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CHAPTER 5

Perfects in Baltic and Slavic

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This survey presents a comprehensive account of perfect constructions (based on an anteriority participle and an often optional auxiliary) in Baltic and Slavic over space and time, including dialects and high-contact minority varieties. Based on a classification by participle types and their combinations with BE- and HAVE-verbs, it provides a systematic check of renowned functions of perfects and evaluates accepted parameters of grammaticalisation. The most consistent common denominator of perfects in Baltic and Slavic lies in the irrelevance of most such parameters but an increase in admissible lexical input and a decrease in paradigmatic variability. The two most salient differences between Slavic and Baltic are (i) the high level of stability of voice orientation of participles in Baltic vs. the diathetic lability and repeated changes in voice orientation in Slavic, and (ii) stable systems of perfects of likely great antiquity in Baltic vs. the lack of consistently employed perfect systems in most Slavic languages.

Keywords: Baltic languages, Slavic languages, grammaticalisation, BE-perfects, HAVE-perfects

1. Introduction

The chapter is structured as follows. We first survey Baltic (§2), then Slavic (§3). The internal division of these sections is not identical, owing mainly to the differences between the two groups. For each group we first survey the formal structure and types of perfects, before dealing with functional differentiation and diachronic matters. In §4 we summarize by taking up the findings of §§2–3 and point out parallels and differences in the patterns of rise and change. We also investigate the extent to which perfects in Baltic and Slavic comply with accepted parameters of grammaticalisation. We justify why morphosyntactic parameters are a bad indicator and inquire into possible reasons for the astonishing diachronic stability of resultative perfects in most varieties of both groups.

2. Perfects in Baltic

Our account of the structure and functions of the perfect in modern Lithuanian and Latvian will be mostly synchronic. The situation in the third recognized modern Baltic language, Latgalian, has not yet been sufficiently investigated, so we refrain from discussing it in any systematic fashion. The data from Old Prussian and earlier stages of Lithuanian and Latvian will be only cursorily touched upon in the section on diachrony (§2.4).

There is not much literature on the perfect constructions in Baltic, even less so in languages other than Lithuanian and Latvian, and there is a clear (and rather unfortunate) bias towards Lithuanian at the expense of Latvian. On Lithuanian perfects and resultatives see e.g. Geniušienė & Nedjalkov (1988), Sližienė (1995), Wiemer (2012), Sakurai (2016); on Latvian, among the works published in Latvian, Nau (2005) should be mentioned; on Baltic in general see Mathiassen (1996), Wiemer & Giger (2005: §4) and Arkadiev & Daugavet (2016). Regrettably, the Baltic perfects have not been included into the survey of the European perfects in Lindstedt (2000) or Dahl & Hedin (2000), and Latvian is lacking in Thieroff (2000).

2.1 Formal issues

The perfect and resultative constructions in all Baltic languages are periphrastic and consist of a past participle of the lexical verb and an auxiliary. The default auxiliary is the existential/copular verb ‘be’, Lith. *būti*, Latv. *būt*, which is often omitted in the present tense. The participle may be passive (patient-oriented, suffix *-t-*), yielding an objective resultative (in terms of Nedjalkov & Jaxontov 1988), which is systematically syncretic with the actional passive, cf. (1), or active (agent-oriented, suffix *-us-*), yielding a subjective or a possessive resultative or the perfect proper, cf. (2). The functional side of the aforementioned oppositions will be discussed in more detail in §2.2.

- (1) a. Lithuanian (Geniušienė & Nedjalkov 1988: 369)
Lang-as (yra) *už.dary-t-as*.
 window-NOM.SG be.PRS.3 close-PST.PASS.P-NOM.SG.M
- b. Latvian (constructed)
Log-s (ir) *aiz.vēr-t-s*.
 window-NOM.SG (be.PRS.3) close-PST.PASS.P-NOM.SG.M
 a=b “The window is closed.”

- (2) a. Lithuanian (LiLa)
Es-u su-kait-us-i ir
 be.PRS-1SG PVB-become.hot-PST.PA-NOM.SG.F and
iš-prakaitav-us-i ...
 PVB-perspire-PST.PA-NOM.SG.F
- b. Latvian (LiLa)
Esm-u no-kars-us-i un
 be.PRS-1SG PVB-become.hot-PST.PA-NOM.SG.F and
no-svid-us-i
 PVB-perspire-PST.PA-NOM.SG.F
 a=b “I am hot and sweating.”

