term ‘biaspectual verbs’; this is, actually, a case of temporally conditioned shift, which we observe also in Ossetic with verbs of movement. In Slavic languages, biaspectual verbs are forms, allowing both interpretation, which can be disambiguated only by context (Zaliznjak, Šmelev 2000: 71–76).

In Ossetic, prefixed Present forms usually receive a habitual meaning, their actional content is transformative. With motion verbs, when the preverb retains its spatial meaning, the prefixed Present form does not exclude the concrete-processual meaning (Tomelleri 2007: 304):

(15a) Prefixed Present (Achvlediani 1963: 247)

Ix-Ø	don-yl	s-araz-y	jæ	xid-Ø
ice-NOM	river-ADES	PFV-build-PRS.3SG	CL.3SG.GEN	bridge-NOM
‘The ice builds a bridge upon the river’				
(Russian translation: ‘Lěd čerez reku (obyčno) stroit most’)				

(15b) Present of prefixed motion verbs (adapted from Achvlediani 1963: 225)

Mit-Ø	ny-uuar-y
snow-NOM	PFV(down)-fall-PRS.3SG
‘The snow is falling’ (Russian translation: ‘Sneg vypadaet’)	

## 2.5. Syntactically conditioned restrictions

### 2.5.1. Phasal verbs

Russian –, Georgian +, Ossetic –

In the Slavic languages, here exemplified by Russian (16a), as well as in Ossetic (16b), with phasal verbs only the Imperfective form of the infinitive is allowed:

(16a) Russian

on načnēt pisat’ (IPFV)/\*napisat’ (PFV)  
‘he’ll begin to write’

(16b) Ossetic (Stojnova 2006)

araz-yn	rajdaj-yn	*s-araz-yn	rajdaj-yn
build.IPFV-INF	begin-INF	begin-INF	PVF-build-INF
‘to begin building’			

In Georgian, instead, we can find both the aspects, as in Hungarian (Csató 1994: 234–235) and Lithuanian (Wiemer 2001: 40):

(17) Georgian (Holisky 1979: 395)<sup>14</sup>

disert’aci-is	da-c’er-a-Ø	da-v-i-c’q-e
dissertation-GEN	PFV-write-INF-NOM	PFV-1-V-begin.II-AOR.SG
‘I began to write my dissertation’		

13 For a critique of this position see Wiemer [2001: 43].

14 The infinite form is a verbal noun (*masdar*).

According to Holisky, there is a semantic explanation for the distribution of prefixed and unprefixed forms: only durative telic verbs like *dac'era*, denoting a gradual achievement of a result, can occur as complements of phasal verbs. Instantaneous telic verbs, on the other hand, do not allow this type of combination.

2.5.2. Imperfective with negated Imperative

Russian +, Georgian –, Ossetic –

When negated, the Imperative form in Russian is mostly Imperfective (but see § 2.6.1. for some semantically conditioned exceptions); in Bulgarian the negation selects automatically the Imperfective form:

(18) Georgian (Tschenkéli 1958/II: 95)

- |    |                            |                      |            |                     |
|----|----------------------------|----------------------|------------|---------------------|
| a. | <i>nu</i>                  | <i>k'rep</i>         | <i>mag</i> | <i>q'valil-eb-s</i> |
|    | NEG                        | pick(IPFV).I.IMP.2SG | DEM.this   | flower-PL-DAT       |
|    | 'Don't pick these flowers' |                      |            |                     |
|    |                            |                      |            |                     |
| b. | <i>mo-k'rip'-e</i>         | <i>ai</i>            | <i>es</i>  | <i>q'valil-eb-i</i> |
|    | PFV-pick.II-IMP.2SG        | PTLC.here            | DEM.this   | flower-PL-NOM       |
|    | 'Pick these one'           |                      |            |                     |

Comparing (18a) with (18b) one could think that the choice of the unprefixed or prefixed verb form depends on the presence/absence of negation. However, the next examples (19) suggest a different interpretation:

(19) First vs. Second Series in Georgian (Tschenkéli 1958/II: 96)

- |    |                           |                    |              |                  |
|----|---------------------------|--------------------|--------------|------------------|
| a. | <i>nu</i>                 | <i>da-xur-av-Ø</i> | <i>orive</i> | <i>panžara-s</i> |
|    | NEG                       | PFV-open-I-IMP.2SG | both         | window-DAT       |
|    | 'Don't open both windows' |                    |              |                  |
|    |                           |                    |              |                  |
| b. | <i>da-xur-e</i>           | <i>mxolod</i>      | <i>es</i>    | <i>ert-i</i>     |
|    | PFV-open.II-2SG           | ADV.only           | DEM          | one-NOM          |
|    | 'Open only this one'      |                    |              |                  |

As a rule, the negation *nu* requires a first series form (Aronson 1990: 251), which can be called Imperfective only in the old sense of the term. Indeed, in Old Georgian preverbs did not have any grammatical (aspectual) meaning; the “durative” Present stem contrasted aspectually to the “punctual” Aorist stem, from which it had been derived through suffixation, according to a derivational pattern attested also in Old Greek, “where the relatively simple aorist forms can be contrasted with a wide variety of present forms” (Armstrong 1981: 11). Therefore, there was an aspectual opposition between the first series (Present stem = IPFV) and the second series (Aorist stem = PFV); the third series (Perfect) was indifferent to aspect (Schmidt 1984).

