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## The so-called possessive perfect in North Russian and the Circum-Baltic area. A diachronic and areal account

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### ABSTRACT

The paper provides a historical and areal investigation of the North Russian perfect, often referred to as the “*possessive perfect*”. This perfect is encoded by a periphrastic predication consisting of a copular auxiliary and a past passive participle in an invariant form; the non-prototypical subject is case-marked with an adessive-like PP while the object is assigned the nominative or, in some varieties, accusative case; contrary to several scholars there is no trace of ergativity. As to the diachrony, the paper represents a case study on the rise of non-prototypical subjects and the development from subjects to objects. The historical investigation of the perfect reveals that etymologically it is neither related to the possessive construction of the *mihi est* type (as has been commonly assumed before) nor to a passive. Instead, the development out of a patient-oriented resultative construction based on the copula with a predicative resultative participle is suggested. The adessive-like PP (often functioning as a new dative in East Slavic) enters this construction as an adverbial referring to a participant that is physically or mentally affected by the resultant state but develops later exclusively the meaning of the agent of the preceding action and, subsequently, acquires behavioral subject properties. The areal perspective of the investigation reveals two hotbeds of expansion. First, the early sequence of changes leading from the patient-oriented resultative construction to the impersonal perfect with a number of syntactic active properties, and encompassing such languages as Polish, all East Slavic, Baltic and Fennic languages, seems to have been influenced by Polish. Second, the later developments consisting of the incorporation of the *free-dative*-like adverbial into the construction, the acquisition of agent meaning, and subsequently, subject properties has been instigated by North Russian. From North Russian dialect area this construction spread to such languages as Standard Russian, Estonian, Karelian, Votian and Latvian with a decreasing degree of grammaticalization. Both areal and diachronic perspectives allow equilibrating areal and internal triggers for the described developments.

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**Abbreviations:** ACC, accusative; AcP, *accusativus cum participio*; ACT, active; ADESS, adessive; ADJ, adjective; ADV, adverb; ALLAT, allative; AUX, auxiliary; CB, Circum-Baltic; CONV, converb; COP, copula; DAT, dative; ELL, ellative; EP, External Possessor; FEM, feminine; FUT, future; GEN, genitive; IC, infinitival clause; IE, Indo-European; IMPF, imperfect; IMPR, impersonal; INF, infinitive; INSTR, instrumental; INVAR, invariant; ITERAT, iterative; LOC, locative; M, masculine; NEG, negation; NEUTR, neuter; NOM, nominative; NP, nominal phrase; NR, North Russian; P-oriented, patient-oriented; PART, partitive; PASS, passive; PERF, perfective; PL, plural; POSS, possessive; PP, prepositional phrase; PPO, Predicative Possessor; PRT, particle; PPP, passive past participle; PR, P-oriented resultative; PRES, present; PST, past; REFL, reflexive; SAE, Standard Average European; SG, singular; TAM, tense-aspect-mood. **Keywords:** Possessive perfect; Resultative; Circum-Baltic area; Non-prototypical subjects; Ergativity; Language contact.

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**Table 1**

Relative chronology of the NR perfect.

	Stage of development	Construed meaning	
Section 3 Stage A	P-oriented resultative construction <sup>a</sup>	<i>*the work is done</i>	
Section 4 Stage B	Impersonal perfect construction	<i>*the work has been done</i>	
Section 5 Stage C	"Split into active and passive perfect construction/reading"	<i>*there has been done the work</i>	<i>*the work has been done (by s.o.)</i>
Section 6 Stage D	Subject becomes object	<i>*there has been done the work</i>	The evolution of passive will not be discussed in this paper
Section 7 Stage E	Agented perfect/Rise of a new subject	<i>*at me, there has been done the work</i>	

<sup>a</sup> scil. Patient-oriented resultative.

## 1. Introduction

The so-called possessive perfect in the North Russian dialect (henceforth NR) has been subject to substantial research for a long time, cf., inter alia, Blevins (2003), Christen (1998), Danylenko (2005a), Holvoet (2001a), Jung (2007, 2009), Kuz'mina and Nemčenko (1971), Lavine (1999), Maslov (1949), Matthews (1955), Matveenko (1961), Petrova (1961), Timberlake (1975), Tommola (2000), Trubinskij (1984), and Wiemer and Giger (2005:29–42). However, much less attention has been paid to its historical development, cf., inter alia, Ambrasas (1977), Borkovskij (1949), Borkovskij and Kuznecov (1963), Danylenko (2005a), Jung (2007), Kuteva and Heine (2004), Matthews (1955), Panzer (1984), and Potebnja (1888[1958], 1899 [1968]).

I will pursue the development of this type of perfect in North Russian from the Old Russian period. I will investigate how the original subject of the resultative construction develops into an object and how a new, subject emerges, gradually acquiring subject properties.<sup>2</sup> I will also argue against the common view that the NR perfect is etymologically related to the possessive construction of the *mihi est* type, adhered to in a number of papers (inter alia, Drinka, 2003; Jung, 2007, 2009; Kuteva and Heine, 2004).<sup>3</sup> Several chronological stages have already been suggested in the literature (cf., e.g., Matthews, 1955 for stage E; Danylenko, 2006:262 for stage D).

The structural parallelism between the NR perfect and analogous perfect constructions in Latvian, Lithuanian, Standard Russian, Estonian, Karelian and Votic suggests an areally induced pattern. These are languages that belong to the same, Circum-Baltic, linguistic area and share a considerable number of isoglosses (Koptjevskaja-Tamm and Wälchli, 2001). I will argue that this type of perfect must be considered as a Northeast Circum-Baltic isogloss that is grounded in the reoccurrence of the morphosyntactic and functional parallel pattern (with some language-specific deviations) and in the same path of evolution across these languages.

I will build up the historical analysis following the relative chronology of the development of the perfect in abstract chronological stages from A to E (sections 3–7) as illustrated in Table 1.

I proceed as follows. In section 3 I put forward the evidence that in Slavic, Baltic and West Fennic, the original meaning of the construction under consideration was a P-oriented resultative. In section 4, I present argumentation for the aspectual reanalysis of the original P-oriented resultative into an impersonal perfect. In section 5 I argue that the impersonal perfect became accessible to two readings, namely, the passive- and the active-like one and it is the active-like one that gave rise to the NR perfect. Section 6 deals with the subsequent development of the core argument that develops from subject to object by the gradual loss of subject behavioral and coding properties and then acquisition of object properties. In section 7, I pursue the evolution of the Agent phrase in the impersonal perfect construction that enables an overt reference to the Agent of the preceding action at the end of its syntacticization. In section 8, I will argue that the NR perfect is the source of the agented perfect constructions in the other Circum-Baltic (CB) languages discussed in the paper. In section 9, I sum up the main conclusions.

## 2. Perfect with non-prototypical subject in the East of the Circum-Baltic sprachbund

In this section I provide a short description of the perfect construction under investigation in the eastern CB languages. This perfect is formed out of an auxiliary (usually omitted in the present perfect) and a participle formed with an allomorphic *-n-* or *-t-* suffix. The participle, originally a P-oriented resultative participle (see section 3), functions in the modern language mainly as a past passive participle. Both arguments of the perfect predicate out of a transitive verb are realized non-

<sup>2</sup> Since Keenan (1976) it is a well-established fact that grammatical relations in general are subject to prototype effects. Thus, I will refer to a prototypical subject (designated by both behavioral and coding properties) as *subject* and to a non-prototypical subject, i.e., exhibiting only some of these properties, as *subject-like*.

<sup>3</sup> The origin of perfect- and, then, of the aspect-split ergativity from a possessive construction was also suggested for other languages as Old Persian and Old Armenian (inter alia, Trask, 1979:397–398). In light of this paper, it might be worthwhile to reconsider the historical development of the perfect in these languages as well, cf., e.g., an interesting approach in Bynon (2005) who assumes possessor ascension and later reanalysis of the raised possessor into syntactic subject for Indic and Iranian.

prototypically: the subject argument is case-marked with an adessive-like PP consisting of the preposition *u* ‘at’ and a genitive case-marked NP, while the object argument is case-marked with the nominative:

- (1) **U menja ruka porane-n-o** (North Russian)  
 at me hand:NOM.SG.FEM injure-PPP-NOM.NEUTR.SG=INVAR  
 ‘I have injured my hand’.

In some North-western Russian varieties the object argument can be case-marked with accusative. The subject passes most syntactic subject tests (Timberlake, 1975).

It was Holvoet (2001a) who has first argued that there are striking similarities across the (“possessive”) perfect constructions in Latvian, Estonian and Votic consequently interpreting them as areally induced:

- (2) **Viņam viss jau bija izteik-t-s** (Latvian)  
 him:DAT.SG all:NOM.SG already be:PST.3 say-PPP-NOM.SG.M  
 ‘He had already said everything (he had to say)’.

- (3) **Tal oli kõik juba öel-tud** (Estonian)  
 him:ADESS.SG be:PST.3.SG all already say:PPP  
 ‘He had already said everything (he had to say)’. (from Pihlak, 1993:81)

- (4) **Silla on vetettu bābuškalt üvä tširja kāsa** (Votic)  
 you:ADESS.SG be:PRES.3.SG take:PPP from your grandmother good letter  
 ‘You have taken a good letter along from your grandmother’. (from Ariste, 1968:29)

In fact, these perfect constructions in Estonian, Latvian and Votic are exactly parallel to the NR perfect as in (1) formally and functionally. Additionally, the Standard Russian and Karelian also have this construction:

- (5) **Ob etom u nego uže vse skaza-n-o** (Standard Russian)  
 about this at him already all:NOM.SG.NEUTR say-PPP-NOM.SG.NEUTR  
 lit. ‘About this he has already said everything’.

- (6) **Meil on puut jo varušettu** (Karelian)  
 we:ADESS.PL be:PRES.3.SG firewood already prepare:PPP  
 ‘We have prepared the firewood’./(Lit. ‘In ours, the firewood is prepared’).<sup>4</sup>

The first, subject-like argument is encoded with the case marking that also otherwise has functions typical for the dative domain (as, e.g., Experiencer, External Possessor or Beneficiary) in these languages. I will refer henceforth to the adessive case in Fennic, the adessive PP in Russian and the dative case in Latvian as DAT in order to make the structural parallelism across languages more transparent and not to dwell on morphology. While the languages mentioned follow coherently this pattern, only Lithuanian deviates in two respects: first, the meaning of the construction is further developed here: it only has evidential meaning; secondly, the Agent is case-marked with the genitive case instead of the expected dative, cf. (7):

- (7) **Senų miškai mylé-t-a** (Lithuanian)  
 old:GEN.PL forest:NOM.PL love-PPP-SG.NEUTR  
 ‘The elders [apparently] loved the forests’. (Jablonskis, 1922:141)

The object-like argument is case-marked with nominative in Standard Lithuanian and accusative in some eastern varieties. The construction is marginal and is restricted mostly to intransitive predicates. Nevertheless, it must be considered as belonging to the perfect pattern (Jung, 2007:154). The main arguments for that are: (i) it has etymologically and functionally the same morphology as the Latvian and Russian perfect and it has functionally the same morphology as the Estonian, Votic and Karelian perfect; (ii) the original meaning of the Lithuanian Evidential construction was as a perfect (Holvoet, 2007:92ff), as a close historical relationship between perfects and evidentials is well-attested cross-linguistically (cf. Bybee et al., 1994; Bybee and Dahl, 1989:73–74; Litwinow, 1989). Under this view, an attestation of the evidential reading with the NR perfect

<sup>4</sup> This and other examples from Karelian are from Zajkov (2000:161–162).

(cf. Wiemer and Giger, 2005:39) is no surprise. Additionally, in a broader perspective, Polish and Finnish attest somewhat corresponding pattern:

- (8) *Zawiezio-n-o go do szpitala* (Polish)  
 carry-PPP-NOM.INVAR he:ACC to hospital  
 '[They] brought him to the hospital'.
- (9) *On ol-tu myös sitä mieltä, että ...* (Finnish)  
 be:AUX.3.SG be-PPP.INVAR also this:PART.SG opinion:PART.SG that  
 '[People] have also been of the opinion, that ...' (from Karlsson, 1987:151)

The Polish construction matches etymologically the NR perfect construction, nevertheless, there are considerable synchronic differences between them in terms of the lexical-aspectual restrictions, function and even morphological interpretation (Lavine, 2005; Wiemer, in press-a, in press-b). Furthermore, there is no overt slot for the Agent in Polish and Finnish, which is restricted to non-referential and/or generic participants only.

In sections 3–7, I try to uncover the historical development of the pattern behind the particular constructions in the languages of concern. Though acknowledging the divergent properties of each of the constructions I will state in section 8 that – given the broader areal perspective – these constructions attest striking correspondences in their developments that simultaneously affect different structural domains (as morphology, morphosyntax and syntax) and are, hence, unlikely to be independent from each other (Heine, 2009, cf. also the *Principle of complex correlation* in Seržant, 2010).

### 3. Resultative construction. Stage A

It is common in the literature to depart from the passive function of the *-n/-t*-construction which is not entirely correct, even though some researchers subsume Patient-oriented resultatives under passive. The *resultative* has been thoroughly investigated and established as an independent grammatical category in Nedjalkov and Jaxontov (1988). Resultatives encode or profile the phase immediately after the event referred to by the underlying lexical verb has been accomplished. The core participants do not interact anymore at this phase and are no longer parts of the same situation. This is why the resultative focuses only on one of the former participants and, hence, is intrinsically semantically intransitive. I maintain that the *-n/-t*-derivatives are historically resultatives to begin with. They profile the resultant state at the Patient participant of a two-place verb and match, thereby, the notion of the *P-oriented resultative* in Nedjalkov (2001) and Nedjalkov and Jaxontov (1988:9), abbreviated *PR*. In turn, the passive function *sensu stricto* does not alter the semantic transitivity and, more generally, the event structure referred to by the underlying lexical verb. With regard to the argument structure and diathesis, resultatives are, thus, closer to (e.g., anticausatively used) middles than to passives, since both are semantically intransitive and both have only one valence, namely, that of Patient.<sup>5</sup> The assumption of a middle-like category as the source for the *-n/-t*-predicate accounts straightforwardly for its latter split into the active and passive continuants (section 4) while the assumption of the original passive function makes the rise of the active continuant less plausible. Furthermore, as stated in Haspelmath (1990), Croft (1998:56–57), Nedjalkov (2001:937–938) and Nedjalkov and Jaxontov (1988:49), it is typologically more probable for resultatives to develop into passives than vice versa. Apart from these general considerations the data of the languages suggest also the resultative function to begin with.