In addition, Lithuanian has a marginal possessive resultative construction with the transitive auxiliary *turėti* “have” and an active past participle, which makes this construction typologically exceptional (Wiemer 2012), cf. (3).

- (3) Lithuanian (Wiemer 2012: 71)
Kišen-ėje j-is tur-i pa-si-slėp-ęs
 pocket-LOC.SG 3-NOM.SG.M have-PRS.3 PVB-REFL-hide-PST.PA.NOM.SG.M
butel-į.
 bottle-ACC.SG
 “In his pocket he has a bottle hidden.”

Participles in periphrastic resultative and perfect constructions always agree with the subject in gender, number and case – nominative in finite clauses, see examples above, non-nominative in non-finite clauses, cf. (4) and (5), in contrast to predicative adjectives and nouns which often occur in the predicative instrumental case.

- (4) Lithuanian (LKT)
istorini-ai šaltini-ai liudij-a [pirmąkart
 historical-NOM.PL.M source-NOM.PL testify-PRS.3 first.time
Mozart-o oper-ą ‘Užburtoji fleita’ Lietuv-oje buv-us
 Mozart-GEN.SG opera-ACC.SG ‘The.magic.flute’ Lithuania-LOC.SG be-PST.PA
pa-rody-t-ą 1802–1805 met-ais].
 PVB-show-PST.PASS.P-ACC.SG 1802–1805 year-INS.PL
 “Historical sources testify Mozart’s ‘The magic flute’ being staged for the first time in Lithuania in 1802–1805.”
- (5) Latvian (example courtesy of Anna Daugavet)
ne-driksť bū-t dzēr-uš-am vecāk-am
 NEG-may.PRS.3 be-INF drink-PST.PA-DAT.SG.M parent-DAT.SG
 “A parent may not be drunk.”

Due to the systematic omission of the auxiliary in the present tense of the active resultative, it systematically coincides with the past tense of the active evidential, which in Lithuanian employs active participles instead of finite forms as main predicates. Thus, the Lithuanian Example (6) without context can be interpreted either as a non-evidential present tense resultative (denoting a state) or as an evidential past tense (denoting an event).

- (6) Lithuanian (constructed)
- J-i ap-si-reng-us-i šilkini-ais*
 3-NOM.SG.F PVB-REFL-put.ON-PST.PA-NOM.SG.F of.silk-INS.PL.M
marškini-ais.
 shirt-INS.PL
- i. “She is wearing [*lit.* is dressed with] a silk blouse.”
 - ii. “She (reportedly) put on a silk blouse.”

In Latvian the evidential has dedicated forms in the present and future tenses but uses active past participles in the past tense, as in Lithuanian.

Lithuanian, but not Latvian, has developed an ‘impersonal evidential’ based on the passive participle with suffix *-t-*, otherwise used in objective resultatives and in the impersonal passive, from which it often can hardly be distinguished. It is impersonal inasmuch as the *t*-participle does not show agreement with a noun phrase, since there is no agreement controller. The subject is coded with the genitive and obligatorily precedes the participial predicate, see (9). The construction is largely restricted to intransitive verbs (7), but may occur also with zero-place verbs (8) and can even be combined with the passive (9).¹

- (7) Lithuanian (LKT)
- Tai zigzag-ais šuoliuo-t-a, tai tupė-t-a ir*
 DEM zigzag-INS.PL gallop-PST.PASS.P-NA DEM roost-PST.PASS.P-NA and
dairy-t-a-si, tai pul-t-a šalin
 look.around-PST.PASS.P-NA-REFL DEM rush-PST.PASS.P-NA aside
dvimetr-ini-u šuoli-u.
 two.meter-ADJ-INS.SG.M jump-INS.SG
- “[Here are paths of hares. Look,] they (must have) galloped in zigzags, roosted and looked around. [Look,] they (must have) rushed to the side with two-meter jumps.” [*lit.* “... (it) is galloped in zigzags, roosted and looked around ...”]

1. This combinability is indicative of the different provenance of passive and impersonal evidential. Thus, in contrast to passive constructions, the impersonal evidential does not show any restrictions concerning the lexical input or numerical valency. Cf. Wiemer (2006b) and Spraunienė et al. (2015) for a systematic analysis.

