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WHEN PERFECT MEETS AORIST

AORISTIC RESULTATIVE
IN LANGUAGES BUILT ON
DESCENDING TIME
(TOCHARIAN, ALBANIAN AND SLAVIC)

1. INTRODUCTION

The resultative is a taxis gram. Besides time (present, past and future) and aspect (primary: performative or imperfective, and secondary: progressive or perfective), taxis is the third abstract and universal semantic pool in verbal systems. The taxis gram follows a usual development from a statal construction, through an actional formation until it becomes a perfect (perfect drift). After that it may undergo further changes and develop into a simple past tense (aoristic drift). Novel taxis grams (born as statives) can be formed in almost all tenses and aspects, but their birth and grammaticalization (perfect drift) often start in the unmarked present and past tenses, i.e. in the imperfective present and past. Later the stative in the present gives the perfect present and the stative in the imperfective past gives the past perfect. But, since languages try to generalize the resultative in all existing tenses and aspects, other formations (tenses/grams) will occur in the perfect (cf. Spanish, which includes a great number of perfect tenses and also double perfects like *la he tenido hecha*). Among them one can find the aorist, i.e. the perfective past, or the derivational secondary past in Descending Time (cf. Hewson & Bubenik 1997).

The position of the aorist perfect-resultative is quite special in languages built on the representation of Descending Time. This is due to the implicational meaning of the aorist itself. It is a marked perfective past. It can however, in a given context, provide a resultative implication which the unmarked imperfective past usually cannot. For example in Polish, *napisalem list* 'I wrote the letter' can have purely past aoristic meaning or may correspond to *mam list napisany* 'I have written the letter'. Of course, this is a type of the contextual implication, and not a grammatical meaning (aorist is a marked perfective past in languages which are built on the representation of Descending Time). In consequence, the aorist can receive implicational resultative meaning. The difference between the aorist and the resultative (auxiliary in the imperfective aspect) would also consist on a statal

character of the resultative (at least in the begging of its grammaticalization) in comparison with the actional character of the aorist.

This paper tries to answer the question, "What is the position of the aoristic resultative?" i.e. what is its relation to the perfect (auxiliary in the imperfective present) and to the pluperfect (auxiliary in the imperfective past)? In order to answer these questions, I will analyze the taxis formation with the auxiliary in the present (imperfective present), imperfect (imperfective past) and aorist (perfective past) in three Indo-European families which are constructed on the representation of Descending Time, i.e. Tocharian, Albanian, and Slavic (Old Church Slavonic, Sorbian and especially Polish).

2. TOCHARIAN, ALBANIAN AND SLAVIC DATA

West Tocharian employed three analytical resultative formations depending on the tense of the auxiliary. Since the copula may be put into the present, past or aorist, the Tocharian taxis system included a present perfect, a pluperfect and an aoristic perfect (cf. Krause & Thomas 1960: 190). The copula in the present may be omitted (cf. Slavic).

auxiliary	example
present [present impf.]	sanune kekemu nesau 'I am come in danger' = 'I am in danger'
imperfect [past. impf.]	tu wnolmi kekyauṣoṣ ṣeyem 'the beings had heard that'
aorist (seldom) [past perf.]	<i>k_uce wänteresa kekamos takās</i> 'in which affair have you come?'

Table 1: Taxis in West Tocharian

According to Hewson and Bubenik (1997), the copula in the imperfect corresponds to the pluperfect in OCS ($neslu\ b\check{e}(a)x\check{v}$) or to the pluperfect passive in Latin $laud\bar{a}tus\ eram$. "The other two combinations, PP plus the copula in either the present or the aorist, correspond to the perfect" (Hewson & Bubenik 1997: 132). Krause and Tomas (1960: 190) conclude that the meaning of this analytical construction was "ungefär [...] Perfekt und Plusquamperfekt" (cf. Krause 1952: 52-53). As pointed out by Hewson and Bubenik (1997: 132) the examples with the copula in the aorist are very few and this enables us to state that the aoristic perfect was a somewhat 'rare' construction. The resulting system of analytical formations in West Tocharian can be tabulated in the following way:

auxiliary	meaning
present	perfect
imperfect	pluperfect
aorist (seldom)	perfect (present implication)

Table 2: Meaning of taxis formations in West Tocharian

As was the case in Tocharian, Albanian includes three taxis formations depending on the tense of the auxiliary verb. These formations are as follows:

	perfect	pluperfect I	pluperfect II
auxiliary	present	imperfect	aorist
habeo-type	kam + participle	kisha + p.	pata + p.
sum-type	jam + participle	isha + p.	qeshë + p.