First, there is comparative evidence. The *-n/-t*-participles are sometimes assumed to have had a passive meaning already in the Indo-European (IE) proto-language on the basis of their function in Latin, late Sanskrit or Slavic. Though, this has not been their original function as witnessed by the most ancient IE languages as Ancient Greek, Hittite or Early Vedic. These derivatives distinguished even morphotactically from the IE 'true' participles by not having tense-aspect markers as did 'proper' participles in IE. They matched, instead, deverbal adjectives (inter alia, Meier-Brügger, 2002:289; Szemerényi, 1990:352) and were intrinsically intransitive, since an adjective can modify only one NP (Haig, 2008:41). The rise and grammaticalization<sup>6</sup> of the *-n/-t*- construction is *not* an Indo-European inheritance and can be found only in some less archaic languages such as Latin, Late Sanskrit or in Baltic and Slavic (Brugmann, 1895; Danylenko, 2005a:352–353), while it is not attested in the earliest Sanskrit Vedic, Hittite, Avestan, Tocharian or Ancient Greek.

<sup>5</sup> I refer here only to a parallelism as to the argument structure and semantics of middles and resultatives. Notably, the etymological relation between 3rd pers. middle and the neuter form of a resultative participle as suggested in Schmalstieg (1988:36–37; 2000:370) is controversial.

<sup>6</sup> By grammaticalization I mean here the development of a grammatical category of resultative, i.e., the change from a rather lexical item (deverbal adjective) into a grammatical item (resultative participle), cf. for such a definition of grammaticalization Heine et al. (1991:2) and Traugott (2003:645). Generally, I conceive of grammaticalization as a diachronic development that consists of changes occurring in at least two dimensions: (i) changes in the formal or morphosyntactic organization and (ii) changes in functional semantics. As regards (i), I understand grammaticalization as a process that *increases internal dependency* (Haspelmath, 2004, cf. also Givón, 1979:208). Under increasing internal dependency would fall the increasing obligatoriness of the adessive PP argument (from an adverbial to the subject), its grammatical or, more precisely, syntactic entrenchment in terms of the change from a "loose" adverbial towards a subject with subsequent syntactic properties of binding reflexive anaphora and coreferential control properties. As for (ii), the change (sometimes referred to as *semantic bleaching*) "where a lexical unit or structure assumes a grammatical function, or where a grammatical unit assumes a more grammatical function" is an instance of grammaticalization (Heine et al., 1991:2), cf. also Traugott (2003:645). This change is found in the development from a resultative adjective (a rather lexical item) into the perfect participle (a grammatical item).

In addition to the evidence from IE, the assumption of an originally resultative meaning is supported by evidence from the modern languages. In Baltic and East Slavic, most transitive verbs, independent of their aspectual value, can form a passive. Though not all verbs form passive in the same way. There is a quasi-allomorph relation between the passive of perfective and imperfective verbs in East Slavic and a less developed one in Baltic. The passive construction formed with the *-n/-t*-participles and the copular auxiliary, etymologically related to the NR perfect (section 5), is lexically restricted to almost only perfective verbs in both Modern and Old Russian.<sup>7</sup> The analogous Baltic passive (perfect) construction resembles this picture. Here, it is mainly restricted to telic verbs only. According to the understanding of passive *sensu stricto* adhered to in this paper, the main function of the passive as a morphosyntactic operation is to make the object NP available to clause-linking operations (such as binding, control, etc.) as well as for discourse and pragmatics purposes. These functions themselves do not motivate aspectual restrictions on the lexical input, the selectional properties of the passives being rather sensitive to transitivity. It is, thus, likely that the aspectual restrictions with the (Old) Russian and Baltic *-n/-t*-passives are features that have been inherited from the historical source construction of these passives and are not motivated by their synchronic function. The assumption of an originally resultative function of the construction formed with the *-n/-t*-participles and the copular auxiliary provides the necessary historical explanation for these aspectual restrictions, since resultatives generally can be formed only out of telic verbs, i.e., verbs that have a natural result in the structure of the event they encode. This assumption is additionally supported by direct evidence from several Old Slavic branches (Havránek, 1937:101–102); cf. (10) from Old Russian:

- (10) *K večeru že priběgoša ljudije:* (Old Russian)  
 in the evening came people  
*inъ rane-n-ъ inъ nagъ*  
 another:NOM wound-PR-NOM another:NOM naked:NOM  
 [lit.] ‘Toward evening people arrived; some wounded, others naked’. (Primary Chronicle, Cod. Laur. 1377, 225<sup>v</sup>)

Example (10) from Old Russian attests the resultative meaning of the construction of concern. This meaning is also preserved in Modern Russian, especially with the copula left unexpressed (cf. Tommola, 2000:463).

While the Lithuanian *-t*-passive also has resultative, alongside perfect or aorist, readings (cf. Geniušienė and Nedjalkov, 1988), Latvian allows only for resultative and perfect readings.<sup>8</sup> Thus, the aorist or perfect meaning in Russian and Lithuanian can be accounted for as historically secondary meanings with regard to the general developmental cline *from resultatives to perfects, then, to aorists and, then, to a past tense* that is widely attested cross-linguistically (inter alia, Brey, 1987, 1998:90–91; Kuryl-owicz, 1964:141ff; Serebrennikov, 1974:234–236). It seems natural and expected to find the etymological correlates across the cognate languages occupying different positions on this cline. In this vein, the Modern Polish counterpart which does not encode any aspectual or phasal information, but only past reference, can readily be explained as being the most progressive with regard to this cline. In turn, the exclusively perfect or resultative meaning of the Latvian passive perfect represents the most archaic state of affairs (Holvoet, 2001b:170). Note that typically for the resultative construction, the Latvian passive perfect (cf. 11) does not allow an Agent complement.

- (11) *Māja ir uz-cel-t-a* (Latvian)  
 house:NOM.SG.FEM be:AUX.PRES.3 PERF-build-PR-NOM.SG.FEM  
 (i) ‘The house is built’. (resultative)  
 (ii) ‘The house has been built’. (perfect, dynamic, with no overt Agent reference)  
 (iii) \*‘The house has been built by X’. (perfect, dynamic, with Agent reference)

The lack of an overt slot for the Agent in the Latvian *be*-passive is yet another piece of evidence for the original resultative meaning, since P-resultatives provide neither semantic nor syntactic valence for the Agent.<sup>9</sup>

Concerning the data in West Fennic, I equally postulate a similar development from the P-oriented resultative to an impersonal passive perfect. Indications for that are: (i) no Agent phrase was originally possible (and is still impossible in Finnish); (ii) the Fennic construction is also formed exclusively with the auxiliary ‘to be’; (iii) the meaning is stative and not dynamic (Vihman, 2002:5); (iv) the participle used in this construction is also P-oriented; (v) Old Finnish attests verbal agreement with the Patient NP (de Smit, 2006).

Summing up, the selectional restrictions in East Slavic and selectional tendencies in Baltic as well as the scope of the aspectual meaning of the *-n/-t*-passives, and the properties of the corresponding construction in Fennic are all traces of the original, P-oriented resultative meaning of this construction. The nominative argument is a full-fledged subject of the

<sup>7</sup> The imperfective verbs form a passive via reflexive verb forms in Modern Russian as well as mainly via the passive *present* participles in *-m-* in Old Russian (Seržant, 2009) and Lithuanian.

<sup>8</sup> Baltic has generalized the *to*-forms, there are no longer allomorphic *-n*-forms.

<sup>9</sup> By assuming the original resultative meaning one can also explain such synchronically unmotivated but apparently archaic forms as Lith. *bū-t-a* ‘been’, Latv. *bū-t-s* ‘idem’, Russ. dial. *by-t-o* ‘idem’. This verb originally had telic meaning ‘to arise’ and therefore was compatible with the resultative construction, cf. Vedic *bhū-ta-* ‘is, arisen’, whereas such verbs as *to be* and *to arise* are usually not compatible with passive operations across languages.

resultative predication at this and the next stage: it is the only valence-bound argument of the copular resultative, being marked with the prototypical subject case (nominative) triggering verbal agreement and having other subject properties.

#### 4. P-Resultative develops into perfect. Stage B

The original resultative meaning has been, however, very early extended to include the meaning of perfect. In the following I will illustrate this change.

The aspectual difference between the resultative and the perfect is not very clear-cut, and the situation in a given language may represent an intermediate stage between the resultative proper and the perfect. However there are a number of parameters or properties (P) that can allow for distinguishing between resultatives and perfects. I will base my analysis on the following properties listed in Nedjalkov and Jaxontov (1988:15–17):

*P1:* The resultative expresses a state achieved by the preceding action, while the perfect denotes the persistent relevance of the preceding action, experiential meaning, inclusive meaning, etc. (cf. also Maslov, 1988:65ff);

*P2:* The after-effects of the action expressed by the perfect are non-specific, and they are not attributed to any particular participant of the situation;

*P3:* The perfect of transitive verbs is usually transitive, while resultatives are usually intransitive;

*P4:* The perfect can be derived from any verb, unlike the resultative (only telic verbs);

*P5:* Different restrictions hold of the collocation with time adverbials.

Applying these properties to the Old Russian data, one finds that the resultative construction has acquired a dynamic reading very early, exhibiting a number of perfect properties already in the earliest language layer, cf. (12):

- (12) *To bylo vъ ty rati i vъ ty plъky,* (Old Russian)  
 this was in those wars and in those armies,  
 A sicei rati ne slyšano  
 but this:GEN.SG.FEM war:GEN.SG.FEM not hear:PR.NEUTR.SG  
 ‘This had been during those wars and in those armies, but this war has not been heard of’. (Igor’s Tale around 1185–1187)<sup>10</sup>

The poet – to give some context – describes all previous wars and armies and concludes that such a war, as this one now, is unheard of. The main verb is *slyšati* ‘to hear’. As it is a morphologically marked \*slūs-yā- or \*slūs-ē- (with the lengthening of the root vowel and the suffix \*-yā- or \*-ē-) durative/iterative verb it violates the P4 of resultatives hence witnessing a rather perfect function. Furthermore, the meaning of (12) is rather experiential, which is not typical for resultatives but is well attested among perfects (P1). The abandonment of the lexical restrictions on the verb can also be observed in (13) (from Nikiforov, 1952:318), where the main verb *davati* is morphologically marked as iterative (and hence not capable of having a result):

- (13) *Masterov vsjakix bylo mnogo ...* (Middle Russian)  
 craftsmen different was many  
 dengi im davany na rukodelje napered  
 money:NOM.PL they:DAT.PL give:ITERAT.PR.NOM.PL for production in advance  
 ‘There were all kinds of craftsmen ... money (was) **given (to each of them)** for their production in advance’.  
 (Domostroj, 64, 15th–16th cc.)

The abandonment of lexical-aspectual restrictions on the construction substantiates the development from more specific or lexically restricted contexts to more general ones and, hence, an increase in grammaticalization (cf. Bybee, 2003:605; Wiemer, 2004:295). The concomitant *semantic bleaching* is instantiated in the rise of a more general meaning of the construction, namely, the perfect meaning “*relevance to the moment of speech*”. In (14) P1 and P2 are violated:

- (14) *Aže budet’ svobodnyj človekъ ubitъ* (Old Russian)  
 if be.AUX.FUT.3.SG free:NOM.SG.M man:NOM.SG kill:PR.NOM.SG.M  
 – 10 grivenъ serebra za golovu  
 10 grivna of silver for head  
 ‘If a free man is killed [then] 10 grivnas of silver [have to be paid]’. (Smolensk Treaty I. 14–15, from 1229)

<sup>10</sup> This and other examples are from Borkovskij and Kuznecov (1963:393–394). The falsification theory of Igor’s Tale was argued against in Zaliznjak (2004).

In the Treaty between merchants of Smolensk, Riga and Gotland coast the rules for merchants are established. The rule above prescribes that if any merchant were to kill a free man, then a fine of 10 grivnas had to be paid. The meaning of the PR construction in the protasis is the one of perfect and not of a resultative because it refers to the after-effects of a certain action rather than its result, matching the semantics of a perfect, cf. (P1). What is even more important for the further discussion is that the Agent is clearly present in the semantic structure of the situation denoted by the protasis clause in (14), since the whole issue is about one who – if he would kill a free man – will have to take the consequences of this act, namely, to pay 10 grivnas (P2). The Agent that was not present in the semantic structure at the stage of resultative (except implicationally) now acquires certain discourse relevance: even though the merchants are not explicitly mentioned here the whole rule is about them. Thus, the Agent is non-referential but it is the context-topic.

Originally the resultative encoded only the resultant state while the preceding action was only an implicature of that. As the examples (12)–(14) show, this implicature of the preceding action becomes more fore-grounded and more discourse-relevant. The fore-grounding of the preceding-action component of the meaning endows the overall semantics of the construction with a certain degree of dynamicity, since a preceding action, especially when encoded by a transitive verb, is per se dynamic and transitive. The more the focus shifts from the resultant-state onto the preceding-action, the more relevant becomes the Agent participant. The emergence of the Agent into the semantic structure of the event referred to by the construction gets conventionalized in the course of time, and the Agent becomes the second semantic valence though without having a slot for an overt realization to begin with. This made the construction *impersonal*, since the human Agent participant is semantically implied but cannot be specified (cf. Frajzyngier, 1982). It becomes a convenient means to express perfect situations with an indefinite or generic Agent. This is manifested in Old Russian in frequent expressions such as *skaza-n-o* 'it has been said (that)...', *reče-n-o* 'idem', *slyša-n-o* 'it has been heard (that)...', *prikaza-n-o* 'it has been commanded...', *vele-n-o* 'idem', etc. One finds also intransitives with this construction in the older language layer, as for instance in Old Russian *vysěda-n-o* (lit.) 'it has been stood up' (Russkaja Pravda, 13th c. Kuz'mina, 1993:176), *reče-n-o* (Primary Chronicle, Cod. Laur. 225<sup>1</sup>) 'it has been spoken, said', and other examples in Lomtev (1956:199ff), Danylenko (2003).<sup>11</sup> There are also a number of examples in Old Lithuanian: *ne girdė-t-a* 'no one has heard' (lit. 'not heard') (DP 406<sub>38</sub>), *yr apsakī-t-a* 'it has been told' (DP 394<sub>20</sub>, 545<sub>4</sub>), etc. (Ambrasas, 1979:198.13); similar examples are attested in Old Latvian (Ambrasas, 1979:199) and Middle Belarusian (Lomtev, 1941:281).

The construction becomes the main means for encoding perfect situations with non-referential Agents probably because the other perfect type that exists or existed in these languages is historically based on the Agent-oriented resultative participles. Being focused on the Agent it was, therefore, less compatible with generic or indefinite Agents.<sup>12,13</sup> This distribution of both perfect forms still holds in Estonian and Finnish, where the perfect with referential Agents is expressed by the originally A(gent)-oriented resultative construction (based on *-(n)ut/-*(n)yt participle in Finnish), whereas the perfect with a non-referential Agent is expressed by the originally P-oriented resultative construction (based on *-ttu* participle in Finnish). In Modern Latvian and Lithuanian both perfect forms can be used to encode non-referential Agents. However, only the P-oriented resultative can be used to encode the impersonal reading in a context with a third person topic.