In Ossetic, negation is not responsible for the aspectual form of the verb when the preverb carries a concrete, spatial meaning:

(20a) Ossetic (Achvlediani 1963: 321)

demæ	ma-cy	a-xæss-Ø
2SG.COM	NEG-INAN.NOM	away-take-IMP.2SG

'don't take anything with you!' (Russian translation: 's soboj ničego ne beri')

If the preverb has only a grammatical meaning, the negated imperative form can occur without preverb (20b), but this is not always the case, as in (20c):

(20b) Unprefixed Imperative (Achvlediani 1963: 257)

ma	kæ-ut
NEG	cry(IPFV)-IMP.2PL

'Don't cry!' (Russian translation: 'Ne plač'te')

(20c) Prefixed Imperative (adapted from Abaev 1973/1996: 60)

Ma	a-rgævd-Ø	sædž-y
NEG	PFV-slaughter-IMP.2SG	goat-GEN

'Don't slaughter the goat!' (Russian translation: 'Ne zakalyvaj kozu')

From this we may conclude that the preverb cannot be dropped when it adds to the simple verb a lexical (spatial) meaning; on the other hand, it must not be dropped when it carries only a grammatical function (the expression of Perfectivity).

## 2.6. Semantic restrictions

### 2.6.1. Volition

(Russian +, Georgian –, Ossetic –)

In Russian, but not in Georgian and Ossetic, the semantic notion of control in the Imperative can be responsible for the aspectual choice (Wiemer 2001: 35): + control selects the Imperfective, – control selects the Perfective<sup>15</sup>.

(21a) [+ control]

ne	padaj-Ø
NEG	fall(IPFV)-IMP.2SG

'don't throw yourself'

(21b) [– control]

ne	u-pad-i
NEG	PRV-fall(PFV)-IMP.2SG

'pay attention (you could fall)!'

### 2.6.2. Deontic vs. dynamic modality

The same holds for the Infinitive, which gets different modal interpretations according to the aspect form (Wiemer 2001: 35):

15 On the periphrastic *da*-construction with Perfective verbs in Bulgarian see Wiemer [2008a: 405].

(22a) Deontic

Nel'zja	pere-j-ti (PFV)	ulic-u
NEG.MOD	PFV <sub>over-go</sub> -INF	street(F)-SG.ACC

'It is impossible to cross the way'

(22b) Dynamic

Nel'zja	pere-xod-it' (IPFV)	ulic-u
NEG.MOD	over-go(IPFV)-INF	street(F)-SG.ACC

'It is forbidden to cross the way'

Such a pervasive semantic correlation between aspect and categories like volitionality or modality seem to be unknown to Georgian and Ossetic. Hence, it is extremely difficult to say whether, in Ossetic, the aspectual distinction between Perfective and Imperfective in (23), expressing the dynamic and deontic modalities, is a calque of the Russian construction:

(23a) Deontic modality in Ossetic < Russian? (Techov 1970: 80)

Xistær-mæ	fæstæmæ	dzur-æn	næj
elder-ALL	ADV.back	speak(IPFV)-MOD	NEG.be.3SG

'It is not allowed to object to an elder man'  
(Russian translation: Staršemu ne sleduet vozražat')

(23b) Dynamic modality in Ossetic < Russian? (Techov 1970: 80)

Xistær-mæ	fæstæ-mæ	s-dzur-æn	næj
elder-ALL	ADV.back	PFV-speak-MOD	NEG.be.3SG

'It is not possible to object to an elder man'  
(Russian translation: Staršemu nel'zja vozrazit')

In any case, the extension of the aspectual opposition to the level of semantics and pragmatics (§ 2.7.) is a quite peculiar development of Russian and Polish (Wiemer 2008a: 387) and can be considered to be a rather late development in the process of grammaticalization (Bermel 1997: 84). It is also possible that in Russian, since its aspectual system is by far the best described and available, more subtleties and nuances have been detected, which in other less known languages still expect their discoverer and interpreter.

## 2.7. Pragmatic restrictions

Russian +, Georgian –, Ossetic –

In the literature on Russian aspect particular attention has been paid to the pragmatic function of the aspect opposition, as in sentences like (24a and b):

(24a) Imperfective

Ty	smotre-l-Ø	ètot	fil'm-Ø?
2SG.NOM	see.IPFV-PAST-M.SG	DEM.this.SG.ACC.M	film(M)-SG.ACC

'Have you (ever) seen this film?' (experiential meaning, general-factual meaning)

(24b) Perfective

Ty	po-smotre-l-Ø	ètot	fil'm-Ø?
2SG.NOM	PFV-see-PAST-M.SG	DEM.this.SG.ACC.M	film(M)-SG.ACC

'Did you see the film?' (the addressee is expected to have watched the film)

In Georgian, the experiential meaning is expressed by the Perfect, which can be Perfective or Imperfective. In negative clauses, the Perfect form is preferred in the general denotation that an action did not take place in the Past (*general-factual meaning*). The negation of the Aorist form, instead, adds a volitional connotation to the utterance (Rudenko 1940: 242):

(25a) Perfect (Boeder 2005: 30)  
 ar            mo-sul-a  
 NEG        PRV.hither-gone.PERF-3SG.S  
 's/he hasn't come'

(25b) Aorist  
 ar            mo-vid-a  
 NEG        PRV.hither-go.II-AOR.3SG.S  
 's/he did not want to come'

Ossetic, having a single Past form, does not seem to express such distinctions.