- (8) Lithuanian (Geniušienė 2006: 55)
Nakt-į ly-t-a.
 night-ACC.SG rain-PST.PASS.P-NA
 “It obviously (must have) rained at night.”
- (9) Lithuanian (Spraukienė et al. 2015: 326)
J-o bū-t-a muš-t-o.
 3-GEN.SG.M be-PST.PASS.P-NA beat-PST.PASS.P-GEN.SG.M
 “He must have been beaten.”

This evidential construction is mainly restricted to inferential meanings (see the last examples), while evidentials with agreeing participles tend to be more frequent in reportive meaning (see (6)). As derived from different kinds of the perfect, both evidential constructions also show a different distribution in dialect-geographical terms: the impersonal is prominent in the south-eastern part of Lithuania, while the construction with agreeing participles is productively used in the northern part of the country closer to Latvia.

Both in Lithuanian and Latvian the perfect auxiliary can take any morphological form. The past and future perfects will be discussed in more detail below (§2.2.3, 2.2.4), so here less frequently encountered forms are shown, such as the habitual past (only Lithuanian) (10), imperative (11), and subjunctive (12) (note the ‘supercompound’ form of the subjunctive counterfactual passive in the second clause).

- (10) Lithuanian (Arkadiev 2012: 104; LKT)
Dar nedaug k-as bū-dav-o girdėj-ęs apie
 yet not.many who-NOM be-HAB-PST.3 hear-PST.PA.NOM.SG.M about
neseniai iš.leis-t-ą knyg-ą, o Šimait-is jau
 recently publish-PST.PASS.P-ACC.SG book-ACC.SG but PN-NOM.SG already
spė-dav-o j-ą per-skaity-ti ...
 manage-HAB-PST.3 3-ACC.SG.F PVB-read-INF
 “It used to be that very few people had yet heard about a recently published book, whereas Shimaitis would already manage to read it ...”
- (11) Lithuanian (Arkadiev 2012: 100; LKT)
Visada bū-k pa-si-ruoš-ęs
 always be-IMP.2SG PVB-REFL-prepare-PST.PA.NOM.SG.M
man-e pri-im-ti ...
 1SG-ACC PVB-take-INF
 “Be always prepared to receive me [, because I will come secretly.]”

- (12) Latvian (LiLa)
It kā es pat-i ne-bū-tu krit-us-i
 as if 1SG.NOM self-NOM.SG.F NEG-be-SBJV fall-PST.PA-NOM.SG.F
bedr-ē un ne-bū-tu bij-us-i
 pit-LOC.SG and NEG-be-SBJV be-PST.PA-NOM.SG.F
spies-t-a dzīvo-t cit-u dzīv-i?
 press-PST.PASS.P-NOM.SG.F live-INF other-ACC.SG life-ACC.SG
 “As if I myself had not fallen into a pit and had not been pressed to live a different life?”

The auxiliary can appear in various non-finite forms, such as the infinitive, see (5) above, or participle, either in subordinate clauses, as in (4) and (13), or in evidential constructions, as in (14).

- (13) Lithuanian (LKT)
Skambin-u, j-i vis sak-o [es-a-nt-i
 call-PRS.1SG 3-NOM.SG.F still say-PRS.3 be-PRS-PA-NOM.SG.F
užsiēm-us-i].
 be.occupied-PST.PA-NOM.SG.F
 “I am calling her, but she keeps telling me that she is occupied.”
- (14) Lithuanian (Ambrazas ed. 2006: 263)
Sveči-as es-ęs kil-ęs iš
 guest-NOM.SG be-PRS.PA.NOM.SG.M rise-PST.PA.NOM.SG.M from
kaimieči-ų.
 peasant-GEN.PL
 “The guest is [said to be] descended from peasants.”