## 5. Split into the active impersonal and passive impersonal perfect. Stage C

In the previous section I have presented argumentation showing a very early aspectual shift from the resultative into the perfect. Concomitant with and, as a consequence of this aspectual shift, the resultative predicate acquires the second semantic valence, namely, the Agent. At this stage, the Agent is not a syntactic valence, the whole predicate remaining to be syntactically monovalent but semantically bivalent impersonal (henceforth: *impersonal perfect*).

Since the nominative argument of the impersonal perfect construction is co-referential with the verb's object elsewhere in the active paradigm, it would be reasonable to assume that as to voice, one has to analyze this construction as an impersonal *passive* perfect construction, i.e., a construction with a demoted subject and promoted object. However, such an analysis would only be plausible if the nominative argument would behave as the subject of the impersonal perfect (cf. similar argumentation in Haspelmath, 1990:27). Yet, there are indications that the nominative argument started losing subject- and acquiring object properties in some contexts very early, whereas in other contexts it remained the subject throughout. This twofold behavior of the nominative argument should be considered a manifestation of a split into active- and passive-like interpretations of the impersonal perfect. Another kind of evidence for the rise of the active-like reading is mirrored, among other things, in the fact that the construction started admitting more intransitive verbs than before. One finds a number of such cases in Old Russian, cf. *vyse-eda-n-o* 'it has been sat' (Russkaja Pravda, 13th c. Kuz'mina, 1993:176) or *reče-n-o* (Primary Chronicle, Cod. Laur. 1377, 225<sup>1</sup>) 'it has been said', in Old Latvian and Old Lithuanian, cf. (15) from Ambrasas (1979:198):

<sup>11</sup> However, the number of occurrences of the *-n/-t*-construction with intransitive verbs is comparatively small in the oldest texts. This can be explained by the existence of the subject-oriented resultatives in *-l-* and *-vb(š)-* that are more productive with intransitive verbs.

<sup>12</sup> This second type of perfect is formed on the bases of the active past participle (A-oriented resultative) and the copula. Baltic has preserved here the IE A-oriented resultative participle in *\*-wōs/-us-*, while Slavic has developed new A-oriented perfect participles in *-lo-* (New Preterit in Modern Russian).

<sup>13</sup> In fact, the typologically rare co-occurrence of both types of resultatives (i.e., A- and P-oriented) must be regarded as a common Circum-Baltic feature/isogloss in Finnish, Estonian, North Russian (Trubinskij, 1988), Latvian and Lithuanian, as well.

- (15) *Bus kalbeta Czebuwims* (Old Lithuanian)  
 be:FUT.3 speak:PR.NEUTR inhabitant:DAT.PL  
 ‘It will be said to inhabitants.’, cf. the source: ‘*man wird sagen zu den einwonern*’.

Another piece of evidence for the split into two readings is provided by the modern languages. The copular *-n/-t-* construction is typically represented by two different constructions in Modern Polish, Belarusian, in some North Russian varieties, and in East High Lithuanian varieties, one of which functioning as a proper passive and the other one rather as impersonal active, cf. the active-like type in (16) and the proper passive in (17):

- (16) *Bi-t-o Piotra* (Polish)  
 beat-PR-SG.INVAR Peter:M.ACC  
 ‘[They] beat Peter’.
- (17) *Piotr byl bi-t-y przez kaprala* (Polish)  
 Peter.m.NOM was.m beat-PR-SG.M.NOM by corporal  
 ‘Peter was beaten by the corporal’.

Whereas (16) is traditionally considered an impersonal active construction, (17) is the proper passive in Polish. Nevertheless, both constructions equally originate from the *-n/-t-* perfect construction which still attested both passive and active readings in Old Polish (Wiemer, in press-a).

The reason for this split can be found in the original semantics of the construction of concern. Being a resultative construction, it was neither active nor passive but rather a sort of middle: (i) its subject was rather a prototypical patient (in the sense of Dowty, 1991); (ii) the predicate, being inherently stative, was very low on the transitivity scale in terms of Hopper and Thomson’s (1980) transitivity parameters (Danylenko, 2003); (iii) it removed the Agent of a transitive verb from the event structure; and (iv) it was incompatible with other middles (e.g., based on reflexive periphrasis).

Typically for middles, it had affinities to both passive and active interpretations. After the aspectual shift to perfect, subsequently, acquisition of certain dynamicity and the rise of the semantic valence of Agent, it became automatically ambiguous as to voice. The evidence for this “intermediate stage” with both passive and active readings can be provided from those CB languages where the archaic state of affairs was maintained, as in Old Polish (Wiemer, in press-a), Old Russian (cf. examples above and 18 below), Latvian, Estonian and Finnish. In these languages, both readings are still available with this construction and a certain interpretation as to voice is ambiguous as was pointed out by Pihlak (1993:54, 56–57) for Estonian, cf. (19). Thus, in (18), the pragmatics (cf. the word order) suggests a rather active interpretation (i), while the morphology (given the neuter gender of the core argument) does not provide any disambiguation:

- (18) *I po ouspeni ego položeno byst’ ego telo v cirkvi* (Old Russian)  
 and after dormition his put:PR.NEUTR be:AOR.3.SG his body:SG.NEUTR in church  
 (i) ‘[They/(God’s will)] had placed his body in the church after his dormition’.  
 (ii) ‘His body was placed in the church after his dormition’. (Primary Chronicle, Cod. Laur. 1377, 123<sup>v</sup>).
- (19) *Linn on välismaailmast eraldatud* (Estonian)  
 city:NOM is from outside world isolate:PR  
 (i) ‘There has been isolating the city from the outside world’. (impers. active)  
 (ii) ‘The city is isolated from the outside world’. (impers. passive)

Finnish and Estonian the active-like interpretation is more probable because of its morphosyntactic properties as, e.g., non-agreement of the nominative argument with the predicate and the accusative case marking with personal pronouns. However in some cases, agreement with the predicate is possible (cf. Erelt, 1977:173 for Estonian and de Smit, 2006:90 for Finnish), and in such cases the second, passive-like interpretation must be favored, as the core argument behaves here more like a subject, cf. other examples in Christen (1998:55). The emancipation of the active-like reading was manifested in the gradual change at the core argument of the construction from subject to object, while the passive-like reading remained stable in this respect.

## 6. Subject becoming object. Stage D

After the active-like reading of the impersonal perfect had been conventionalized the subsequent syntactic and morphosyntactic remodelling could be instigated (cf. Traugott, 2003:642). In the course of further evolution, the active-like reading has developed an active syntactic and morphosyntactic interface, emerging into a full-fledged active construction. The nominative argument loses subject behavioral and, subsequently, coding properties and acquires object behavioral and, subsequently, coding properties over the course of time (sections 6.3–6.6), while there arises a new covert impersonal



subject (*PRO*). At the end of the development, i.e., in the NR perfect, the former functions as an object (Jung, 2009:216; Lavine, 1999).

The syntactic active was acquired by the construction not at once and not to the same extent across the Eastern CB area. Thus, the earliest Old Polish already attests the accusative case-marking with this construction (cf. Shevelov, 1968) which implies that this language was the first to complete the change from the original subject of the resultative into a full-fledged object of the impersonal construction. There were different kinds of processes going on alongside the reinterpretation of the nominative argument into object (e.g., the abandonment of the restrictions on transitivity allowed also for grammatical middles to occur with the construction, aspectual shifts along the cline *resultative*→*perfect*→*aorist*→*preterite*, etc.).

I believe that the development from subject to object by the nominative argument was gradual starting with early instances of contextually driven subject/object-ambiguity (6.1, 6.2) continued by the loss of behavioral (6.3) and, subsequently, coding (6.4) subject properties, and finally acquiring the object coding properties (6.5).

### 6.1. Impersonal use, context of ambiguity

Baltic and Slavic generally form impersonals via the *null subject* construction that leaves the verb's active morphology unchanged but suppresses the subject, cf. personal (19) and its impersonal null subject counterpart in (20):

(20) *Mindaugas sakė, kad ...* (Lithuanian)  
Mindaugas say:PST.ACT.3 that  
'Mindaugas said that ...'

(21a) *Sakė, kad ...* (Lithuanian)  
say:PST.ACT.3 that  
'[People/they] said that ...'

Now, the impersonal perfect of an intransitive verb, as in (21a), functions in the same way:

(21b) *(Pa)-sakyta, kad ...* (Lithuanian)  
(PERF)-say:PR that  
'[People/they] have said that ...', literally '[It] has been said that ...'

This structural parallelism between the impersonal perfect construction in (21b) and the active impersonal null subject construction in (21a) along with the same functional semantics provided a link for the reanalysis of the impersonal perfect toward active. Thus, the Old Lithuanian translations render the Polish *-t/-n*-impersonal with either an impersonal *-t*-perfect or, more commonly, with the null subject construction (Danylenko, 2005b; Matthews, 1955:359). Remarkably, while the Old Lithuanian construction still had the perfect or even resultative meaning, the Polish construction had already developed into a past reference, which is the reason why the Polish *-no/-to*-construction was often replaced by the preterit in Lithuanian.

Originally a resultative, the *-n/-t*-construction was also compatible with telic intransitive verbs. Such a compatibility with intransitive or even unaccusative verbs (cf. Latvian *bū-t-s*, Lithuanian *bū-t-a* and North Russian *by-t-o* [lit. 'it has been' from the verb *to be*) facilitates an active-like reading cross-linguistically (cf. Barðdal and Molnár, 2003; Frajzyngier, 1982:288–289).

### 6.2. Negated clause, context of ambiguity

Another ambiguity context was provided by negation. In earliest Old Russian (Igor's Tale from the 12th c., cf. 12 above), the nominative case-marked core argument – originally subject of the resultative construction – became the target of the genitive of negation rule. This rule targets direct objects, which change into genitive, when the predicate is negated. Nominative subjects, in contrast, do not generally show up in the genitive case when the predicate is negated. Exceptions are only subjects of some unaccusative verbs that generally show properties of objects. From this it follows that, when the impersonal perfect predicate was negated, there arose a case of subject/object-ambiguity as illustrated in the examples below, where (22a) contains the negated impersonal (plu)perfect and (22b) the negated active (plu)perfect, but the subject in (22a) and the object in (22b) are not morphologically distinguished:

(22a) *i ne bĕ sego slyšano* (Old Russian)  
and no be:AUX.ACT.AOR.3.SG this:GEN.SG hear:PR.NEUTR.SG  
*v d[ь]nĕxъ pervyx[ъ] v zemli Rusĕstĕ*  
in the first days in the Russian land  
'And this was not heard of in the first days in the Russian land.' (Primary Chronicle, Cod. Laur. 1377, 75<sup>v</sup>)

- (22b) *si bo ne bešša predi* (Old Russian)  
 these:NOM.PL PRT no be:AUX.ACT.AOR.3.PL before  
*slyšali slovese knižnogo*  
 hear:PART.ACT.PERF.NOM.SG.PL word:GEN.SG book:ADJ.GEN.SG  
 ‘As they have not heard before about the written word’. (Primary Chronicle, Cod. Laur. 1377, 41<sup>f</sup>)

The negated impersonal (plu)perfect (originally *P-resultative*) predicate in (22a) triggers the genitive case-marking on the core argument (*sego*), exactly as does the negated *active* perfect in (22b). Even though *slovese knižnogo* corresponds to the direct object in the affirmative counterpart of (22b) while *sego* corresponds to the subject in the affirmative counterpart of (22a), both share the same formal (coding) properties, namely, the assignment of a typical object case (genitive) and the failure to trigger verbal agreement. Thus, the impersonal perfect based on the *-n/-t*-construction – when negated – fails to promote the underlying object argument into subject position thereby establishing the link for its interpretation as a direct object. This type of ambiguity can also be found in the other languages of concern. In fact, in the Finnish and Estonian impersonal perfect, it is obligatory to assign partitive case under negation instead of the otherwise regular nominative case. Contrast affirmative (23a) with negated (23b) from Finnish:

- (23a) *Hän on nähty kaupungilla* (Finnish)  
**he/she:NOM** COP see:PPP in town  
 ‘He/she has been seen in town’.
- (23b) *Häntä ei ollut nähty kaupungilla* (Finnish)  
**he/she:PART** NEG COP be:PPP see:PPP in town  
 ‘He/she had not been seen in town’. (Karlsson, 1987:152)

This ambiguity under negation is also attested in Baltic, cf. (24) from Latvian (dial.):

- (24) *Tur vair nav neviena spuoka radzāts* (dial. Latvian)  
 there anymore NEG.COP:PRES.3 no-one:GEN.SG ghost:GEN.SG see:PR  
 ‘There wasn’t seen any ghost anymore’. (Endzelins, 1951:563)

In sections 6.1 and 6.2 I have provided some of the ambiguity contexts that have downplayed the formal and functional distinctions between subject and object at the core argument, facilitating, thereby, its reanalysis toward object; other ambiguity contexts include neuter NPs with Nom = Acc, several masculine and feminine NPs with Nom = Acc, partitive genitive NPs headed by a quantifier and intransitive and even unaccusative lexical input.

### 6.3. Loss of behavioral subject properties, object-like behavior. Stage D.1

In this Subsection I present data that attest loss of the syntactic subjecthood by the core argument which loses its original control and binding properties. The consequence of this process is the concomitant rise of a new syntactic subject position, an empty category or, technically PRO, (as suggested for Polish in Lavine, 2005) restricted to exclusively indefinite or generic animates. It overtakes these subject properties indicating an ongoing activation process of this predicate (cf. Maling and Sigurjónsdóttir, 2002), i.e., an ongoing and gradual approaching to the active prototype.

I assume that the activation on the syntactic level had been accomplished around the 16th c. in Russian. Even though being inherently covert, this argument acquires controlling properties as can be observed from the following example from monastery book keeping records (from Nikiforov, 1952:319):

- (25) *Da Ø jedučī k Moskve...* (Middle Russian)  
 and [PRO]<sub>i</sub> drive:CONV to Moscow ...  
 Ø *pokupano ovsa i sena*  
 [Impersonal Agent]<sub>i</sub> buy:PR.NEUTR.SG oats:GEN.SG and hay:GEN.SG  
 ‘On [their] way to Moscow [they] have bought some oats and hay’.

The reference of the logical subject of the converb *jedučī* is controlled by the covert argument evincing thereby its presence in the syntactic structure of the perfect construction. Furthermore, even though the co-reference of the converb’s subject with the matrix subject is not obligatory in Old and Middle Russian (Potebnja, 1888[1958]:163–166, 185–187, 311–315; Zaliznjak, 1995:164),<sup>14</sup> there is, nevertheless, a strong preference toward such co-reference

<sup>14</sup> I thank here one of the reviewers for making me aware of this fact.

(cf., inter alia, Zaliznjak, loc.cit.).<sup>15</sup> From that it also follows that the core argument *ovsa i sena* ‘oats and hay’ is not the subject of the PR anymore, since it fails to control the converb.