## 2.8. Extension of the category

Russian +, Georgian –, Ossetic +

Does prefixation apply to the whole verbal lexicon? By tackling this problem, we should not confuse perfectivity and aspectual pair; the notion of aspectual pair, indeed, presupposes the lexical identity of the two members of the aspectual opposition (Maslov 1985: 22). In Georgian, there is a semantic restriction: prefixation is very seldom combined with atelic verbs and does not apply to non dynamic lexemes (states). In addition to this, stative verbs possess a defective paradigm, in the sense that the Past is, formally speaking, an Aorist (old Perfective), but behaves aspectually as an Imperfective:

(26) Aorist form – Imperfect(ive) meaning (Comrie 1976: 116)  
*viq'avi* 'I was', *viĵeki* 'I was sitting'

In Russian and Ossetic, the features –dyn, –T are compatible with prefixations receiving an ingressive as well as a delimitative or perdurative meaning:

(27) Delimitative and perdurative in Russian

a. on            po-stoja-l-Ø            tam            dva    čas-a  
 3SG.M.NOM    PFV-stay-PAST-M.SG    ADV.there    two    hour(M)-SG.GEN  
 'He stayed there for two hours' (delimitative meaning)

b. on-i            pro-igra-l-i            ves'            den'-Ø            v            park-e  
 3PL.NOM    PFV-play-PAST-PL    all.ACC.M    day(M)-ACC    PREP.in    park-LOC  
 'They played the whole day in the park' (perdurative meaning)

(28) Ossetic delimitative

æz            fæ-xuys-dzyn-æn            izær-mæ  
 1SG.NOM    PFV-sleep-FUT-1SG            evening-ALL  
 'I'll sleep till the evening'

- (29) Georgian delimitative, only with activity verbs (Aronson 1990: 441)  
*i-lap'arak'eb's* '(s)he will be talking' (FUT.3SG)  
*c'a-ilap'arak'eb's* '(s)he will be talk for a while' (FUT.3SG)

A particular problem is represented by the so-called medial verbs in Georgian, which through prefixation acquire an ingressive meaning. Holisky [1981: 136] considers them as perfective members of an aspectual pair together with their unprefixated counterpart:

- (30) Aspectual pairs in Georgian?  
 a. *t'iris* 'X is crying' > *a-t'irdeba* 'X will cry out'  
 b. *duğs* 'X boils' > *a-duğdeba* 'X will start to boil'

It is worth noting that *at'irdeba* and *aduğdeba* can be compared with the passive forms (with the *-d-* suffix) of a causative formation. In some cases, it is possible to derive from them, through depreverbation, a secondary Imperfective, creating what really seems to be a real aspectual pair (see also below § 2.8.2.):

- (31) Secondary imperfective (Holisky 1981: 136)  
*a-duğdeba* (PFV) 'It begins to boil' > *duğdeba* 'It is beginning to boil'

While in Old Georgian the inflectional aspect opposition, as already mentioned (§ 2.5.2.), depended on the verb stem, Present (IPFV) vs. Aorist (PFV), the extension of the new derivational category over the Perfect allows new semantic distinctions, as the evidential transitive Perfect vs. the stative meaning of the unprefixated form:

- (32) Resultative vs. Evidential in Georgian (Sumbatova 1999: 79)
- a. *bebia-s*                      *t'axt'-ze*                      *pardag-i*                      *ug-i-a*  
 grandmother-DAT              ottoman-LOC              carpet-NOM              spread-STAT-3SG.S  
 'Grandmother has a carpet spread on the ottoman'
- b. *turme*              *bebia-s*                      *es*              *pardag-i*              *tviton*              *da-ug-i-a*  
 apparently              grandmother-DAT              this              carpet-NOM              self              PFV-spread-PERF-3SG.S  
 'Grandmother has apparently spread this carpet herself'

The different meaning of the sentences (32a) and (32b) is conveyed by the absence vs. presence of the perfectivizing preverb *da-*.

### 2.8.1. Obligatory imperfectivization (*Praesens historicum*, *habitual meaning*) Georgian +, Ossetic –, Russian +

We have obligatory imperfectivization when a Perfective form is substituted by the Imperfective correlate according to grammar rules and not because of semantically contrasting content. In Russian, obligatory imperfectivization occurs in certain contexts, e.g. the Present tense (*Praesens historicum*) and the expression of serial or habitual action or events (Šmelev 2006: 376). A

form like Russian *ubeždaet* (IPFV), e. g., in a narrative context can indicate a telic process as well as the event resulting from it (Wiemer 2006: 108): '(s)he tries to convince' or '(s)he succeeds in convincing'.

While in Georgian a narrative context in the Present tense usually selects an unprefixated form (33a), Ossetic seems to be more sensitive to the semantic meaning of the verbs, allowing sequences of prefixed Present forms (33b):

(33a) Narrative context in Georgian

davit-i k'ar-ze a-k'ak'un-eb-s da otax-ši še-di-s<sup>16</sup>  
 Davit-NOM door-LOC V-knok(IPFV)-I-PRS.3SG.S CONJ.und room-ILL into-go(IPFV).I-PRS.3SG.S  
 'Davit knocks on the door and goes in the room'

(33b) Narrative context in Ossetic (Narty 1990: 103)

Elda-Ø ra-uaj-y æmæ duar-yl a-læuu-y mæst-æj  
 Elda-NOM PFV\_out-run-PRS.3SG CONJ.and door-ADES PFV-stay-PRS.3SG anger-ABL

k'uymæl-æj dyuuæ a-naz-y  
 beer-ABL two PFV-drink-PRS.3SG

'Elda runs out, stays a bit at the door (and) filled with anger drinks up two cups of beer'

(Russian translation: 'Èl'da vybežit, u dverej postoit i so zlosti dve čaši kvasa vyp'et' – Narty 1989: 35)

Further, in Ossetic we frequently observe a shift from Past to Present tense forms within the same sentence (Achvlediani 1963: 231); in addition, the indifferently used *dzury* (IPFV) '(s)he says' or *zæy* (PFV) 'id.' to introduce direct speech, although these are considered to form a suppletive aspectual pair (like Russian *govorit-skazat'*), is noteworthy.