Table 3: Taxis formations in Albanian

According to Camaj (1984) "The Pluperfects I and II express a completed action before a point in time in the past. [...] In independent clauses, the Pluperfect I and II express the end-point of an action occurring in the distant past; the Pluperfect II [...] is actually better-suited for this purpose" (Camaj 1984: 152). There is also a pluperfect III with the auxiliary kisha pasë or isha qenë + participle. That construction expresses "action occurring in an even more remote past" (Camai 1984: 152) and corresponds to the Old Polish surcomposé perfect which evolved into the pluperfect. Camaj translates the perfect as 'have brought', the pluperfect I as 'had been being/had been having' (Camaj 1984: 131), 'I had been enduring' (Camaj 1984: 217), or (sic!) as 'have been bringing' (Camaj 1984: 223), and the pluperfect II as 'had brought'. It seems to be a mistake to translate the pluperfect I by 'I have been bringing' (cf. Camaj 1984: 223). Mann (1932), on the contrary, always translates the pluperfect I as 'had been'. He labels the construction with the copula in the present as perfect, and the construction with the copula in the imperfect as pluperfect. The meaning of the pluperfect I and II may be summarized in the following table:

	Camaj	Mann	Hewson & Bubenik
pluperfect I	had been doing	had done	had been doing
pluperfect II	had done		had done

Table 4: Pluperfect I and II in Albanian

There is however a problem in comparing Tocharian and Albanian perfects with Slavic forms because Albanian and Tocharian do not have imperfective or perfective participles as Slavic does. Albanian has only one participle used in analytical taxis formations. In consequence, Albanian and Tocharian are not sensitive to aspectual opposition in participles. Slavic languages, on the contrary, present such an opposition in participles. The resulting system of analytical formations in Albanian may be tabulated in the following way:

auxiliary	meaning of the analytical resultative	
present	perfect	
imperfect	pluperfect imperfective (?)	
aorist	pluperfect	

Table 5: Meaning of taxis formations in Albanian

Common Slavic had four (or even five) taxis constructions with a sum-kind auxiliary (byti). The constructions which are interesting for our investigation are those with the auxiliary byti in the present neslo jesmo, in the imperfect neslo $b\check{e}(a)x\mathfrak{d}$, and in the agrist neslo byx \mathfrak{d} . The formation with the auxiliary in the present gave the ordinary perfect (which in some later languages evolved into a simple past, cf. Modern Polish) and the formation with the auxiliary in the imperfect gave the pluperfect (cf. Sorbian). However, the construction which was using the copula in the agrist *neslv* byxv received conditional meaning and took the place of the old optative in *bimb*. In the Cyrillic manuscripts the conditional (optative) is expressed by the analytical formation with the auxiliary in the aorist bych (cf. Nandris 1988: 156-157; Schmalstieg 1983: 156-158; Rosenkranz 1955: 131; and Lunt 1974: 98-99). Polish and Czech pluperfects do not however come from the original OSC pluperfect but are kinds of the surcomposé taxis: Czech byl jsem pil (cf. the perfect pil isem), and Polish nioslem byl (cf. the perfect pilem) both from the original surcomposé perfect nesla byla jesmb (cf. Nahtigal 1961: 238 and Hewson & Bubenik 1997: 295)1. In the same way, the conditional II in Czech byl byx nesl and Polish *niósł był bym* was remodeled from the original aoristic surcomposé perfect neslo bylo byxo. The meaning and the changes of the Common Slavic analytical resultative can be tabulated in the following way:

auxiliary	OCS	Sorbian	Polish and Czech
present	perfect	perfect	past
imperfect	pluperfect	pluperfect	/ a new pluperfect < surcomposé perfect
aorist	conditional	conditional	conditional

Table 6: Analytical sum-resultative in Slavic

When the copula stood in the present or in the imperfect (both in the imperfective aspect) the meaning was originally statal but with the time evolved into an actional signification: statal in the present neslv jesmv > actional nioslem; statal in the past neslv $b\check{e}(a)xv$ > actional nioslem byl. However, the original temporal meaning of the construction with the copula in the aorist neslv byxv is much more complicated. Was the meaning actional from the beginning? In Slavic the construction with the auxiliary in the aorist does not form a part of the taxis gram. As mentioned above it received the conditional meaning in OCS. This meaning holds in modern languages.