The same reanalysis of the syntactic role of the core argument took place in Baltic as well. Here too, the original subject of the PR construction was reanalyzed as an object. However, this process has been accomplished to a different degree in the Baltic languages: while the Latvian perfect construction has acquired only the syntactic properties typical of an active clause (D.1), its Lithuanian counterpart has subsequently acquired also the coding properties (D.2, D.3). Thus, Latvian represents a more archaic state of affairs. The following example illustrates that the nominative argument of the impersonal perfect fails to control the reflexivization which is instead controlled by the generic PRO subject:

- (26) *mīti radušies, kad, pārstāstot kaut ko unikālu,* (Latvian)  
 myths appeared when retelling some thing unique  
*ø<sub>i</sub> tas<sub>j</sub> darīts no sava (i/\*<sub>j</sub>) ierobežota skatījuma,*  
 PRO it:NOM.M do:PR.M from REFL.POSS.GEN.SG narrow:GEN.SG view:GEN.SG  
*padarīts sev (i/\*<sub>j</sub>) “pieejamāks”,*  
 do:PR.M REFL.DAT more-acceptable  
*pieliekot varonim ... netikumū.*  
 adding to-figure defect  
 ‘The myths have appeared because, while retelling something unusual, this has been done on the bases of one’s own narrow understanding, and because it has been made “more acceptable” to oneself.’  
 ([http://www.odiseja.lv/intervijas/citas\\_atbildes/42/209/](http://www.odiseja.lv/intervijas/citas_atbildes/42/209/))

Another property, indicative of the activation is the lack of selectional restrictions on the lexical input (cf. Maling and Sigurjónsdóttir, 2002:102). Thus, unaccusative verbs (27) or modal verbs (27), (28a) generally are not compatible with passive constructions cross-linguistically but the *-to*-perfect does attest them:

- (27) *Kā aizmirst cilvēku ar kuru ir būs kopā četri gadi?* (Latvian)  
 how forget person with whom is be:PR together four years  
 ‘How can one forget the person with whom one has been together for four years?’ (<http://www.pajauta.lv/question/list/155/1147/ka-aizmirst-cilveku-ar-kuru-ir-but-kopa-cetri-gadi/>)
- (28a) *Šveices latvieši saka,* (Latvian)  
 Switzerland’s Latvians say,  
*ka Šveicē pa pastu nav varēts balsot.*  
 that in-Switzerland by post not.be:PRES.3 can:PR vote:INF  
 ‘Switzerland’s Latvians say that it has not been possible to vote via post in Switzerland’.  
 (<http://www.civciv.lv/25523727631>)

The last example is also interesting as it shows yet another similarity with an active predicate: it provides the controller of the infinitival PRO, namely, the covert PRO subject of the impersonal perfect. Thus, Lavine (2005:86) argues that one of the active properties distinguishing the rather syntactically passive Ukrainian construction from its syntactically active Polish counterpart is the absence with the former but the presence with the latter of a controller for the infinitival PRO. This argument can equally be advanced to (28a) as well as for analogous cases in Lithuanian (with *pradėta* ‘begun’), Estonian and Old Russian (cf. the examples with *poč(j)ato* ‘begun’, *kazano* ‘commanded’, *poslano* ‘sent’ in Potebnja, 1899[1968]:341–342). Additionally, given the unlikelihood of a passive analysis with a modal verb (as in 28a), one has to analyze the Latvian construction as a less prototypical active containing a covert (indefinite or generic) syntactic subject. The consequence is that the nominative argument fails to behave as a full-fledged syntactic subject of the clause. An impersonal perfect, as in (28a), is yet not an instance of the bi-clausal or long-distance passive (as defined in, inter alia, Perlmutter and Postal, 1984; Zushi, 2001), since the matrix predicate – given that input – cannot be analyzed as a proper passive. Thus, (28a) patterns syntactically (yet not morphologically and morphosyntactically) with (28b) which is an indication of its affinity to the active voice:

<sup>15</sup> The first attestations of the converb – as an invariant form of the respective participle in the predicative position – is as early as 14c. (inter alia, Ivanov, 1990:361). Historically, the underlying form of the converb is nominative singular which is why it is preferably controlled by matrix subjects.

- (28b) *Šveices latvieši saka,* (Latvian)  
 Switzerland's Latvians say,  
*ka Šveicē pa pastu nevarēja balsot.*  
 that in-Switzerland by post not.can: PRES.3 vote: INF  
 'Switzerland's Latvians say that it was not possible to vote via post in Switzerland'.

And, indeed, the next example attests a lack of even morphological traces of raising to subject:

- (29) *Kā rezultātā tie tiekot izķerti, pirms māju sākts būvēt,*  
 as result they being selected before house: ACC.SG begin: PR.NOM.M build: INF  
 'As a result they [scil. designs] reportedly are selected, before having started to construct the house'. (<http://www.diena.lv/arhivs/labsajuta-var-pievilt-13021583>)

Similarly, the *-t-* construction in (30a) patterns with its unambiguously active counterpart in (30b) by not raising the subject of the participial clause<sup>16</sup>:

- (30a) *Nereti dzirdēts vecākus sakām, ja viņi būtu zinājuši,* (Latvian),  
 unseldom hear: PR.m.SG.NOM parent: ACC.PL say: CONV if they would known  
*ka valstī būs krīze*  
 that in-country will-be crisis  
 'Frequently one hears parents saying that, if they had known, there would have been a crisis in the country ...'  
 ([www.ventasbalss.lv/blogs/read/238](http://www.ventasbalss.lv/blogs/read/238))

The corresponding active verb form exhibit exactly the same structure as in (30a):

- (30b) *Viņi dzirdēja vecākus sakām, ka...* (Latvian)  
 they: NOM hear: ACT.PAST.3 parent: ACC.PL say: CONV, that  
 'They heard the parents saying that ...'

This and other examples illustrate that the *-t-* construction has acquired active-like syntactic behavior. Similar examples are attested in Lithuanian, where, as Ambrazas (1979:205) states, the object analysis is especially likely when the nominative argument occurs in the post-predicative position, i.e., in the linear position typical of an object.

#### 6.4. Loss of coding subject properties. Theoretical bases

In section 6.3, I discussed the syntactic reanalysis of the construction leading to the loss of the syntactic subject properties by the core argument. In the following section, I present data illustrating the subsequent loss of the subject coding properties (as defined in Keenan, 1976). However, before turning to the data, I reinforce the relevance of the coding properties for subject and object analysis in terms of three criteria that will be applied in the following sections.

The correlation between morphological coding and the respective syntactic role does not always hold, and there are oblique case-marked subjects attested cross-linguistically (Andrews, 1976; Barðdal, 2006:53–54; Zaenen et al., 1985). Nevertheless, I maintain that syntactic roles and the respective coding properties are coupled, at least, in the diachronic perspective. Thus, subjects generally do not tend to lose the ability of triggering verbal agreement but rather to acquire it in the course of time (as witnessed in, inter alia, Allen, 1995; Cole et al., 1980; Falk, 1997). On the other hand, with objects, the reverse is found: objects tend to lose nominative-verb agreement (if they happen to have it) in the course of syntactic canonization, but not to acquire it. Hence, the first criterion is as follows:

- (i) *if a core argument loses the nominative case marking and/or the ability to trigger subject-verb agreement then this can be regarded as an indication that it undergoes development into an object.*

Furthermore, although there are non-prototypical subjects that do not trigger verbal agreement, there are no nominative case-marked subjects that do not trigger verbal agreement (in an accusative language with subject-verb

<sup>16</sup> One could object that the accusative case could be stipulated syntactically, cf. the English construction with the accusative case-marked subject of the complement clause: *I hear him saying...* also known as *accusativus cum participio* (AcP). However, even if one were to assume that the Latvian example in (30a) were an instance of AcP, the very fact that the PR predicate can take the AcP complement speaks for its formal transitivity as AcP usually combines only with transitive predicates, cf. e.g., English \**it was heard him saying*, which is ungrammatical as opposed to the grammatical *I hear him saying*. As has been mentioned, any passive analysis given the modal input verb is unlikely.

agreement). On the other hand, there are nominative adverbials and nominative objects that do not trigger verbal agreement. Thus, the second, synchronic criterion is:

- (ii) *a core argument which is case-marked with nominative but does not trigger subject-verb agreement can only be a non-prototypical object and never subject*, since nominative subjects without the ability of triggering agreement are never found.

Haspelmath's *Behavior-before-Coding* principle (Haspelmath, 2010) can be used as a third criterion, reformulated as follows for this context:

- (iii) *if a core argument acquires accusative case marking in the course of time then it acquires (more prototypical) objecthood*.

In some of the discussed languages, one finds that all three criteria are met. Needless to say, the process of restructuring of original subjects into objects is a gradual process, and it succeeds to a different extent across the languages under investigation: some of them are more archaic, while some are more innovative, developing a perfect construction with a full-fledged subject and object.

#### 6.5. Nominative objects and loss of agreement, criteria (i) and (ii). Stage D.2

As was mentioned above, the earliest case of loss of agreement is the application of the genitive-under-negation rule (see section 6.2) that led to the loss of agreement in negated contexts. One of the earliest examples in an affirmative context is from a document from 12 to 13c. (Krys'ko, 1995:503)<sup>17</sup>:

- (31) *Na outrija slyšano bystь sьmьrtь iulijana prestouьpnika* (Old Russian)  
 on morning hear:PR.NEUTR be:aor.3.SG death:NOM.SG.FEM of Julian villain  
 'The death of Julian the villain was heard of in the morning'. (Vita Athanasii Alex. 8a)

There are a number of occurrences attesting lack of agreement in the Primary Chronicle but also in the more colloquial, administrative documents from the 16th c., cf. (32) from bookkeeping (Nikiforov, 1952:319):

- (32) *A vo vsem v tom delano monastyrju pribylь* (Middle Russian)  
 and in all in this do:PR.NOM.SG.NEUTR monastery:DAT.SG.M profit:NOM.SG.FEM  
 'And in all these things [they] made profit for the monastery'.

Note that in both cases (31) and (32) the nominative argument follows and does not precede the verb as typically do objects in Russian. Later on, the neuter form of the PR was generalized in the most North Russian varieties (Novgorod, Beloje Ozero):

- (33) *Dom sastroeno tut byl* (North Russian)  
 house:M build:PR.NEUTR here be:PST.M  
 'The house was built here'.
- (34) *Krovat' byla kupleno* (North Russian)  
 bed:FEM be:FEM buy:PR.NEUTR  
 'The bed was bought'.

At the same time, the varieties toward the South (Velikije Luki, Pskov) employ the form of the masculine nominative in *-n* or *-t* as the default form (cf. Kuz'mina, 1993:136), exactly as does Latvian, thus yielding a micro-area. The only reminiscent difference from the passive correlate here is the Agent marking, which is still the adessive PP in Modern Russian and the dative NP in Latvian, instead of the instrumental case in Russian and genitive case in Latvian which are typical Agent case-markings in proper passives:

- (35) *U vas vse zapisano* (Modern Russian)  
 at you everything:NOM.SG.NEUTR written:PR.SG.NEUTR  
 'You have written everything down'.
- (36) *Jums viss ir uzrakstits* (Latvian)  
 you:DAT everything:NOM.SG.M be:AUX.PRES.3 written:PR.SG.M  
 'You have written everything down'.

In (35) and (36), the nominative argument agrees with the PR in number, gender and case. Thus, Modern Russian and Latvian no longer exhibit non-agreeing nominative objects in this construction. One can object that the loss of the ability to trigger

<sup>17</sup> The absolutely earliest example of the absence of agreement can be regarded *medь vь veselie dano bystь b(o)gьmь* 'The honey has been given by God for joy' from the Izbornik of Prince Svjatoslav (1076), whereby *medь* 'honey' (nom.sg.m.) does not agree with the participle (PR) *dano* 'given' (nom.sg.neutr.). However this example has been shown to be misinterpreted by Shevelov (1969). Note also that the word *medь* itself is an ancient Indo-European word and in the ancient languages was neuter, cf. Ancient Gr. *methu* (neutr.) and Vedic *madhu* (neutr.). Thus, one could also admit that in this Earliest Old Russian text the original gender is still preserved but was changed later to masculine, since neuter *-u*-stems become extinct in Old Russian.

verbal agreement has never taken place in these languages instead of claiming a retrograde and thereby a more complex development. While this is possible for Latvian, there is evidence for Standard Russian that the abandonment of the ability to trigger verbal agreement did take place at an earlier stage. Thus, there is evidence that the Moscow Russian of the 17th c., which is the ancestor of Modern Standard Russian, originally did have non-agreeing nominative in this construction (Nikiforov, 1952:322ff.), cf. the letter from Peter the Great to Duke F. Romodanovskiy (from 1695):

- (37) *Da otъ menja tebě poslano měxъ* (Early Moscow Russian)  
 and from me you:DAT.SG send:PR.NEUTR pelt:NOM.SG.M  
 'And there was sent a pelt from me to you'.

Belarusian and Ukrainian attest loss of agreement from the end of 14th c. as illustrated by the examples in Filin (1972:495) and Lomtev (1941:290), cf. also Danylenko (2003:224–264). *Terminus ante quem* for Russian is the second half of the 16th c., cf. the massive data provided in Nikiforov (1952).

Note that it is indeed the loss of the agreement property and not a purely phonological process. An important argument in favor of this view is the fact that in Old Russian, North Russian and Standard Russian, the PR is inflectional elsewhere. A purely phonological explanation would not be able to account for the divergence between the invariance in the impersonal perfect and the ability to inflect as a modifier. Furthermore, such bleaching phonological changes as *akanje* (conflation of unstressed *a* and *o*) are only attested in the Western part of North Russian, not throughout its area. Additionally, in Lithuanian, where the structure of the end syllables is generally well-preserved, an assumption of a purely phonological/phonetic change would be simply unmotivated. Hence, the generalization of the neuter singular form of the PR in East Slavic (also Polish) and Lithuanian reflects the underlying syntactic change from subject to object.

The next stage in the loss of agreement is found when even the auxiliary (e.g., in the pluperfect) no longer agrees with the nominative argument. This stage is clearly reached only in the varieties of Novgorod and Pskov (Matveenko, 1961:111):

- (38) *Denъgi položъn bylъ* (North Russian)  
 money:NOM.PL put:PR.m.SG be:AUX.NEUTR.SG  
 'Money had been placed down'. (from Matveenko, 1961:114)

The auxiliary *bylъ* does not show agreement with the nominative argument *denъgi*. In this case agreement is completely abandoned. The lack of agreement ability in North Russian varieties of Pskov and Novgorod corresponds to the same property of the nominative argument in Finnish and Estonian, where the copula does not agree with the nominative object in number (Holvoet, 2001a:367; Blevins, 2003:487), cf. Finnish:

- (39) *On keitetty kahvit* (Finnish)  
 be:3.SG.PRES COOK:PPP coffee:NOM.PL  
 '[One] has brewed coffees'.

In Lithuanian the PR has the ability to inflect otherwise, but shows up only with the generalized (historically neuter singular) form in the impersonal perfect construction, cf. Lithuanian dial.:

- (40) *Raktas buvo prikabinta prie durim* (dial. Lithuanian)  
 key:NOM.SG.M was hang:PR.NEUTR at door  
 'The key was hung at the entrance'. (from Roduner and Privitelli, 2006:406).