Wiemer [2001: 37–38] assigns to the obligatory imperfectivization a decisive role in his attempt at defining the grammatical status of the Slavic aspect; it must be observed, however, that other Slavic languages, as Croatian, do allow the use of a Perfective Present tense form in contexts of unlimited iteration (Knjazev 1997: 261):

(34) Habitual in Croatian (Hlebec 1990: 98)

a. Svak-og dan-a sjed-nem u autobus-Ø,  
 every-GEN.M day(M)-GEN sit\_down (IPFV)-PRS.1SG PREP.in bus(M)-ACC.SG  
voz-im se do čitaonic-e i tamo  
 drive(IPFV)-PRS.1SG REFL PREP.to library(F)-GEN.SG CONJ.and ADV.there  
ostaj-em do dva sat-a  
 stay(IPFV)-PRS.1SG till two hour(M)-GEN.SG  
 'Every day I get on the bus, drive to the library and stay there till 2 o' clock' (IPFV)

b. Svakog dana sjednem (PFV) u autobus, odvezem se (PFV) do čitaonice i tamo ostanem (PFV) do dva sata  
 'Same meaning'

16 As we have seen (§ 2.4.), in the Present tense form of motion verbs preverbs have only a spatial (directional) meaning.

2.8.2. Aspectual pairs and beyond

An oft posed question regards the derivational or inflectional character of the Slavic-style aspect. When we add a preverb to a simple verb, creating a perfective form by prefixation, do we get a new lexeme or two forms of the same verbs? As mentioned earlier (§ 2.3.), some scholars adhere to the view that prefixation always implies a change of meaning (Isačenko 1968: 361, Majsak 2005: 297). According to their opinion, empty preverbs too provide the compound form with the feature (+T), which in the Past form, due to the external temporal limit imposed to the process, gives origin to a Perfective meaning in all the discussed languages. In any case, the so-called telic pairs (*predel'nye pairs*), often quoted in the literature, underline the difference (attempt vs. result) more than the similarity between the two members within the aspectual pair (Wiemer 2006: 108):

(35) Telic pairs (Wiemer 2001: 41–42)

(a.) Lithuanian

Aist-ė	vis-ą	dien-ą	raš-ė	laišk-ą
Aistė-NOM	all-F.SG.ACC	day(F)-SG.ACC	write-PAST.3SG	letter(M)-SG.ACC

bet	taip	ir	ne-pa-raš-ė
CONJ.but	ADV.so	CONJ.and	NEG-PFV-write-PAST.3SG

'Aistė (the whole day) wrote a letter, but even so she did not finish it'

b. Russian

A.	ves'	den'-Ø	pisa-l-a	pis'm-o
Aistė.NOM	all.M.SG.ACC	day(M).SG.ACC	write(IPFV)-PAST-F.SG	letter(N)

no	tak	ego	i	ne	na-pisa-l-a
CONJ.but	ADV.so	3SG.ACC	CONJ.and	NEG	PRV-wrote-PAST-F.SG

'Same meaning'

c. Georgian (Aronson, Kiziria 1999: 390)

i-tmin-a	did-xans	da	vegar	mo-i-tmin-a
V-suffer.II-AOR.3SG>3	big-time-DAT	CONJ.and	NEG	PFV-suffer.II-AOR.3SG>3

'He suffered for a long time and couldn't bear it any longer'

According to Aronson (1989: 17, n. 2), "the presence vs. the absence of a preverb cannot be viewed in Georgian as an inflectional process, but must be considered derivational"; Aronson further assumes that it is impossible to predict the formal relationship between Perfective and Imperfective form. According to recent research in the framework of natural morphology, the Slavic style aspect is viewed as a non prototypical inflectional category (Manova 2007). Wiemer [2001: 30, 2006: 97 and 99], on the other hand, defends the possibility to have a grammatical category with a derivative formal expression.

As we have already seen (§ 2.8.1.), the aspectual opposition as a grammatical category presupposes an identical (trivial) meaning of Imperfective and Perfective forms (Wiemer 2001: 42); only in the Slavic languages the secondary imperfectivization, going back to an old morphological pattern for expressing unbounded repetition of events (seriality), allowed the creation of pure aspec-

tual pairs, in which the Imperfective member can carry the resultative meaning of the Perfective; does this situation hold for Georgian and Ossetic too?

The lexical problem in the interpretation of the aspectual pairs is further complicated by the fact that, without the possibility of deriving secondary Imperfective forms by means of a suffix, in Georgian and Ossetic a simple form proves to be the Imperfective correlate of several prefixed (also perfective) forms, which different meanings and collocation:

(36a) The Georgian case

- |    |                         |                                 |             |
|----|-------------------------|---------------------------------|-------------|
| a. | <i>ak'eteb</i> s (IPFV) | vs. <i>ga-ak'eteb</i> s (PFV)   | 'to do'     |
| b. | <i>ak'eteb</i> s (IPFV) | vs. <i>še-ak'eteb</i> s (PFV)   | 'to repair' |
| c. | <i>ak'eteb</i> s (IPFV) | vs. <i>gada-ak'eteb</i> s (PFV) | 'to revise' |
| d. | <i>ak'eteb</i> s (IPFV) | vs. <i>mo-ak'eteb</i> s (PFV)   | 'to heal'   |

A similar situation occurs also in Lithuanian:

(36b) The Lithuanian case (Wiemer 2001: 50)

- |    |               |                                      |                             |
|----|---------------|--------------------------------------|-----------------------------|
| a. | <i>versti</i> | <i>per-versti</i> , <i>už-versti</i> | 'to turn over, to change'   |
| b. | <i>versti</i> | <i>nu-versti</i>                     | 'to throw' (stone)'         |
| c. | <i>versti</i> | <i>nu-versti</i>                     | 'to remove' (power, regime) |
| d. | <i>versti</i> | <i>iš-versti</i>                     | 'to translate' (text)'      |
- etc.