Synchronically Old Polish had a new pluperfect on the basis of the perfect using the imperfect (imperfective past) of the auxiliary $by\dot{c}$ 'be', i.e. $by\dot{t}$ (diachronically this construction has its roots in the surcomposé perfect). In consequence, from the synchronic point of view, this construction corresponds to the OSC pluperfect, which used the auxiliary in the imperfective past. It is interesting that neither Sorbian nor (Old) Polish developed any kind of taxis with the auxiliary in the perfective past (aorist). The taxis category includes only constructions with the copula in the imperfective present and past. It seems as if the aoristic perfect does not fit into the perfect gram. In consecuence, OCS

reinterpreted it as a conditional, and Sorbian and Old Polish have not created any new aoristic perfect, i.e. there are no examples of the copula in the aorist, even though such a verb exists.

auxiliary	OCS	Sorbian	Old Polish
present	[pf.] neslъ jesmь	[pf.] sym njesł	[past] niosł jsem
imperfect	[pqp.] neslə bĕaxə	[pqp.] běch njesł	[pqp.] niosłem był
aorist	[cond.] neslv byxv		

Table 7: Analytical sum-resultative in OCS, Sorbian and Old Polish

Modern Polish provides good examples of the correlation between the analytical resultative with the copula in the present and the same construction with the copula in the aorist. There is an objective resultative and a possessive resultative in Polish. The objective resultative is formed by the *sum*-type copula *być* and the participle in the perfective aspect. The copula may stand in the present and past giving the present resultative (similar to the present perfect) *jest napisany* 'is written'. It may also stand in the past *był napisany* 'was written' giving the past resultative a similar meaning to the pluperfect. When the copula stands in the perfective aspect *został* the whole construction is not a statal resultative anymore but an actional passive.

Jest napisany	[present impf.]	statal (present resultative)
Był napisany	[past impf.]	statal (past resultative)
Został napisany	I Inact nert I	actional (passive past perfective)

Table 8: Objective sum-type analytical constructions in Polish

There is more *semantic* correlation between present resultative and aoristic resultative (i.e. passive perfective past) than between present resultative and past resultative. The phrase *List został napisany* can imply the phrase *List jest napisany*. The use of the auxiliary in the aorist (perfective past) may have present-perfect implications, while the use of the auxiliary in the imperfective past does not provide such implications.

(1)

- a. List jest już napisany [present meaning] letter-Nom be-pres.impf.3.sg. already written
- b. List był już napisany *[present meaning] letter-Nom.be-past.impf.3.sg. already written
- c. List został już napisany [present meaning] letter-Nom. be-past.perf.3.sg. already written

One may observe the same correlation in the case of the possessive resultative: *mam napisane* 'I have written' (present resultative similar to the present perfect) and *mialem napisane* 'I had written' (past resultative similar

to the pluperfect). There is no possessive resultative with the auxiliary in the perfective aspect (cf. the objective resultative above). In order to put the auxiliary in the perfective aspect one must use a suppletive form *dostać* 'get', cf.: *Dostałem nagranego* 'I got it already recorded'. This construction is purely lexical and not grammaticalized. As was the case with the objective resultative, the pluperfect meaning is provided by the construction with the auxiliary in the imperfect, and not by the construction with the auxiliary in the aorist.

(2)

- a. Słuchaj, mam już CDika nagranego [present meaning] listen-imperat.sg. have-pres.impf.1.sg. already CD-Acc. recorded
- b. *Słuchaj, miałem już CDika nagrego* *[present meaning] *listen-*imperat.sg. *have-*past.impf.1.sg. *already* CD-Acc. *recorded*
- c. Słuchaj, dostałem już CDika nagrego [present meaning] listen-imperat.sg. have/get-past.perf.1.sg. already CD-Acc. recorded

The construction with the copula in the aorist is more strongly linked to the present than the form with the auxiliary in the imperfect. In both resultative types the constructions with the auxiliary in the aorist do not form the resultative gram, but constitute a passive voice (objective) or a lexical expression and not a grammatical resultative category.

auxiliary <i>być</i> 'be' and <i>mieć</i> 'have'	meaning		
present	present resultative > perfect		
imperfect	past resultative > pluperfect		
aorist – suppletive forms	<i>być</i> aorist passive – present implications <i>mieć</i> aorist, lexical unit – present implications		

Table 9: Resultative and auxiliary in Polish

3. COMPARISON OF DATA - CONCLUSIONS

Let us compare the data provided by Tocharian, Albanian, and Slavic languages (cf. Table 10). When a copula stands in the present (imperfective present) and in the imperfect (imperfective past) Tocharian, Albanian and Slavic are unanimous about the meaning of such resultatives (cf. Table 10):

auxiliary	Tocharian	Albanian	OCS	Polish new resultatives
present	pf.	pf.	pf.	pf.
imperfect	pqp.	pqp. impf.	pqp.	pqp.
aorist	pf.	pqp.	cond.	pass. / aor.