To sum up, one finds a gradual loss of the agreement property by the nominative argument starting out from the context of negation or quantified NPs in the earliest language layers. In later language the agreement property disappears first sporadically and then more frequently also in affirmative contexts. In the North Russian varieties, in some High Lithuanian varieties and in both Finnish and Estonian there is only one generalized form of the PR without the ability of being inflected in this construction. In Finnish, Estonian and North Russian varieties of Novgorod and Pskov the nominative argument fails to trigger agreement also on the auxiliary - a fact that instantiates the complete abandonment of the agreement property.

This diachronic process represents the consequences of the on-going syntactic reanalysis of the nominative argument in the impersonal perfect construction toward objecthood. These are the first (i) and the second (ii) criteria that require such an analysis of the data. Hence, even though the syntactic role of the nominative argument was a point of some discussion in the literature it seems likely that it starts exhibiting object-like behavior already from the 16th century on.<sup>18</sup> The very evolution

<sup>18</sup> Cf. Matveenko (1961:110), Nikiforov (1952:321) and others for an object analysis and recently Trubinskij (1988:403) for a subject analysis. The problem, as was pointed out by Kuz'mina and Nemčenko (1971:56ff), might also be grounded in the fact that this status may vary across North Russian varieties, thus, e.g., for Standard Russian there is no doubt that this argument must be analyzed as subject. The diachronic development from subject to object is mirrored in the dialectal diversity: the more peripheral varieties to this change preserve a more archaic state of affairs, while the more central are more innovative.

of the nominative argument from subject into object was facilitated by the fact that the non-agreeing nominative objects are and were existent in the CB languages in other constructions that do not assign structural nominative such as described in, *inter alia*, Ikola (1959:43–45), Jung (2007:149), Koptjevskaja-Tamm and Wälchli (2001:667–668), Matthews (1955:370), Roduner and Privitelli (2006:419), and Timberlake (1974).

#### 6.6. Acquisition of object coding properties. Criterion (iii). Stage D.3

The last stage in the evolution from subject to object is the acquisition of the prototypical object coding property, i.e., accusative case, manifesting the adoption of the morphosyntactic properties to the new function (cf. Haspelmath, 2010; Traugott, 2003:642). Though it is important to stress that the acquisition of accusative is found in all CB branches, as one finds accusative case marking in East Slavic (Old and Modern Ukrainian and Belarusian [Lopatina, 2000:139], sporadically in North Russian varieties [Matveenko, 1960:352]), West Slavic (Polish), Baltic (Lithuanian East High varieties), and there is also accusative case marking of the core argument with personal pronouns in Fennic languages. The accusative object marking is first attested in the Russian texts from the 16th to 17th century (Borkovskij and Kuznecov, 1963:398–399; Filin, 1972; Jung, 2007:149; Lopatina, 2000:139; Sprinčak, 1960:102):

- (41) *Skorbnovo slovom polzovano* (Middle Russian)  
 sad:ACC = GEN word:INSTR treat:PR  
 ‘[They] treated the sad one with a word’.

Belarusian (cf. Lopatina, 2000:139), Polish and Eastern High Lithuanian have also introduced accusative case marking on the core argument according to the more general strategy in these languages of abandoning nominative objects (cf. “activation” in Polish in Gołąb, 1975:29; Holvoet, 2001a:376–377 for Lithuanian; Danylenko, 2005a:364; Danylenko, 2006):

- (42) *Savo žemę mylėta* (Eastern Lithuanian)  
 REFL.GEN country:ACC.SG.F love:PR.NEUTR.SG  
 ‘People used to love their [native] country’. (Example from Jablonskis, 1922:141)

- (43) *Odkryto małą wyspę* (Polish)  
 discover:IMPR. (< PR.NEUTR) small:SG.ACC island:ACC  
 ‘[People/they] discovered a small island’.

Several scholars believe that the accusative case-marking constitutes a morphological copying from Polish into Ukrainian, Belarusian (*inter alia*, Moser, 1998:340, Shevelov, 1969:201, Wiemer, *in press-a*) and into some Eastern Lithuanian vernaculars (Danylenko, 2005b). However, a case assignment pattern can hardly be borrowed without the underlying syntactic structure. That is to say, only because the core argument in Ukrainian, Belorussian and Lithuanian has acquired syntactic objecthood (stage D.1) it was capable of acquiring the accusative case typically associated with this syntactic role.<sup>19</sup> Thus, the syntactic reanalysis preceding and triggering the acquisition of the accusative case marking does represent, in my eyes, a shared innovation and, thereby, an areal phenomenon that goes from Polish to North Russian along the Baltic sea including Ukrainian, Belarusian, Lithuanian and Latvian. The residual examples from Belarusian (also Middle Belarusian, Shevelov, 1969:211) support this view intermediating between North Russian, Fennic and Polish, Lithuanian, Ukrainian. The gradual acquisition of accusative case across the languages is expected under the wave model approach. Thus, Polish, Ukrainian and Belarusian very early attest it (cf., *inter alia*, Danylenko, 2006; Filin, 1972:490; Shevelov, 1968, 1969), whereas it is not attested in Old Lithuanian (cf. Danylenko, 2005b).

Finnish and Estonian, being more archaic, exhibit accusative case-marking only on personal pronouns:

- (44) *Sinut on nähty* (Finnish)  
 you:ACC.SG be:COP.3.SG see:PR.INVAR  
 “People have seen you.”

To sum up: the nominative case marking of the object is abandoned and replaced by the accusative case at this relative-chronological stage in Polish, Belarusian, Ukrainian, in some East High Lithuanian varieties and in some North-western Russian varieties. On the other hand, Standard Russian, which did have non-agreeing nominative objects in their earlier stages, and Latvian have accommodated the construction to the parallel and cognate *-n/-t*-passive construction (cf. section 4)

<sup>19</sup> I will argue elsewhere that it is natural for nominative objects of any kind to acquire accusative case marking by starting with personal pronouns as languages usually disallow non-agreeing but nominative case-marked personal pronouns.

that resulted in the restoration of the agreement property and, hence, subjecthood. Note that also other languages of the area attest the strong impact from the passive correlate. Thus, as correctly pointed out in Lavine (2005), the Ukrainian impersonal construction differs from its Polish correlate by having a number of typical passive features except for the accusative case-marking of the core argument. It allows for the agent complement case-marked with instrumental that is otherwise used with the true passive constructions. Lithuanian is similar in the latter by having generalized the adnominal genitive case-marking in the active and passive correlates.

## 7. Rise of the Agent and subject phrase. Stage E

This section is devoted to the introduction of the Agent phrase into the impersonal perfect construction and its grammaticalization into the subject. A short overview of the state of affairs in the languages under investigation (section 7.1) is followed by a diachronic analysis for how the agented perfect construction came into existence (section 7.2).

### 7.1. State of affairs

In this last stage of the evolution, the impersonal active perfect construction has incorporated a DAT adverbial that originally denoted primarily “adessive” location (X is in the closure of Y), but metaphorically also beneficiary, experiencer and the external possessor. I subsume these readings under the notion of *affectedness* or the *affected participant*, since being in the closure of Y implies locational or physical affectedness. In turn, beneficiary and experiencer imply abstract or mental affectedness; the external possessor also encodes affectedness (Haspelmath, 1999:111). The affected participant acquires the Agent reading through frequent, pragmatically induced co-reference with the Agent of the preceding action. The presence of such an Agent slot in the perfect construction (henceforth: *agented* perfect) is found in Latvian, Estonian, Karelian, Votic, Standard Russian, and North Russian. However, only in North Russian the DAT constituent exclusively denotes the Agent of the preceding action and no longer an affected participant.

#### 7.1.1. Fully grammaticalized possessor-like marked subject

It is only North Russian that has a fully grammaticalized or syntacticized (in terms of Givón, 1979:207–222), valence-bound non-prototypically marked subject (with the PP *u* ‘at’ + genitive, henceforth: *adessive PP*), cf.<sup>20</sup>:

- (44) *U menja ruka porane-n-o* (North Russian)  
 at me:GEN hand:NOM.SG.F injure:PPP-NOM.NEUTR.SG = INVAR  
 ‘I have injured my hand’.

The adessive PP fulfills most of the subjecthood tests such as *equi-NP deletion*, *control of reflexivization* and *topicality/first position in the unmarked word order* (Timberlake, 1975), but it cannot trigger verbal agreement.<sup>21</sup> The re-introduction of agreement with the PR in some less central varieties is certainly due to the influence of the Standard language. The subject status of the adessive PP in North Russian must be dated as early as the 16th century (cf. examples in Danylenko, 2005a:362; Filin, 1972:499; Jung, 2009:214; Timberlake, 1974:16). The non-prototypical subject marking with the prepositional phrase *u* + gen. is often extended to intransitive verbs too, which originally had only nominative subjects in this construction, cf. (45a) versus (45b):

- (45a) *Molodye uexano* (North Russian)  
 young:PL.NOM go away:PR.INVAR  
 ‘The young people have gone away’. (from Matveenko, 1961:119)

- (45b) *Zdes’ u skotiny byto, xoženo* (North Russian)  
 here at cattle:GEN be:PR.INVAR go:PR.INVAR  
 ‘Cattle have been here and walked here’. (from Matveenko, 1961:123)

The subject position was initially occupied only by animate nouns (Maslov, 1949:96; Matveenko, 1961:125). However, after this case marking was reanalyzed as the subject case marking, it started to admit inanimate NPs too, cf. (46) and (47):

<sup>20</sup> In some varieties around Pskov one also finds bare genitive without the preposition, which is however likely to be an innovation caused by a phonetic loss of the preposition (Roduner and Privitelli, 2006:417).

<sup>21</sup> Koptjevskaja-Tamm and Wälchli (2001:690) report that there are cases attested, where there is agreement between the adessive PP marked subject and the PR. I assume that this has to be considered a “ghost-phenomenon” for the time being, since there are no indications of that otherwise in the literature. Note also that the PR form is generalized to one invariant form in North Russian.



- (46) *Zdes' verno u dožž'a byto* (North Russian)  
 here surely at rain be:PR  
 'Rain has been here surely'. (from Matveenکو, 1961:125)
- (47) *u cvetov sovsem zasoxnuto* (North Russian)  
 at flower totally dry.up:PR  
 'The flowers are totally dried up'. (from Markova, 1987:169 apud Wiemer, in press-a).

The subject slot in (46)–(47) is occupied by an inanimate NP, which would have been impossible at earlier stages or outside North Russian. Note that this is one of the very rare examples where a metaphorical personification can be excluded, as stressed by Matveenکو (loc.cit.). Nevertheless, it can be regarded as an increase in generality in the sense of Bybee (1985), exhibiting a high degree of grammaticalization.

The Lithuanian Evidential in (48) historically also goes back to the impersonal active perfect both structurally and etymologically (Holvoet, 2007:92ff, cf. Roduner, 2004):

- (48) *Ten šuns bėgta* (Lithuanian)  
 there dog:GEN.SG run:PR.NEUTR.SG  
 'A dog must have run here (there are foot-marks)'. (Holvoet, 2007:90, my glossing)

The only structural difference with the North Russian agented perfect is the case marking of the subject argument. Instead of an external-possessor-like case marking (DAT), Lithuanian assigns to it genitive case, i.e., the case-marking that is typical for the internal, adnominal possessor in this language. Thus, the Lithuanian structure exhibits only partial correspondence to the North Russian agented perfect, which is also not unexpected as Lithuanian is geographically situated further away from the epicenter of the agented perfect pattern (see section 8).

The adnominal origin of the Lithuanian genitive (Holvoet, 1995) contrasts with the adverbial origin of the adessive PP in North Russian (section 7.2) indicating deviating grammaticalization paths.<sup>22</sup> The Lithuanian development must thus be considered as to some extent independent from NR. The very fact, however, that Lithuanian had developed a perfect construction with a non-prototypically marked subject on the basis of the same input construction is, however, striking and suggests certain areal influence. I will argue below that the parallel passive construction affects the impersonal construction to various degrees in the languages of concern. One can thus assume that the morphological make-up of the Agent phrase of the Lithuanian perfect, subsequently Evidential, might have been adjusted to the parallel genitive in the passive construction in *-t-*.

Now, turning to the morphosyntactic properties of the NR perfect, it is important to stress here that DAT in the NR perfect and genitive in the Lithuanian Evidential do not encode emerging ergativity as has been suggested in the literature (cf., inter alia, Danyleenko, 2005a:350–351; Jung, 2009:218; Lavine, 1999; Orr, 1989; Schmalstieg, 1988:30ff). First, there is no syntactic ergativity in terms of S/O pivothood as there is only A/S pivothood as defined by Dixon (1979, 1994). There is, secondly, no morphological ergativity either. Even though S and O can be encoded alike (with Nom) in many vernaculars, occurrences as (45b) or (46) do violate Dixon's definition of morphological ergativity (Dixon, 1979, 1994), since S is coded like A due to the analogical spread of the adessive PP here. Furthermore, the DAT never encodes the prototypical Agent in East Slavic, Baltic or Fennic, which is quite untypical of an ergative Case. Even with the perfect, though it is always co-referential with the Agent of the preceding action, it still preserves the semantics of Affectedness with no ability to control the event that has already taken place. Generally, the perfect predicate is semantically low on the transitivity scale in terms of Hopper and Thompson (1980) and, thus, does not entail prototypical agenthood that could be encoded by an ergative. The NR perfect differs in that respect crucially from past/perfective split-ergativity in, e.g., the Modern Indian or Iranian languages in that it did not undergo the aspectual shift from perfect to aorist or to a past tense that would raise the whole predication on Hopper and Thompson's (1980) transitivity scale and make the DAT case-marking match with true agents. Instead, the DAT argument marks involuntary agents, experiencers, possessors (in the possessive construction), prepositional objects (as, e.g., *sprosit u + gen* "to ask someone"), etc. in the area (cf. Seržant, forthcoming).

It has sometimes also been suggested that the North Russian agented perfect construction or the Lithuanian Evidential construction are a subtype of the passive in these languages (cf. Keenan and Dryer, 2007). Neither the perfect nor the Evidential construction can be regarded as a passive for several reasons: there is no promotion and no demotion in terms of discourse and syntactic pivothood. The construction is structurally identical with an active construction in any other tenses of the same verb. The interpretation of the corresponding Evidential in Lithuanian as passive has been rejected by previous research (see Blevins, 2003:495–499; Holvoet, 2007:90ff). The fact that both the adessive PP in North Russian (Timberlake, 1975) and the genitive NP in Lithuanian (Blevins, 2003:499; Matthews, 1955:356) behave as subjects and the nominative/accusative argument as an object, excludes the passive analysis. Thus, the agented perfect construction is an active perfect

<sup>22</sup> I thank two reviewers for drawing my attention to this point.

construction, whereby the low transitivity of the perfect predicate rooted in the stative/perfect aspect is encoded at the clause level with non-prototypical subject marking and in some varieties with non-prototypical, nominative, object marking.