If we take into account the situation in Modern Georgian, we could attempt to reverse the historical perspective, explaining the synchronic state of the language in the following terms. The lexically basic form is the prefixed, Perfective one, the Present tense form or the Imperfective form is obtained by dropping the preverb from the Future, or Perfective, one (Aronson 1990: 44). In this case we would not say that the simple unprefix verb "is, at least potentially, the Imperfective of *all* its prefixed Perfectives" (Comrie 1976: 92); instead, we would postulate the existence of a great number of simple homonymous forms, lexically differing from each other:

(37) Enantiosemy or polysemy?

a. Lithuanian (Wiemer 2008: 408)

*daryti* 'to open' and 'to close' vs. *ati-daryti* 'to open' – *už-daryti* 'to close'  
*jungti* 'to turn on/off' vs. *į-jungti* 'to turn on' – *iš-jungti* 'to turn off'

b. Georgian (Tschenkéli 1958: 96, Vogt 1971: 185)

*gan-a-iarağ-eb-s* 'to disarm' (PFV) vs. *še-a-iarağ-eb-s* 'to rearm' (PFV)  
*a-iarağ-eb-s* 'both meanings' (IPFV)

We get a bidirectional derivation process: the aspecto-temporal grammatical meaning is obtained by adding a preverb to the simple form, whereas the lexical meaning goes the opposite way, from the prefixed Perfective form to the simple Imperfective one (depreverbatation). Compare the following examples from Ossetic:

(38a) Ossetic aspectual pairs (Achvlediani 1963: 257)

Nana, fæ-læu-Ø-ma                      Salomi-Ø                      næ læuu-y  
 Mama    PFV-stay-IMP.2SG-PTCL    Proper noun.NOM    NEG    stay.IPFV.PRS-3SG  
 'Mama, stop!'...Salomi does not stop'  
 (Russian translation: Mama ostanovis'...Salomi ne ostanavlivaetsja')

(38b) (Achvlediani 1963: 189)

Nal                      mæ                      zon-ys  
 NEG                      1SG.GEN                      know.PRS-2SG  
 'Don't you recognize me anymore?' (Russian translation: 'Bol'se ne uznæš'<sup>17</sup> menja?')

These Ossetic examples, together with the case of *duǰdeba* as imperfective form derived from the prefixed perfective *a-duǰdeba* (see above example 31), confirm the idea that the aspectual opposition can be expressed morphologically by dropping the preverb: the Imperfective is obtained through depreverbalization of the prefixed, Perfective form. In Slavic too, this kind of homonymous forms is well known (Vaillant 1946, Dickey 2006), but in Georgian and Ossetic, where secondary imperfectivization devices lack (but see below § 2.9), this phenomenon seems to be a more general rule:

(39) Grammatically conditioned homonymy (Isačenko 1968: 365, Breu 2000b: 26)

(IPFV)	(PFV)	
(boy')	<i>po-bit'</i> , <i>pri-bit'</i>	'to beat'
(enemy)	<i>po-bit'</i>	'to defeat'
<i>bit'</i> (dishes)	<i>raz-bit'</i>	'to break'
(bells)	<i>pro-bit'</i>	'to ring'
(money)	<i>vy-bit'</i>	'to mint'

Comrie rightly points out that in Slavic the secondary imperfectivization gave rise to an “overall system of lexically equivalent aspectual pairs” (Comrie 1976: 93). That’s why it is difficult to agree with Maslov, arguing that we can speak of aspect as a grammatical category only after the development of secondary Imperfective forms by means of suffixes. Hence, aspectual system can be built up on a morphological opposition between simple and prefixed forms (Breu 1992).

## 2.9. Suffixation

In Ossetic, there is an imperfectivizing suffix, *-cæj-*, being used with prefixed Past and Future forms in order to make the verb Imperfective, giving it a processual or conative meaning (Levitskaja 2004: 30):

17 The verb *zonyn* (IPFV) means 'to know' (Russian *znat'*); with the preverb *ba-* 'in' the compound form *ba-zonyn* (PFV) can be derived from it, meaning 'to get to know' (Russian *uznavat'*). In this example, *zonyn* seems to be lexically identical with *ba-zonyn*.

(40) Processual meaning through suffixation (Achvlediani 1963: 236)

- a. Boris-Ø ær-cyd-is goræt-æj  
 Boris-NOM PFV\_hither-go.PAST-3SG.INTR town-ABL  
 'Boris arrived from the town' (Russian translation: 'Boris priexal iz goroda')
- b. Boris-Ø ær- cæj-cyd-is goræt-æj  
 Boris-NOM PFV\_hither-PROG-go.PAST-3SG.INTR town-ABL  
 'Boris was coming from the town' (Russian translation: 'Boris exal iz goroda')

The processual meaning pertains to the motion verbs, which in the Past are Perfective<sup>18</sup>. This fact resembles very closely the situation in Hungarian, where only preverbs with concrete spatial meaning allow the inversion (from preverb+verb to verb followed by the preverb) for expressing, among others meanings, the actual process in the Past:

(41) Preverb inversion in Hungarian (Kiefer 1994: 419–420)

- a. 'Pisti 'le-ment-Ø a 'pincé-be  
 Pisti-NOM down-go-PAST.3SG DET.the cellar-INES  
 'Steve went down to the cellar' (Perfective)
- b. 'Pisti 'ment-Ø 'le a 'pincé-be,...  
 Pisti-NOM go-PAST.3SG down DET.the cellar-INES  
 'Steve was going down to the cellar,...' (Progressive)

With other (non spatial) preverbs, the interpretation of the suffix *-cæj-* can be only conative:

(42) Conative meaning (Comartova 1988: 207)

- uyj fæ-cæj-axst-a Ulja-(j)y jæ cong-æj fælæ...  
 3SG.S PV-IPFV-take.PST-3SG.TR Ulja-Gen cl.3SG.GEN hand-ABL CONJ.but  
 'He tried to take Ulja's hand but...'