Table 10: Comparison of data from Tocharian, Albanian and Slavic

The analytical resultative with the auxiliary in the present tense (imperfective present) gives the meaning of the present perfect in all analyzed families. It is also quite striking that the usage of the copula in the imperfect gives always the meaning of the pluperfect (cf. Table 11). The same phenomenon may be observed in languages that are organized in the ascending time like for example Germanic languages where a copula in the unmarked past tense transforms a resultative construction into the pluperfect (cf. English *I had done*, *I was gone*, Icelandic *Ég hafði gert*, *Ég var kominn*).

auxiliary	Tocharian	Albanian	OCS	Polish new resultative
imperfect	pqp.	pqp. impf.	pqp.	pqp.

Table 11: The meaning of the resultative – copula in the imperfect

The resulting meaning of the usage of the copula in the aorist (perfective past) is much more heterogeneous and complicated. The copula in the aorist quite often does not appear at all in the taxis constructions (cf. Sorbian and Old Polish). In many cases, there is a correlation between formations using the aorist-auxiliary and constructions which use the auxiliary verb in the present tense. These 'correlated' forms with the copula in the aorist can have either perfect meaning or present contextual implications:

auxiliary	Tocharian	Polish objective	Polish subjective
aorist	pf.	present contextual implication	present contextual implication

Table 12: The meaning of the resultative – copula in the aorist

There are, however, cases when the construction with the auxiliary in the aorist acquires the meaning of the pluperfect (Albanian) or the atemporal meaning of the conditional (Slavic):

auxiliary	Albanian	OCS
aorist	pqp.	conditional

Table 13: The meaning of the resultative – copula in the aorist (OCS and Albanian)

The results of the comparative analysis of Tocharian, Albanian and Slavic are as follows: a) the analytical resultative with the copula in the imperfective present evolves into the present perfect; b) the analytical resultative with the copula in the imperfective past evolves into the pluperfect; c) the analytical resultative with the copula in the aorist (perfective past) often does not form a part of the new taxisgram (cf. Old Polish, Sorbian, and Polish new resultatives). It may provide present implications similar to the present perfect and therefore does not form a clear functional opposition to it (cf. Tocharian and Polish new resultatives), but it can

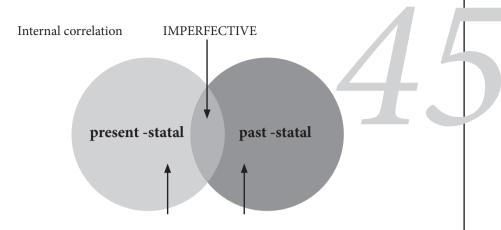
also be reinterpreted to acquire functions of other grammatical categories (cf. the conditional in OSC). In consequence, the position of the analytical construction with the auxiliary in the aorist is much weaker in the taxis system than when the auxiliary stands in the imperfective present or past.

auxiliary in	resulting meaning	
the imperfective present	perfect	
the imperfective past	pluperfect	
the aorist	a) does not form a part of the new taxis-gram	
	b) present implicationsc) reinterpretation	

Table 14: The meaning of the resultative – conclusions

Why does the aoristic resultative behave in this way? Why is its position in the taxis system different from the position of the imperfective present and imperfective past? As mentioned above, the resultative gram starts its grammaticalization in the unmarked present, i.e. the grammaticalization begins in constructions with the copula in the present tense. This unmarked present tense in languages which are built on the representation of Descending Time stands in the imperfective aspect (imperfective present). The corresponding construction in the past is therefore the imperfective past (imperfect) and not the perfective past (aorist)². The imperfect transposes the meaning into the past, while the aorist would add a new aspectual signification. In consequence, the copula in the aorist would mark the analytical resultative in a double way. The statal meaning of the analytical resultative is achieved by the use of the imperfective auxiliary, the statal present when the auxiliary stands in the present, and the statal past when it stands in the past. When the imperfective auxiliary receives a perfective reference and stands in the perfective aspect, the meaning of the whole construction must change drastically, and the statal signification is much less available.