7.1.2. *Less grammaticalized possessor-like constituent: Standard Russian, Belarusian, Latvian, Estonian, Votic, Karelian*

In Standard Russian, Belarusian (Karskij, 1956:320, 358; Potebnja, 1899[1968]:339–344), Latvian, Estonian, Votic and Karelian, the impersonal perfect with a DAT-marked constituent that provides reference to a person is attested as well, cf. examples in (49)–(52):

- (49) *U menja mašina otremonirovana* (Standard Russian)  
 at me:GEN car:NOM.SG.FEM repair:PR.NOM.SG.FEM  
 (lit.) '[There] is a repaired car at me'.  
 'I have repaired the car'. or 'My car has been repaired (by someone)'.
- (50) *Man mašina jau ir salabota* (Latvian)  
 I:DAT car:NOM.SG.F already be:3.PRES repair:PR.NOM.SG.FEM  
 (lit.) '[There] is a repaired car at me'  
 'My car has already been repaired'./'I have already repaired the car'.
- (51) *Silla on vetettu bābuškalt ūvā tširja kāsa* (Votic)  
 you:ADESS.SG be:PRES.3.SG take:PPP from your grandmother good letter  
 'You have taken a good letter along from your grandmother'. (from Ariste, 1968:29)
- (52) *Meil on puut jo varušettu* (Karelian)  
 we:ADESS.PL be:PRES.3.SG firewood already prepare:PPP  
 'We have prepared the firewood'./'(Lit. 'In ours, the firewood is prepared').

The DAT marked constituent denotes in these languages a broad range of meaning including location, affectedness and external possession (cf. Garde, 1985), and it is not necessarily co-referential with the Agent of the preceding action. Nevertheless, there is a tendency also in this type of perfect for the DAT to acquire the meaning of the Agent of the preceding action, as pointed out by Holvoet (2001a:374–375) for Latvian and Estonian, cf. examples (53)–(54):

- (53) *Viņam viss jau bija izteikts* (Latvian)  
 him:DAT.SG all:NOM.SG already be:PST.3 say:PR.SG.M  
 'He had already said everything (he had to say)'. (from Holvoet, loc.cit.)
- (54) *Tal oli kõik juba öeltud* (Estonian)  
 him:ADESS.SG be:PST.3.SG all already say:PPP  
 'He had already said everything (he had to say)'. (from Holvoet, loc.cit.)

The same is true also for Standard Russian:

- (55) *U nego ob etom uže vse skazano* (Standard Russian)  
 at him about this already all:NOM.SG.NEUTR say:PR.SG.NEUTR  
 'He has already said everything about this'.

To sum up: the variety of the agented perfect attested in Latvian, Estonian, Standard Russian, Karelian, and Votic largely corresponds to the North Russian agented perfect. Thus, the possessor reading of the DAT constituent can be excluded in (53)–(54) (Holvoet, 2001a:374–375) and (55); also, the meaning of affectedness is not intended and only that of the Agent of the preceding action is available. I consider this fact, following Holvoet (2001a:374–375), as evidence for a certain progress in grammaticalization of the DAT constituent into the Agent phrase of the construction in these languages. An Agent of an active clause is always encoded by the subject in these languages, and, indeed, the DAT constituent in Latvian and Standard Russian develops certain subject properties as, e.g., the ability to control reflexive anaphora or occupying the first position in an unmarked word order but not, e.g., *equi-deletion* control. The former properties attest the shift toward *increasing internal*

*dependencies* (Haspelmath, 2004, cf. also Givón, 1979:208). These syntactic and semantic properties witness a less grammaticalized variety of the agented perfect.

### 7.2. From the impersonal perfect to agented perfect. Stage E

I maintain, following Matthews (1955), that the P-oriented resultative construction, subsequently, the impersonal perfect construction is formally a subtype of the copular construction. I claim, in contrast to the “possessive-hypothesis” (see section 7.3), that the agented perfect arose in the CB area from a construction in which the DAT constituent, originally a Free-Dative-adverbial, gradually becomes a valence-bound argument of the resultative/perfect predicate and acquires subject properties as a consequence of the conventionalization of an exclusively Agent reading. This happened through a number of semantic changes in the meaning of the DAT, whose original semantic scope was affectedness, as has been pointed out above. The semantic link between the affected participant and the Agent of the preceding action emerged only after the resultative construction had acquired mainly perfect meaning, i.e., became more dynamic, thereby foregrounding the role of the Agent. Affectedness implies that the affected participant is in a close relationship with the resultant state and the preceding action.

The frequent co-referentiality of the affected participant with the Agent of the preceding action facilitated the foregrounding and conventionalization of the Agent reading. Thus, the affected participant encoded by DAT is very often co-referential with the Agent of the preceding action in the less grammaticalized variety of the perfect of Standard Russian, Latvian and Estonian. The Agent implicature has been conventionalized and became an integral part of the meaning of DAT in these languages. The integration of the Agent reading leads to utterances as in (53)–(55) above where only the Agent reading is present, and the ambiguity between the affected participant and the Agent is abandoned. In North Russian and in Lithuanian the Agent reading became the only available reading and the reading of the affected participant was lost. This semantic reanalysis led to the syntactic reanalysis, since in these languages the Agent of an active clause is typically encoded by the syntactic subject. The syntactic pivot functions of the underlying covert subject PRO of the impersonal perfect have been overtaken by the DAT constituent here. The paradigmatic pressure instigated by the correlation between the Agent and its encoding as subject in other TAM (*tense-aspect-mood*) forms of the given verb must have additionally facilitated this process.

The adverbial origin of the subject slot does not only coherently account for the attested developmental stages of this construction, but also explains why, in some peripheral branches, Agent markings other than the one of an external or predicative possessor are used (such as the ablative or inessive PP). This is because the historical derivation from an adverbial with reference to a person affected does not predict the morphological make-up of the Agent phrase in contrast to the possessive-hypothesis (see section 7.3). Even more, it accounts for correlations between the agented (active) perfect and the corresponding *-n/-t*-passive perfect constructions assuming an adverbial origin of the agent slot for both. Thus, the rise of the passive agent complement and the rise of the non-prototypical subject in the agented perfect are analogous, while the corresponding syntactic interface is dependent on the voice interpretation of the predicate.

This agented perfect of the CB area, thus, differs crucially in its grammaticalization path from the Standard Average European (SAE) ‘*have*’ possessive perfect, which is historically based on the *habeo*-type possessive construction (cf. Hopper and Traugott, 2003:65). With the agented perfect there is no reanalysis of what has been originally two predicates into one (as in the case with the SAE perfect), there is no concomitant ‘raising’ into subject of the participial phrase’s logical subject (as is the case with the SAE perfect, cf. Hopper and Traugott, 2003:65) and there is no creation of a new subject slot.

### 7.3. Objections against the “possessive-hypothesis”

It is the general opinion that the NR perfect has emerged out of the possessive *mihi est* construction (henceforth “possessive hypothesis”), cf., inter alia, Drinka (2003), Jung (2009), Kuteva and Heine (2004), Maslov (1949), Panzer (1984), being thus allegedly parallel to and borrowed from the SAE perfects. The only difference is the type of the possessive construction: *habeo* or *mihi est*. The SAE perfects have emerged out of the *habeo*-type possessive construction that was extended by a resultative Small Clause embedded under the possessee (inter alia, Salvi, 1987). There are, however, several inconsistencies with this hypothesis which, as I suggest, should be dropped. In what follows I present a more detailed criticism of the “possessive-hypothesis”.

Possessive perfects are extremely rare outside Europe, which is why Drinka (2003:9), Heine (2009:43) and Kuteva and Heine (2004) postulate Scandinavian (Vikings) influence on North Russian. While the Viking influence on (Old) North Russian, at least on its Western part, does not seem to be problematic, it seems improbable to assume a contact-induced development for exactly the agented perfect. First of all, one has to take into account that the Common Slavic perfect formed with the auxiliary ‘to be’ and the past perfect active *-l*-participle still had perfect functions at the earliest stage of Old Russian, i.e., in the period of alleged contacts with Vikings. Second, in Old Russian there was competition between both possessive strategies: the *mihi est* and the *habeo* type, the latter being widely attested not only in the oldest birch bark charters (cf. N 752 from 1080 to 1100 in Zaliznjak, 1995:220) but also in the Primary Chronicle (cf. 56):

- (56) *Imexou bo obyčai svoi* (Old Russian)  
 have:IMPF.3.PL because traditions:ACC/NOM.PL REFL.POSS.NOM/ACC.PL  
*i zakonъ o[tъ]cъ svoix[ъ]*  
 and law:NOM/ACC.SG father:GEN.PL REFL.POSS.GEN.PL  
 ‘For they had their own traditions and laws of their fathers’. (Primary Chronicle, Cod. Laur. 1377, 5<sup>1</sup>)

On the language contact account one would expect that the perfect construction in North Russian would be based on the *habeo*-type of the possessive construction in North Russian as it is exactly this type the Scandinavian perfect is based on. Thus, the account based on the possessive construction and language contact with Scandinavian is not motivated at this point (for further criticism see Danylenko, 2005a).

Another problem with the possessive hypothesis is that the impersonal perfect and the agented perfect of Baltic and Slavic cannot be separated from each other diachronically and, in some languages, also synchronically (contra Kuteva and Heine, 2004:62, following Moser, 1998:340 and Shevelov, 1969:201)<sup>23</sup>: both constructions had exactly the same aspectual/phasal meaning, both constructions are formally identical (except for the Agent slot) as both go back to the same verbal morphology (*-n/-t*-participles plus copular auxiliary), the same morphosyntax (nominative, and as a later development in some branches accusative object). Furthermore, the impersonal perfect construction is attested throughout the historical corpora, whereas the agented perfect construction appears late and only in some branches. Thus, the impersonal perfect is likely to be the ancestor of the agented perfect with respect to the historical attestation as well. Hence, there is no way to deny the etymological relation of the agented and impersonal perfect.

Furthermore, the etymological connection with the *mihi est* possessive construction explains only the type of the *-n/-t*-construction with the Agent case-marked with DAT. Historically, however, there was competition between different types of adverbials that occurred in the impersonal perfect construction with the Agent reading, reaching as far back as Old Church Slavonic (cf., inter alia, Danylenko, 2005a:359–361 with references). Note that for this point it is irrelevant whether the construction of concern should be interpreted as rather active-like or passive-like in a one or another case. It is only important that there were originally other types of adverbials available but which cannot be etymologically related to the possessive construction. Thus, in North-western Russian rarely and in Belarusian and Ukrainian dialects more often, the Agent can also be marked with instrumental case, cf. (Danylenko, 2003; Matveenko, 1960:354; Sobolev, 1998:74):

- (57) *Tut skatsinaj paxodžana* (Belarusian)  
 here cattle:INSTR.SG walk:PR.NEUTR  
 ‘Cattle have walked here’.

Occasionally, the Agent slot of the NR perfect can be marked with the bare dative, cf.

- (58) *Mne-to požito dovol'no* (North Russian)  
 I:DAT-PRT live:PR.INVAR enough  
 ‘I have lived already enough’. (this and analogous examples in Matveenko, 1961:129)

The reference to the Agent could also have been marked with a locative case, cf. the residual locative case-marking in a Latvian folk song:

- (59) *Purēja sērdainīte, Bajāros bildināta* (Latvian)  
 tremble:3.PST.ACT orphan-girl.NOM.SG.F boyar:LOC.PL court:PR.NOM.SG.F  
 ‘The orphan girl trembled [being] canvassed by [lit. among] the Boyars’. (Gäters, 1993:382)

Note that the locative NP in Latvian corresponds to the Western North Russian varieties, in which the inessive *v* + locative is used in the plural alongside the adessive *u* + gen. in the singular:

<sup>23</sup> Shevelov (1991:201) and Moser (1998:340) argue that the impersonal perfect construction with the accusative marked patient is a borrowing into Ukrainian and Belarusian from Polish, argued already in Fraenkel (1928:97–98). This does not seem to be likely, since this construction with nominative object marking is attested everywhere in the Old Russian area, including texts from Kyiv (Ukraine) and Polatsk (Belarus’). A possible explanation along the lines of these scholars would be that the Proto-Ukrainian construction was adjusted to the etymologically and functionally cognate Polish pattern in respect to their morphosyntactic layout. Thus, the case marking might have been changed in Ukrainian and Belarusian under the influence of the same Polish construction. But even this assumption is not necessary since neither in Ukrainian nor in Belarusian is it possible to mark objects (in the impersonal environment) with nominative case, as it has been generally abandoned in these languages. Thus, it is possible to assume that the object marking in the corresponding Ukrainian, Belarusian and Polish constructions is due to a more general abandonment of nominative objects and assignment of the prototypical object case-marking and, hence, can be motivated internally (further objections in Danylenko, 2005a:364–365; Jung, 2007:150; eadem 2009:214).

- (60) *Aves u pticax sklevano* (Western North Russian)  
 oat:NOM in bird:LOC.PL peck at:PR  
 'Birds have pecked at the oat'. (this and analogous examples in Matveenko, 1961:130)

The fact that the Agent phrase may be encoded in the same way in Western North Russian varieties and in Latvian folklore may indicate that a locative phrase was originally much more widespread in the area as a means for Agent encoding in the impersonal perfect construction than it is today.

An ablative-like PP (with *ot* 'from' + gen.) is also attested as the Agent adverbial quite frequent in Latvian folk songs (Endzelīns, 1951:984), Old Latvian, North Russian (Matveenko, 1961:129–130), Old Finnish (de Smit, 2006:111) and frequently in Old Russian and in Modern Russian dialects, cf.:

- (61) *I svętyj Dmitrei poslanъ na ny otъ B[og]a* (Old Russian)  
 and holy Demetrius send:PR.NOM.SG.M on us from God:GEN.SG  
 'And St. Demetrius was sent to us from God [by God]'. (Primary Chronicle, Cod. Radz. 15')

- (62) *Ej adres byl dano ot Vani Griškina* (North Russian)  
 she:DAT address:SG.M COP:3.SG.M give:PR.INVAR from Vanja Griškin  
 'Van'a Griškin has given her the address'. (Sobolev, 1998:74)

Old Finnish (Häkkinen apud de Smit, 2006:111) and Karelian can also use the ellative case for the Agent adverbial in the impersonal perfect:

- (63) *N'in on prorokušta k'ir'jutettu* (Karelian)  
 thus be:PRES.3.SG prophet:ELL.SG write:PR  
 'Thus it is written by the prophet'. (from Matthews, 1955:368)

Furthermore, Krys'ko (1995:504) also mentions the dative case and the circumessive PP with the preposition *o* 'around' for Old Russian. The adessive, ablative, inessive or even circumessive PP/NP's were adverbials and were not grammaticalized/syntacticized into a valence-bound Agent phrase slot of the impersonal perfect to begin with. Nevertheless, it is important that these options for the Agent marking of the impersonal perfect had existed earlier, pointing out that the exclusivity of the DAT case marking in modern North Russian is secondary. It also explains why some North-western Russian varieties around Pskov combine the adessive PP (in the singular) and the inessive PP (in the plural) as the subject case-marking. Their function and semantics within the impersonal perfect construction must have been very similar, originally specifying location and, hence, the participant's sphere physically or abstractly affected by the resultant state. This is why they have conflated into two allomorphs. It is the very broad semantic field covered by the DAT adverbial and its high token and type frequency that made it possible for this adverbial to be grammaticalized into the valence-bound Agent phrase and subject, while other adverbials were lost.