The suffix *-cæj-* has often been compared with the secondary imperfectivization in Slavic (Fritz 1983: 7, Majsak 2005: 248), but its use is temporally restricted (only with Past and Future time reference) and is semantically not compatible with all preverbs (Comartova 1988: 207).

In Georgian, a secondary suffix *-ulob*, derived from the Past participle, is mainly used for momentaneous verbs (*accomplishments*) and has a trivial meaning, i. e. both aspectual forms denote a punctual event (43a); with other verbs it can be used with a concrete-processual meaning (43b):

(43) Trivial pairs in Georgian (Holisky 1981: 137–138)

- a. ip'ovnis (PFV) 'X will find Y' > p'o-ulobs (IPFV) 'X finds Y'  
 b. i-qidi-s (PFV) 'X will buy Y' > qid-ulob-s (IPFV) 'X buys Y'

18 On the discussion on the processual meaning of prefixed Present forms of motion verbs see above, § 2.4.

2.10. Tmesis

Russian –, Georgian –, Old Georgian +, Ossetic – (Iron),/ + (Digor)

The possibility of separating the preverb from the root could represent a significant phonetic, morphological and syntactic feature, pointing out to the independent character of the 'preverb'; usually, pronouns or conjunctions are inserted between them. The phenomenon is quite common in Old Georgian, Svan (Schmidt 1988: 82), and in the more conservative Digor (Bouda 1934: 66):

(44a) Tmesis in Old Georgian (Boeder 2005: 32)

rajta	še- <del>xolo</del> -axon	pesu-sa	(Matthew 14, 36)
that	PRV- <u>but</u> -that.they.touch.it	hem-DAT	
	'that they might <u>only</u> touch the hem (of his garment)'		

(44b) Tmesis in Digor (Thordarson 1973: 92)

ra-mæ-mar-æ
PRV-1SG.GEN-kill-IMP.2SG
'kill me'

The question is whether it could serve as an indicator of the less grammaticalized status of the preverbs, being used in their old function of spatial adverbs or prepositions.

### 3. Some concluding remarks

3.1. The Ossetic preverb system is very similar to the Georgian one, above all in the case of the double function of preverbs, denoting not only the direction of the movement, but also the orientation toward or away from the deictic center, represented by the speaker (Tomelleri 2009: 248). The aspectual system, however, differs in some important features from the Kartvelian one and shows sometimes striking similarities to the Russian or the South Slavic systems (§ 2.5.1., 2.6.2. and 2.8.): this concerns above all the extension of the category to the whole verbal system and the presence of an aspectual opposition in the Future.

Thus, a development induced by contact with Georgian is a plausible but not necessary possibility, at least as far as the category of aspect is concerned. The orientation, on the other hand, copies not only semantically, but in one case also morphologically (45), the Georgian model (Tomelleri 2009: 248), in which the hither orientation is always marked (formally more complex) than the thither one:

(45) Ossetic and Georgian orientation

Oss.: ba-cæuy	'(S)he is going in'	vs. ærba-cæu	'(S)he is coming in'
Ge.: še-dis	'id.'	vs. šemo-dis	'id.'

As far as Georgian is concerned, it should be better compared with the South Slavic languages, having preserved two layered systems ( $\pm$  INTRA,  $\pm$

AD) with a strong tendency towards a conflation (Dahl 1994: 245) or a restriction in meaning and use of some combinations. Besides having retained the older aspectual opposition between Aorist and Imperfect, Georgian is also characterized by the fact, common to Bulgarian and Macedonian, that the Perfect has not taken over the function of Aorist and Imperfect, but shows a strong tendency towards the development of evidential and other secondary meanings.

3.2. In an areal perspective, we get the following picture. As is well known, Ossetic shares a lot of features with the neighbouring Caucasian languages at all levels; therefore we could hypothesize a powerful influence of the Caucasian substrate or adstrate (Abaev 1970a = 1995); contact induced phenomena, taking into account the bi- and sometimes trilingual situation of the population (Thordarson 1985), cannot of course be denied; in the case of aspect, however, they can be postulated, if at all, in the sense that contact with Georgian and Russian could have strengthened or accelerated already present tendencies.

In Georgian and, to a lesser degree, Slavic, it is possible to follow the historical evolution of the Slavic-style aspect; language contact in historical times as a triggering factor for the origin and development of this grammatical category is rather unlikely.

3.3. In the scientific literature, there have been some interesting attempts to define typological criteria for determining the more or less grammatical status of Slavic-style aspect systems, allowing a comparison between different systems (Comrie 1976: 94, Majsak 2005: 247–248, Arkad'ev 2007: 20–22); in what follows I shall try to collect and summarize them, with respect to the items discussed above, in a decalogue of formally and semantically relevant features:

- 1.] Original functions of the preverbs: the spatial meaning of preverbs is very well preserved in all three languages.
- 2.] Productivity of the preverbs: the preverb system is very productive in all three languages.
- 3.] Abstract semantics of the preverbs: we observe the presence of an otherwise semantically 'empty' perfectivizing preverb (§ 2.3.): Slavic + (*po-*), Georgian + (*da-*), Ossetic + (*fæ-*). Curiously enough, the Slavic and the Ossetic preverb are etymologically cognate elements (Fischer 1977).
- 4.] Interaction with the lexicon, i.e. semantic correlation of prefixation with telicity (§ 2.8.): preverbs convey a telic or transformative meaning, but they can also correlate with atelic lexemes, much more in Slavic and Ossetic than in Georgian, where we observe a quite strong correlation between derivational perfectivity and telic verbs; prefixation does not apply to the whole verbal system (stative and to a lesser extent atelic verbs are excluded).