As indicated above, the constructions with the copula in the imperfective aspect form a couple and they differ only in time, i.e. present or past. In that way, they stand in clear opposition to each other. The present resultative (copula in the imperfective present) is an oppositional formation to the past resultative (copula in the imperfective past). In consequence, both constructions form a coherent gram (the same aspect) and are also clearly identifiable between themselves by the time opposition (past or present, cf. Figure 1). The copula in the aorist does not fit into this 'team', since it does not stand in the imperfective aspect, and it is not clear what kind of opposition to the other resultative constructions it forms. Its opposition to the present resultative is unclear since it may provide present implications (cf. Polish and Tocharian), and its opposition to the past resultative is aspectual and not temporal, and because of the perfective aspect, the aoristic resultative does not provide a clear statal meaning (cf. Figure 2). The aspectual difference and the unclear internal correlation with the imperfective statal (present and past) may be the main reason why the construction with the copula in the aorist often does not form a part of the resultative-perfect gram.



Internal opposition NON-PAST : PAST Figure 1: Statal resultative – Correlation and opposition

The aoristic resultative shares with the present-statal the present time since it may provide implicational present meaning. It shares the past time pool with the past-statal since it stands in the past tense. It does not share the statal common pool (imperfectness) since its aspect is perfective (copula stands in the perfective aspect, cf. Figure 2). But the perfectness and the imperfectness may be also expressed by participles (cf. Polish where the statal meaning has completely disappeared and the whole aspectual marking is confined to prefix which was originally included in the participle).

In consequence, as far as the resultative is a pure statal the use of the copula in the aorist does not fit to that analytical statal gram (but when the statal-resultative becomes an actional category it may be possible to develop an aoristic perfect, cf. Albanian and Tocharian).

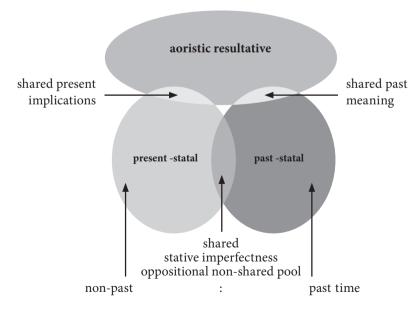


Figure 2: Statal resultative and aoristic resultative

In consequence, since there are some important semantic constraints on a statal aoristic resultative, it is quite improbable (though certainly not impossible) that a language would form such a construction. There are in fact two main tendencies: one is to create a clear and transparent semantic stative resultative (that will work against the use of the aoristic copula), and the other is to generalize a new analytical formation on all grammatical categories, like tenses and aspects (that will work in favor of the copula in the aorist). But there is also another formal constraint on the aoristic analytical resultative: in many languages (cf. Slavic) the copula verbs (*być* and *mieć*) do not formally occur in the aorist and one must use a suppletive (semantically corresponding) verb, i.e. *stać się* 'become' and *dostać* 'get'. This formal feature will also work against the analytical aoristic resultative since its form would be completely different from its imperfective counterparts.

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SUMMARY

WHEN PERFECT MEETS AORIST. AORISTIC RESULTATIVE IN LANGUAGES BUILT ON DESCENDING TIME (TOCHARIAN, ALBANIAN AND SLAVIC)

Because of its implicational meaning and perfective aspect, the position of the aorist resultative is quite special in languages which are built on Descending

¹ The changes are however somewhat different, cf. Czech byl jsem pil < [[bylō jesmb] neslō] < [[neslō [bylō jesmb]], but Polish nioslem byl < [[neslō jesmb] bylō] < [[neslō [bylō jesmb]].

² The same phenomenon occurs in languages which are built on Ascending Time. The copula in the unmarked past tense (preterite) gives the pluperfect, cf. English *I had done*, or Icelandic *Ég hafði gert*.

Time (Hewson & Bubenik 1997). Sometimes it functions as a perfect, sometimes as a pluperfect, and sometimes it acquires other meanings, for example conditional. It often does not form any resultative at all. This article is intended to answer the question, "What is the position of the aoristic resultative?", i.e. what is its relation to the perfect (auxiliary in the imperfective present) and to the pluperfect (auxiliary in the imperfective past)? In order to answer these questions, the author will analyze the taxis formation with the auxiliary in the present (imperfective present), imperfect (imperfective past) and aorist (perfective past) in three Indo-European families which are built on the representation of Descending Time, i.e. Tocharian, Albanian, and Slavic (Old Church Slavonic, Sorbian and especially Polish). By the comparative analysis it will be demonstrated that there are some semantic and formal constraints on forming the aoristic resultative in languages that are constructed on the representation of Descending Time. These constraints will explain why the aoristic resultative is an unstable category and acquires different meanings and uses.

KEYWORDS: historical linguistics, comparative linguistics, verb system, resultative, perfect, aspect, aorist, Tocharian, Albanian, Slavic.