The DAT constituent became a core argument of the construction clearly very late, not before the 16th century (cf. Filin, 1972:499). Before the 16th c. it was used alongside other adverbials that refer to a person, cf. (ii) above. On the other hand, the attributive use of the non-pronominal (or indefinite) forms of the PR fell out of use in non-predicative positions already by the 12–13th cc. (cf. Borkovskij and Kuznecov, 1963:231), while only the long (or historically definite) forms were used in the attributive position after that. Thus, one would expect only the long forms of the PR to occur as modifier in the possessee NP of the possessive construction. Even if one would assume that the whole resultative predication was embedded under the possessee NP as a Small Clause,<sup>24</sup> one would still expect the long endings of the participles, as is the case in Modern Russian, cf. (64):

- (64) *Stol stoit nakry-t-yj /\*nakry-t*  
 table:NOM stand:PRES.3.SG cover-PR-NOM.SG.M.LONG /\*cover:PR.NOM.SG.M.SHORT  
 'The table stands covered'.

Furthermore, the adessive PP can be added in North Russian to any construction at any time without involving the possessive construction. Thus, the NR perfect itself can take more than one adessive PP as in (65a), which can hardly be interpreted as the result of a multiple derivation from the possessive construction as in (65b):

- (65a) *U menja den'gi u Fenki u trubny položeno* (North Russian)  
 at me money:NOM at Fenka at chimney put:PR  
 'I have put [my] money in Fenka's [home] by the chimney'. (from Matveenko, 1961:124)

<sup>24</sup> As this was suggested, e.g., for the Romance perfect (cf. Salvi, 1987).

(65b) \***U menja** [<sub>sc</sub>denʙgi [<sub>sc</sub>**u Fenki** [<sub>sc</sub>**u truby** položeno]]]

One would have to historically derive the three adessive PP's from three Small Clauses as illustrated in (65b), which seems to be less plausible. The account with the Small Clause embedded under the possessee NP will simply fail to explain utterances with other types of Impersonals as in (65):

(66) *U kovo pogiblo v eto vremena* (North Russian)  
 at whom perish:ACT.PST.3.SG in that time  
 'Some died in that period'. (this and analogous examples in Matveenko, 1961:126)

The form *pogiblo* is a finite form and, hence, cannot be subsumed under the Small Clause account by definition as a Small Clause can only contain a non-finite form (and is marked only for aspect). Furthermore, the adessive PP has the tendency in East Slavic to case-mark non-prototypical agents, cf. (67a) from (67b):

(67a) *V Moskve doma strojatsja s ogromnoj skorostju* (Stand. Russian)  
 In Moscow house:NOM.PL build:PRES.PASS.3.PL with great speed  
 'In Moscow houses are built very rapidly'.

(67b) *U nego doma strojatsja s ogromnoj skorostju* (Stand. Russian)  
 at him house:NOM.PL build:PRES.PASS.3.PL with great speed  
 'He builds houses very rapidly'./'His houses are built very rapidly'./'[In the area of his influence] houses are built very rapidly'.

The example (67a) is semantically impersonal, i.e., there is no reference to the acting participant, however syntactically it is personal and the nominative argument *doma* 'houses' is the subject of the clause. (67a) is complete and all valence-bound arguments are overtly expressed. Nevertheless (67a) can be extended with the adessive PP *u nego* 'at him' as in (67b). In this case, the adverbial *u nego* 'at him' can be interpreted as an affected participant (e.g., Beneficiary), but it can also be interpreted as the Agent ('constructor'). Possession is a defeasible implicature here as well. As regards syntax, the first position in the unmarked word order as well as the ability to control the reflexive pronoun can be interpreted as a step toward grammaticalization into a valence-bound argument (subject). This type of extension of an originally unaccusative predicate with a DAT type adverbial (67a)–(67b) is frequently found in East Slavic and Baltic with different kinds of unaccusative predicates. The rise and the constructional incorporation of the DAT with the perfect must be viewed in this broad perspective.

One would not be able to account for all such instances by means of the possessive construction, while, given the coherency of this pattern, a unified explanation covering all such instances must be preferred. This means that the possessive-hypothesis simply neglects the functioning of DAT in the languages of concern: it is originally an adverbial with different kinds of affectedness readings but has the tendency to develop into a non-prototypically encoded primary, but involuntary, participant (e.g., involuntary experiencer) intruding into the predicate's valence, cf. (68):

(68) *U menja bolit golova*  
 at me aches head:NOM  
 'I have a headache'.

In (68), the adessive PP, though demonstrably secondary, now marks a valence-bound, primary argument (experiencer) of the predicate.

Finally, the possessive hypothesis fails to account for the agent subject in the Lithuanian Evidential construction that also originates in the impersonal perfect. The syntactic subject is marked with the genitive case here, while the possessive construction in Modern Lithuanian is of the *habeo*-type. But even for the stage of Proto-Lithuanian one has to postulate a possessive construction only of the *mih<sub>DAT</sub> est* type and not the \**me<sub>GEN</sub> est* one. It is also obvious from a comparative analysis (with Latvian) and the morphological form of the personal pronouns (possessive genitive *man-o* 'mine', *tav-o* 'yours' instead of the regular gen. *man-ēs* 'me<sub>GEN</sub>', *tav-ēs* 'you<sub>GEN</sub>') that the genitive here is originally an adnominal genitive (Holvoet, 1995 contra Schmalstieg, 1987) and, thus, could not originally have occurred in a possessive construction as a possessor.

Summing up, these facts contradict the historical connection with the possessive construction and suggest the adverbial-account within a copular construction with a predicative PR as described in section 7.2.

#### 7.4. The possessive construction and the copular construction with a Free Dative

In this section I contrastively examine the possessive construction and the copular construction with a Free Dative to highlight the structural differences between the possessive-hypothesis and the adverbial account based on the copular

construction with a free DAT adverbial (henceforth *adverbial-hypothesis*). I maintain that the Predicative Possessor (PrPo) DATs must be kept apart from the free or syntactically unbounded DAT arguments due to both their semantics and syntactic interface.<sup>25</sup> Thus, syntactically the PrPo is a valence-bound argument of the possession predicate which may show subject-like properties. As regards semantics, Haspelmath (1999:128) shows that the PrPo covers other semantic fields than does the External Possessor (EP) in Russian, the latter being one of the readings of the free dative. When the free-DAT element is added to the copular construction, the construction appears at first glance to surface as the possessive construction due to the same morphological encoding. This similarity or '*structural parallelism*' in Kayne (1993) and Jung (2009:216–217) led many researchers to equate the NR agented perfect with the possessive construction genetically. However, there are considerable differences in the syntactic organization between the copular with the Free DAT and the possessive construction with the PrPo DAT as has been demonstrated in Holvoet (2003) for Latvian. Thus, the PrPo passes such subjecthood tests as control over reflexive anaphora and the first position in the unmarked word order, while the free-DAT does not, cf. PrPo in (69a) but the EP in (69b):

(69a) **U nee** (est') svoj dom (Standard Russian)  
 at her (be:3.PRES) REFL.NOM.SG.M house:NOM.SG.M  
 'She has her own house'.

(69b) Dom u nee \*svoj malovat (Standard Russian)  
 house:NOM.SG.M at her \*REFL.ADJ.NOM.SG.M quite-small:PREDICTV.ADJ.NOM.SG.M  
 [Intended meaning] 'Her own house is quite small'.

Furthermore, only the copular but not the possessive construction is compatible with predicative adjectives, as has been pointed for Latvian in Holvoet (2003:42), cf. also Russian:

(70) Ruki u nee slabovaty (Standard Russian)  
 hand:NOM.PL at her weak:ADJ.PREDICATIVE.NOM.PL  
 'Her hands are quite weak'.

This point is important for the adverbial account. The Russian adjectival predicative form *slabovaty* can only occur in the predicative position of a copular construction and can never serve as a noun modifier or be used predicatively in the possessive construction. Thus, (70) has to be analyzed as copular and not as the possessive construction. As I have pointed out above, these are exactly the predicative forms of the PR-participles that are used in the NR agented perfect, thereby, disambiguating the genuine copular perfect construction from the possessive one.

### 7.5. Secondary influence of the possessive construction and the Free-DAT hypothesis

I have argued that the DAT subject in the NR agented perfect is originally a free DAT adverbial of the copular construction. As one of the reviewers pointed out, while the origin from the possessive construction can no longer be maintained, one could still argue for a secondary, functional influence of the possessive construction due to the coincidence of the morphological marking used for the PrPo in the possessive construction and the affected participant in the originally resultative construction. Such a hypothesis may at least partly save the possessive account. Indeed, I believe that the formal coincidence may have provided additional reinforcement for the development of the adessive PP into the Agent and, subsequently, subject of the perfect. The predicative possessor meaning with the adessive PP had certainly entrenched the possessor reading of the adessive PP, which, in turn, might have influenced the token frequency of this adverbial in the perfect construction. In the same way, the resultative/perfect predicate did not remain untouched by the rise of the External Possessor reading (EP) with different kinds of intransitives as described in Garde (1985).<sup>26</sup> Nevertheless, I claim that the role of the predicative possession has been overestimated in the literature for the assumed development neglecting other readings of the adessive PP (cf. those discussed in Selivestrova, 2004), first of all the locational one, i.e., being in the sphere of X. The location reading is attested throughout the history of East Slavic (cf., inter alia, Lomtev, 1956:297 for Old Russian, Cienki, 1993). Indeed, the less grammaticalized versions of the agented perfect as, e.g., in Latvian or in Standard Russian (Kuteva and Heine, 2004:49), do attest meanings other than the possessor. Thus, the pure locational semantics '*in one's home*', '*in one's family*', '*in the closure of s.o.*' as in (71) is still preserved with the perfect in Standard Russian:

<sup>25</sup> For the sake of clarity I will distinguish between the predicative possessor and external possessor following, inter alia, Payne and Barshi (1999) and Haspelmath (1999). While both readings are presumably etymologically related they nevertheless exhibit different functional and syntactic properties and, hence, should be kept apart.

<sup>26</sup> Strangely, Garde (1985) himself rejects any affectedness semantics even with Experiencer or Beneficiary readings of the adessive PP in his examples. Affectedness, however, has been shown to be an important factor here in Cienki (1993) followed by Haspelmath (1999).

- (71) *U nego (v kvartire) proizveden obysk* (Standard Russian)  
 at him (in the flat) conduct:PR.NOM.SG.M search:NOM.SG.M  
 ‘A search has been conducted (e.g. by the police) in his [flat]’, lit. ‘at him (in the flat)’

In this sentence, the adessive PP is not the Agent and it is not the possessor of the nominative participant *obysk* ‘search’. It exhibits here its original semantics, namely, location, and thanks to that, a certain degree of affectedness (maleficiary). I claim that the use as in (71) represents the origin of the agented perfect. I insist that the location reading readily develops into the agent reading and that there is no need to postulate an intermediate EP reading, cf.

- (72) *Što pišete do nasъ o svoixъ kupcexъ,* (Middle Russian)  
 that you-write to us about your merchants  
*što zabavleny byli v nasъ vaši kupci,*  
 that withhold:PR.PL.NOM was in/at us your merchants:NOM  
*... bylъ vžderžalъ vašixъ kupcevъ panъ Ondrei, ... našъ ospodinъ*  
 was withheld your merchants sir Ondrei our lord  
 ‘You write to us about your merchants, that your merchants were held in our land/by us. Our lord, Sir Ondrei, has detained your merchants’. (A letter of the citizens of Polock to Riga, second half of the XV c. apud Borkovski, 1958:124)

The reading here is probably locational (in any event not possessive), but an agentive reading can still be inferred from the context. A typological parallel of the assumed development from a locational to the agentive reading without passing an EP-reading can be drawn from German, where the adessive PP *bei* + dat. does not have a possessor reading at all:

- (73) *Bei mir ist meine Haustür kaputt gegangen* (German)  
 at me be:3.SG my:NOM.SG.F door:NOM.SG.F break:PPP  
 ‘At my place, my house door is broken’.

In (73), the adessive PP is ambiguous between an Agent and exclusively maleficiary, while in (74) it is a kind of involuntary Agent only, cf. the English translation:

- (74) *Bei mir ist der Punkt erreicht, wo ich nicht mehr kann* (German)  
 at me is the point achieved where I not more can  
 ‘I have (unwillingly) achieved the point where I cannot anymore’.

The fact that the Russian adessive PP *u* + gen. can be interpreted as having the meaning of the EP has nothing to do with the etymology of the construction it occurs in. The EP semantics is an implicature of the very situation of being both in the closure of X and affected by (the state of) X. Since the locational meaning is still preserved in North Russian (cf. 65a above), Standard Russian (71) and Middle Russian (72) and the other languages, it would be implausible to assume that there has been a stage in the development with no location reading at all and an exclusively external possessor (EP) reading or that the meaning of the adessive PP in this construction would have been reduced exclusively to EPs for a certain period of time. Such a restriction of the meaning seems even less probable given the semantic entailments of the resultative (or later perfect) predicate which typically do not correlate with possessors and, hence, do not motivate them. Rather, as has correctly been pointed out in Weiss (1999), such a predicate entails an experiencer or beneficiary of the resultant state/situation. That is crucially different from the SAE perfects where the possessor meaning is required by the source construction originally containing the lexical verb of possession *have*.

Furthermore, as I have pointed out, the development of the adessive PP into a non-prototypical agent marking is not limited to the perfect predicate but has to be treated in a wider context. The DAT case-marking undergoes the tendency in the languages of concern to develop into a productive case-marking for non-prototypical agents, e.g., involuntary agents (cf. 66, 67b above).

## 8. The epicenter

In the previous sections I have demonstrated how originally the P-oriented resultative construction has developed into an active impersonal perfect and, subsequently, into a personal or agented perfect with the DAT subject in North Russian. I have argued that the other languages of concern show striking correlations in the development of their counterparts across several structural domains. Given the complexity of the development, such correlations cannot be regarded as fully independently induced (cf. Heine, 2009, cf. also the *Principle of complex correlation* in Seržant, 2010). At the same time, I



acknowledged discrepancies that exist between the languages of concern which “disturb” the picture. I regard them as “noise” phenomena driven by a number of competing, internal motivations.