- 5] Imperfectivization devices (§ 2.8.2. and 2.9.): only Slavic has at its disposal a productive system of suffixes to derive Imperfectives from compound (Perfective) forms in which the preverb has changed not only the grammatical, but also the lexical meaning of the base verb (*secondary imperfectivization*): Russian *pisat'* (IPFV) 'to write' > *perepisat'* (PFV) 'to rewrite' > *perepisyvat'* (IPFV) 'to rewrite' vs. Georgian *c'era* (IPFV) 'to write' > *gadac'era* (PFV) 'to rewrite' or Ossetic *fyssyn* (IPFV) > *ra-fyssyn* (PFV) 'to rewrite', both with no secondarily derived Imperfectives<sup>19</sup>. The Georgian suffix *-ulob-*, assigning serial meaning to achievements verbs or the Ossetic suffix *-cæj-*, expressing processual or conative meaning, cannot be seen as the presence of a productive system of imperfectivization. If we are willing to accept the idea that aspectual pairs can also be formed by means of depreverbatation, then we have a productive imperfectivization in Georgian and Ossetic too.
- 6] Correlation of Perfective with other aspecto-temporal categories (§ 2.2.): some tense and mood distinctions became associated with the category of aspect, like in North Slavic and Georgian, but this does not hold for South Slavic and Ossetic. The aspect opposition with Future time reference has not been developed in Georgian, while in Ossetic the same temporal marker can be added to both the Imperfective and the Perfective form, like in South Slavic (Tomelleri 2009: 259).
- 7] Presence of a perfectivity expressing the totality view (–INTRA): the Slavic-style aspect and the Romance-like system select different kinds of terminativity (§ 2.2.2.), they can coexist in a language but, as a rule, tend towards simplification of such a redundant set of formal devices in favour of the Slavic-style aspect. The Aorist/Imperfect distinction, which in North Slavic was totally superseded by the Perfective/Imperfective opposition, allows a comparison between Georgian and East South Slavic, Bulgarian and Macedonian, but this is future work. Ossetic did (and do not) know this kind of aspect opposition, expressed inflectionally and restricted to the Past.
- 8] Semantic compatibility of verbs with the Imperfective grammeme: the question is whether the Imperfective form can have the reading of an actual process or not. In Russian, only Imperfective forms can refer to a process, but this is not always the case. Indeed, with some (transformative) verbal lexemes only the serial interpretation is licensed; in such cases, the Imperfective form has the so-called trivial meaning, denoting the same event as the corresponding Perfective correlate (§ 2.8.2.). As far as Ossetic and Georgian are concerned, the realm of processuality resides in the absence of preverbs. In Ossetic, an on-going process, independently of time reference, cannot be expressed by prefixed forms, with the exception of motion verbs; the prefixed Present tense of non motion verbs always denotes a repeated event, in the sense of bounded situations reaching their

19 In the Russian–Ossetic dictionary by Abaev [1970b: 354], the entry *perepisyvat'* is rendered lexically as *nogæj fyssyn* (literally 'newly write').

inherent limit on every occasion<sup>20</sup>. In Georgian too, prefixation excludes processual meaning; an unprefixated verb can denote, besides the repetitions of bounded events, an on-going action. The trivial meaning of the Imperfective aspect strongly depends on, and is proof of, the grammatical status of the Slavic-style aspect (see below the point 10).

- 9] Combinability with phasal verbs (§ 2.5.1.): only Slavic and Ossetic do not allow Perfective forms with phasal verbs; in Georgian, both aspectual forms can be used, with the exclusion of instantaneous transformative verbs (*achievements*).
- 10] Obligatory imperfectivization (§ 2.5.2. and 2.8.1.): the presence of grammatical contexts, requiring an automatic substitution of one form with another without any change in the lexical meaning, is an important tool for identifying trivial aspectual pairs, in which both forms, Perfective and Imperfective, denote an event, i. e. a change from a state of affairs to another one.

Points 1 and 2 of the decalogue represent the morphological starting point for the Slavic-style aspect; point 3 seems to be the necessary but not sufficient condition for the genesis of the category: preverbs gradually lose their spatial function and begin to be used with different actional (mostly resultative or transformative) meaning. The existence of at least one preverb with no spatial meaning can be seen as an indicator of the grammaticalization process, which is usually paralleled by a more or less advanced emancipation of the category from the telic semantic of the verbal lexemes (point 4). The need for deriving secondary Imperfective forms (point 5) arises firstly within Past time reference, because a telic process which has been already carried out is per default interpreted as completed (finished > completed)<sup>21</sup>; on the other hand, the creation of an aspect opposition in the Future (Russian, Ossetic) is typologically quite rare and not attested in Georgian. The interplay of aspect and tense (or older aspect) is a quite interesting topic for further research (point 6 and 7). The more the aspect category gains grammatically, the more it becomes independent from semantics (points 8 and 9), being sometimes employed, as in Russian and Polish, to convey more subtle pragmatic functions; the obligatory imperfectivization (point 10), finally, along with the existence of pure trivial pairs, can be seen as the proof of the fully grammaticalized status of the Slavic-style aspect. Some evidence about the existence of pure aspectual pairs is to be gained, in Georgian and less regularly in Ossetic, from the fact that most Imperfective Present tense forms, with actual-processual meaning, are formed through depreverbation, i.e. by dropping the preverb from the Perfective form (§ 2.8.2.)

20 In the Past and Future tense, on the other hand, seriality of both bounded (PFV) and unbounded (IPFV) actions is expressed by means of the enclitic particle *-iu*.

21 A similar idea has been formulated by Forsyth [1972: 501] concerning Perfectivity: “It seems at least as probable that such meaning developed first in one or other tense/mood form and only gradually spread until it embraced the whole paradigm”.

3.4. To the aspectual parameters proposed by Comrie, Majsak and Arkad'ev I propose to add, in a diachronic perspective, the different behaviour of preverbs according to their more concrete (spatial, above all with motion verbs) or more abstract meaning (§ 2.4.). Further, the different correlation of preverbs with the tense category (Imperfective without processual meaning in the Present and default perfective in the Past), suggests the possibility of a gradual extension of the perfectivity from one tense to the other(s) (Bermel 1997: 85); the same holds for the Future time reference of prefixed non Past forms, which many scholars consider to be a decisive factor in the grammaticalization of aspect (Tomelleri 2008: 25). Ossetic and, to a lesser extent, the South Slavic languages, show us that aspect can develop without this temporal shift. The extension of the opposition to the levels of pragmatics, as we find it in Russian, represents a further and peculiar step in the grammaticalization path of the aspect category.

3.5. For the meanwhile, we are still far from the identification of the relevant features, according to which we could try to establish a typological classification of the Slavic-style aspect; maybe, this is a hazardous or even impossible undertaking. In any case, I would plead for more comparative work, extending the field of research including colloquial and text corpora of Georgian and Ossetic.

To sum up, if we are not ready to consider the facts described above as examples of proper aspectual opposition, we can nevertheless conclude asserting that the modern Russian system, because of its advanced stage of grammaticalization, is probably not the most suitable tool, either morphologically or semantically, in the effort of explaining and analyzing aspectual or aspectual-like phenomena in other languages; in a reverse perspective, on the contrary, languages in which the Slavic-style aspect is not yet fully developed can be of some utility and help us in the terrific task of evaluating the older, unattested stages of this fascinating category in the Slavic languages.

## Abbreviations

Abbreviations: 1, 2, 3 – Person, ABL – Ablative, ACC – Accusative, AD – Adterminality, ADES – Adessive, ALL – Allative, AOR – Aorist, AUX – Auxiliary, CL – Clitic, COM – Comitative, CONJ – Conjunction, DAT – Dative, DEM – Demonstrative, DET – Determiner, dyn – Dynamic, ERG – Ergative, F – Feminine, FUT – Future, GEN – Genitive, I–II–III – Present, Aorist and Perfect Series, IMP – Imperative, IMPF – Imperfect, INAN – Inanimate, INES – Inessive, INF – Infinite, INTRA – Intraterminality, IPFV – Imperfective, INTR – Intransitive, LOC – Locative, M – Masculine, MOD – Modal, N – Neuter, NEG – Negation, NOM – Nominative, PERF – Perfect, PFV – Perfective, PL – Plural, PREP – Preposition, PRF – Perfect, PROG – Progressive, PROH – Prohibitive, PRS – Present, PRV – Preverb, PTCL – Particle, S – Subject, SG – Singular, STAT – Stative, T – Transformativity, TR – Transitive, V – Version.

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## Slavenski aspekt u kavkaskoj regiji

Ovaj je članak prvi pokušaj usporedbe i tipološkog opisa nekih obilježja aspekta ili aspektualnih obilježja triju jezika na Kavkazu, ruskoga, gruzijskoga i osetskoga. U ova tri barem ne izravno međusobno povezana jezika, svršenost, koju Johanson definira pojmom *adterminality*, izražava se pomoću zatvorene skupine nepredvidivih afikasa priložnog ili prijedložnog podrijetla (glagolski predmetci). Premda se u literaturi o aspektu kritizira izjednačavanje prefiksacije i svršenosti (neki autori izričito predlažu da je ova derivacijska opreka *Aktionsart*, a ne glagolski vid), sinkronijska usporedba različitih sustava korisno je tipološko oruđe za identificiranje i definiranje važnih obilježja tzv. slavenskog aspekta.

Analiza se usredotočuje na deset glavnih parametara te obaseže formalna (prefiksacija, sufiksacija i tmeza) i semantička obilježja kategorije: raspravlja se o nekim korelacijama između aspekta i *Aktionsarta* te svršenosti i vremenske reference; nadalje, predstavljena su i neka sintaktička, semantička i pragmatička ograničenja u uporabi aspektne opozicije.

Rezultat usporedbe je desetodjeljni sažetak tipoloških kriterija za određivanje gramatičkog statusa slavenskog aspekta: ovi kriteriji uključuju izvornu funkciju glagolskih predmetaka, njihovu produktivnost i apstraktnu semantiku, interakciju aspekta sa značenjem *Aktionsarta* glagolskih leksema te s glagolskim vremenom, postojanje sredstava imperfektivizacije i postojanje svršenosti koja izražava cjelovitost radnje (distinkcija aorist/imperfekt).

Osim rasprave o parametrima tipološke varijacije unutar kategorije, ukratko se raspravlja jesu li neka strukturna obilježja možda nastala zbog kontakta.

**Key words:** aspect, Slavic languages, Caucasian languages

**Ključne riječi:** glagolski vid, slavenski jezici, kavkaski jezici