As to the question of the source/epicenter language, one has to distinguish between two diachronic processes that have different epicenters and distributions across the area:

(i)

- the rise of the impersonal perfect out of the P-oriented resultative copular construction (stage B);
- the split into a passive- and active-like reading (C);
- the morphosyntactic emancipation of the active reading with the reanalysis of the nominative argument as object (D.1);
- the subsequent acquisition of the object coding, i.e., the loss of verbal agreement (D.2) and the shift to the accusative case-marking (stage D.3);

(ii)

- the introduction of the Agent phrase into this construction and its gradual grammaticalization into the subject (stage E).

Concomitant with the developments (i) and (ii):

- progression along the cline *from resultative into perfect, from perfect into aorist, from aorist into a past tense* (widely attested cross-linguistically, cf., inter alia, Breu, 1987, 1998:90–91; Kuryłowicz, 1964:141ff; Serebrennikov, 1974:234–236).

Concerning (i), I believe that this is a very old contact phenomenon between East Slavic, Proto-Polish, Baltic and the Fennic languages that were originally spread along the coast of the Baltic Sea and toward the Northeast of Modern Russia. The epicenter of this innovation may be attributed to the area of Polish that first attests the accusative object (stage D.3), namely, already in the 14th c. (cf. Danylenko, 2005b:156–157; Shevelov, 1968; Wiemer, in press-a). The most advanced evolution of the Polish construction along the aspectual cline (i)–(ii) does not disrupt this assumption: as noted in section 3 above the Polish *-n/-t-* construction must be traced back to a resultative *-n/-t-* construction in Proto-Polish. The chronological reservations in Danylenko (2005a:368) may be accounted for by assuming long lasting contact with a gradual borrowing. Fennic languages may also have had an impact on the rise of the active impersonal perfect construction. Though, recall that these languages are more conservative along cline (i) (than, e.g., Polish) and attest only stage D.2, i.e., no prototypical object case-marking except for personal pronouns. This is, however, motivated internally, namely, thanks to the productivity of the nominative object in these languages. In terms of the relative chronology, I assume that one has to draw the line for (i) somewhere in, or immediately after, stage D.

In terms of the wave model, it is expected that some languages of concern attest only partial loss of agreement with participles along such features as gender and number, whereas the introduction of the accusative case (D.3) is attested only in Polish, Ukrainian, Belarusian, Eastern Lithuanian and some NR varieties.

Generally, the very last stage D.3 of (i) might have occurred independently in Polish, Belarusian and Eastern Lithuanian (Danylenko, 2005b) on the one hand, and NR varieties, on the other hand (cf. Matveenko, 1961; Shevelov, 1969) triggered by an independent drift along the areally induced cline (i). However, the first impression of an independent acquisition of the accusative case may in fact be misleading for the following reasons: (a) influence from Fennic onto NR as to accusative is excluded, since Fennic languages have still retained the nominative object; (b) the residual character of the examples from Belarusian (cf. Karskij, 1956:317; Matveenko, 1960:352; Shevelov, 1969:210–211) and Old Belarusian (Lopatina, 2000:139) that might have intermediated at an earlier stage between Ukrainian and Polish, on the one hand, and North Russian, on the other hand, as well as the residual character of the accusative in NR varieties themselves (Matveenko, 1960:352–353) suggest that originally the “accusative-area” must have been much broader. Thus, Matveenko (1960:352) writes that accusative is sporadically attested all over the line from Belarus’ toward NR from Polatsk to Velikie Luki (i.e., part of the territory of Kriviči). In this light, certain interdependencies would be difficult to exclude, and the assumption of a secondary removal of the diffusion (destruction in Wälchli, forthcoming) in this subarea seems more appropriate. The additional internal (systemic) motivation along the lines of the *Behavior-before-Coding-principle* (Haspelmath, 2010), as suggested, e.g., in Holvoet (2001a), would only support the assumption of a common development. To conclude, the development from subject to object remains with no doubts a common development even though rendered and internally bleached to a different extent in each language. Notably, such local disturbances of the convergence process are even expected given the size and linguistic diversity of the area of concern.

As to the introduction of the Agent phrase (ii), this is a much more recent development, which is the reason it has spread to only some Eastern CB languages: it is present in Estonian but not in Finnish, present in Latvian, but structurally different in Lithuanian, grammaticalized in North Russian, but less grammaticalized in Standard Russian, etc. I claim that development (ii) must be seen as a purely North Russian development, since no exact parallels in the immediately neighboring languages can be found. The geographic contiguity of the fully grammaticalized agented perfect construction to only North Russian varieties, which do in fact have a number of contact-induced features from Fennic languages, led some researchers to the conclusion that convergency effects induced by Fennic languages must be sought here. Thus, e.g., Veenker (1967:137–139) postulates Fennic influence (without explicit arguments though), cf. also Vasilev (1968:226–227). This view, however, cannot be maintained for precisely the agented perfect. Latvian, Standard Russian, Estonian, Karelian and Votic, which only partly render the agented perfect of North Russian, must instead be regarded as being influenced by North Russian and not vice versa. This is so because these languages do not exhibit the high degree of grammaticalization found in North Russian,

while the relative degree of grammaticalization has been proposed as a diagnostic for determining the source (more grammaticalized) and target (less grammaticalized) languages for convergency phenomena (Heine, 2009:46–47). Applying this diagnostic to the agented perfect, it becomes apparent that the epicenter of the construction has to be posited into the area of North-West-Russian and of some Mid-West-Russian varieties. The DAT constituent is fully grammaticalized to a syntactic subject only here and denotes exclusively the Agent of the preceding action only in this area.

Moving further away from the epicenter (Novgorod, Pskov, Velikije Luki), less grammaticalized variants appear, in which the adessive PP is not restricted to only Agents, but can also denote the meaning of possessor or otherwise affected participant.

Furthermore, there are also other indications for the highest degree of grammaticalization in North Russian. The Agent phrase *u + gen* as a non-prototypical subject marking spread out to all perfect subjects and has replaced the intransitive nominative subjects, as in *u<sub>at</sub> nego<sub>him</sub> priexano<sub>arrived</sub>* for the earlier *on<sub>nom</sub> prijexano<sub>arrived</sub>* ‘he has arrived’, which is almost restricted to NR. The lexical-aspectual restrictions on the predicates were completely abandoned only in North Russian, allowing now for reflexive and stative verbs. Notably, stative verbs are not likely to appear in perfect systems at their starting stage. They are, for example, not found in the perfect construction in the older Germanic languages as Gothic or Old English (Hoffmann, 1934:36). The NR perfect even shows tendencies toward perfective aspect, thereby fore-grounding the preceding action even stronger and losing the stative implicature. Thus, it became combinable with time adverbials with past reference. Trubinskij (1988:406) provides a number of such examples from West North Russian as, e.g., *včeras* ‘yesterday’.

I conclude that both geographical expansion and the highest level of grammatical entrenchment, by comparison to the other CB languages of concern, both support the assumption that the North Russian varieties are the epicenter of the “agented-perfect” for the Eastern CB area.<sup>27</sup> This comports well with the fact that Estonian and Latvian exhibit more similarities with North Russian with regard to this construction than Lithuanian does, which lies geographically further away from the North Russian area than Latvian and Estonian. The Western North Russian area, including Novgorod, Pskov and Velikije Luki, is also closer to Estonia than to Finland, which only has the stage of the impersonal perfect, and no agented perfect. Latvian, Estonian and Standard Russian, in turn, exhibit more similarities. However, even these languages differ considerably in the degree of grammaticalization from the North Russian epicentral varieties and from each other.<sup>28</sup> It is likely that these languages have acquired this construction from the peripheral North Russian varieties, which also exhibit a less grammaticalized variant of this construction, i.e., the one where the DAT argument can be both the affected and Agent participant, where only transitive and telic verbs are allowed, etc.

Summing up, the early development (i) of the *-n/-t-* construction in the Eastern CB area encompasses the whole Eastern CB area. It is characterized (chronologically) by the rise of the resultative construction, its development toward perfect, as a consequence, the rise of the diathetic ambiguity, morphological and syntactic emancipation of the active reading, by the loss of the agreement property along gender and number by the participles and, finally, the partly shared acquisition of the object coding property (accusative). These early developments were common to a larger area including such languages as Polish or Finnish. The latter development (ii), namely, the rise of the DAT agent slot and its syntacticization must be ascribed to NR from where it has spread to a certain degree onto such languages as Latvian, Estonian, Votian, Karelian and Standard Russian. I skip here the discussion about how exactly the process of the contact-induced grammaticalization should be modeled (cf., inter alia, Heine and Kuteva, 2005; Johanson, 2008:64ff) referring only to a *common developmental path*. I acknowledge that the process of copying the syntactic and morphosyntactic properties is not per se a diachronic process (Johanson, 2008). I conceive of the former as a series of functional copyings and, subsequently, adaptations leading to sequential adjustments across the languages of concern.

At this point it is important to stress that the areal cline is not the only motivation behind the developmental path from A to E illustrated in this paper. Despite several structural similarities as well as analogous developmental paths, the languages attest different kinds of deviations. Notably, (selective) copying of grammatical material does not presuppose, or in fact, exclude full correspondence between the source and the target gram (cf. Johanson, 2008). These deviations are noise phenomena that are either internally motivated or are due to individual contacts among some of the languages. Thus, as I have pointed out above the passive *-n/-t-* correlate did have a strong impact on the development of the active counterpart in some languages: Standard Russian borrows the agreement and subject properties from it, while Standard Ukrainian and Lithuanian overtake the agent phrase case-marking. Generally, Standard Russian and Standard Ukrainian exhibit a strong affinity to the passive correlate also in terms of the syntactic organization, i.e., binding and control, but also in terms of selectional restrictions (see Lavine, 2005 for Ukrainian). Old Finnish attests the object promotion which is motivated by the influence of the Swedish promotional passive based on the copular auxiliary *vera* ‘to be’ (de Smit, 2006). These deviations from the developmental path A→E are motivated internally leading to a distortion of the areally motivated cline.

## 9. Summary and conclusions

I have investigated the evolution of the non-prototypically agented perfect construction in the Eastern part of the CB area. I have argued that this type of perfect originates from a copular construction with a predicative P-oriented resultative to

<sup>27</sup> As one of the reviewers has pointed out there are also attestations of the construction similar to the agented perfect in some western Ukrainian dialects (cf. Nimčuk, 1962).

<sup>28</sup> Thus, as to lexical restrictions, Estonian (cf. Lindström and Trigel, 2010) and Latvian show greater variability than Standard Russian.

begin with (stage A). This is a slight modification of earlier suggestions on the passive origin which indirectly also encompassed a resultative. Nevertheless, I believe that it is crucial to distinguish between the resultative and passive. The point I made here is that a resultative is, in voice, mere of a *middle*, than a passive, in that it inherently lacks an agent in its semantic structure. This understanding of the source construction not only better accounts for the historical data but also seems to be more plausible from the point of view of diachronic typology: a middle is more likely to develop into an active, e.g., from such uses as with intransitive verbs or under negation, than a passive; at the same time, a middle is also likely to develop into a proper passive as it did in most of the languages as middles often develop into passives. Though the traditional historical analysis assuming the development from passive into active seems to be less typical and more complex and – given the empirical data – not plausible for the construction of concern. The resultative also explains why there is an experiencer- or beneficiary-like case marking on the agent (namely DAT) in the perfect: DAT originally marked an experiencer/beneficiary (*affected person*) of the resultant state (Weiss, 1999). A passive agent complement marked with DAT is less plausible from a semantic point of view.

At stage B, the resultative changes first into a perfect, whereby the preceding-action-implicature becomes more foregrounded while the stativity more back-grounded and the overall meaning more dynamic. This, in turn, leads to the rise of the second semantic valence, namely, that of the Agent of the preceding action that is inferred from the overall event structure encoded by the corresponding lexical verb. In other words, the original conflict between the stative “subevent” with only the patient-like participant profiled by the perfect/resultative predicate and the corresponding whole event with both its participants profiled by the lexical verb in all its other TAM forms is resolved at this stage in that the Agent enters the subevent structure of the perfect/resultative. The Agent participant was only a semantic valence to begin with and was not linked to an overt slot in the construction, being inherently impersonal at that stage. The more the preceding action became fore-grounded, the more semantically transitive became the perfect predicate when formed out of a transitive verb. The increase in transitivity forced the perfect predicate to match either a passive or an active interpretation. In other words, what had originally been a stative and, thereby, a middle-like predicate was reinterpreted as either passive or active because of the increase of semantic transitivity that, in turn, was provoked by the aspectual shift. In the later development, both passive- and active-like readings have emancipated and acquired the subsequent morphosyntactic interfaces in most of the languages. The active-like reading developed into the impersonal *active* perfect (stage C), where the original subject of the P-oriented resultative gradually changed into a full-fledged syntactic and, in some languages, morphosyntactic object (stage D). Different languages/dialects show different degrees of progress and deviations in the recent developments. Eastern High Lithuanian, Polish, Ukrainian and West North Russian varieties show up with the prototypical, accusative case marking, whereas Fennic, other North Russian and High Lithuanian varieties are more conservative and preserve the nominative case marking but lose the agreement property.

During the last stage of the evolution (stage E), a DAT-marked adverbial was incorporated into the impersonal perfect construction, acquiring an Agent reading via contextual implicature (cf. Weiss, 1999). In North Russian the Agent reading became the only available reading, while the original array of affectedness readings (still preserved in Standard Russian, Latvian, Estonian, Karelian and Votic) was lost here. The foregrounding of the Agent reading has instigated the acquisition of subject properties by the DAT argument in North Russian. The DAT constituent becomes a full-fledged (behavioral) subject only in North Russian, while it still has an adverbial status in the other languages.

A detailed examination of the history of the NR perfect has revealed that an etymological connection with the possessive construction cannot be corroborated by the data. In fact, it has to be stressed that the possessive origin of a perfect is a typological rarity almost exclusively reduced to Western European languages (cf. Heine and Kuteva, 2002:245). The latter might even have had the same source language (Medieval Latin), cf. Drinka (2003). Thus, the non-possessive origin of the Eastern CB perfect is typologically expected.

Additionally, it was argued that the development from a resultative toward a perfect, coupled with the development of subject into object, is a common Eastern CB innovation and, thereby, a CB isogloss. It seems probable that the epicenter for both the morphosyntactic and functional activation of this construction is found in the area of Polish where this construction had acquired all the formal properties of a full-fledged active construction very early (Wiemer, in press-a). However, the responsibility for the later development of this construction, namely, for its extension to the “non-prototypically agented perfect” has to be attributed to NR, which exhibits the highest degree of its grammaticalization across the area. At the same time, I have argued that the areal developmental cline has been disturbed by the internally motivated changes in several languages. Thus, the cognate passive *-n/-t-* construction affected the impersonal active counterpart to a different degree across the languages. Similarly the abandonment of the nominative object was influenced by the general tendency toward preserving or abandoning nominative objects in a given language. The perplexity of the triggers for the described development may make the impression that there is no convergence at all. Though the set of formal and functional properties does not persist through all languages of concern unchanged, given the major developmental correlations across the languages concerning different structural domains one cannot but postulate an instance of convergence in, perhaps, a more loosely tied linguistic area than, e.g., the Balkan *sprachbund*.

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