In Latvian the auxiliary can take a special periphrastic debitive form, which, according to Holvoet (2001: 37), can have either deontic or epistemic meaning depending on the mutual scope of the debitive and the perfect; compare (15a,b). The subject of the debitive is encoded by the dative case and triggers agreement on the predicate adjective, as well as on the participle in scope of the debitive in (15b), i.e. if the debitive has epistemic meaning:

- (15) Latvian (Holvoet 2001: 37)
- a. *Jān-im ir bij-is jā-bū-t ļoti*
 John-DAT.SG be.PRS.3 be-PST.PA.NOM.SG.M DEB-be-INF very
gudr-am.
 clever-DAT.SG.M
 “John has had to be very clever.” → deontic
- b. *Jān-im jā-bū-t bij-uš-am ļoti gudr-am.*
 John-DAT.SG DEB-be-INF be-PST.PA-DAT.SG.M very clever-DAT.SG.M
 “John must have been very clever.” → epistemic

2.2 Functions of perfect constructions

For the treatment of the resultative/perfect constructions in the Baltic languages, the following oppositions are relevant: (i) resultative vs. (actional) perfect; (ii) present perfect vs. past perfect vs. future perfect; (iii) perfect vs. simple past. The first two oppositions pertain to the structure and functions of the relevant constructions and are to a large extent independent of each other, whereas the latter opposition pertains to the partial overlap of functions and usage patterns between periphrastic perfects and simple tenses, which is common to verbal systems with perfects in general and has rather specific ramifications in each of the Baltic languages. In the following subsections, we will start with the resultative understood in the sense of Nedjalkov & Jaxontov (1988) as denoting a state causally determined by a previous event and then will discuss the various functions of the (present) perfect proper, then turning to the special functions of non-present perfects.

2.2.1 Resultative proper

As has already been said above, the Baltic languages formally distinguish the objective resultative formed from transitive telic verbs by means of passive participles, as in (1) above, and the subjective resultative built upon active participles derived predominantly from intransitive telic verbs, cf. (2) above. In contrast to Slavic, this distinction is strict, see Wiemer & Giger (2005: 43–45). To the latter type also belong resultatives formed from a restricted set of transitive verbs denoting a salient change of state of the subject often involving possession, cf. (16). In Lithuanian (16a), but not in Latvian (16b), this subtype often involves reflexive-benefactive marking.

- (16) a. Lithuanian (LiLa)
Buv-o šviesi-ai nu-si-daži-us-i
 be-PST.3 light.coloured-ADV PVB-REFL-dye-PST.PA-NOM.SG.F
plauk-us.
 hair-ACC.PL
- b. Latvian (LiLa)
Bij-a iz-balināj-us-i mat-us.
 be.PST-3 PVB-whiten-PST.PA-NOM.SG.F hair-ACC.PL
 a=b “She had dyed her hair in light colour.”

Lexically, resultatives are restricted to telic verbs denoting a change of state related to the participant expressed as the subject.

Both kinds of resultative denote states holding at the reference time indicated by the auxiliary (as opposed to the perfect proper referring to situations prior to the reference time, see below), as evidenced e.g. by their co-occurrence with temporal adverbials, cf. (17), or the Lithuanian continuative prefix *tebe-*, cf. (18) (on this prefix, see Arkadiev 2011).

- (17) Lithuanian (Geniušienė & Nedjalkov 1988: 371)
Radij-as buv-o vis-q laik-q įjung-t-as.
 radio-NOM.SG be-PST.3 all-ACC.SG time-ACC.SG turn.ON-PST.PASS.P-NOM.SG
 “The radio set was turned on all the time.”
- (18) *J-is teb.ėra už.si.dar-ęs*
 3-NOM.SG.M CNT+be.PRS.3 close.REFL-PST.PA.NOM.SG.M
savo kambar-yje.
 RPOSS room-LOC.SG
 “He is still locked in his room.” [*lit.* “has still locked himself”]

In both kinds of resultative, the auxiliary can be argued to be a copula merely expressing predicative categories of tense, mood, and person, while the participles show similarities to predicative adjectives (on Lithuanian cf. Servaitė 1988: 87; Sakurai 2016: 195–196), as evidenced, e.g., by their being able to be conjoined with adjectives, cf. (19).

- (19) a. Lithuanian (LiLa)
Miest-as buv-o tušči-as ir
 town-NOM.SG be-PST.3 empty-NOM.SG.M and
ap-mir-ęs.
 PVB-die-PST.PA.NOM.SG.M
- b. Latvian (LiLa)
Pilsēt-a bij-a tuksnesīg-a, iz-mir-us-i.
 town-NOM.SG be.PST-3 empty-NOM.SG.F PVB-die-PST.PA.NOM.SG.F
 a=b “The town was empty and dead.”

In Lithuanian, the objective resultative (= stative passive) is systematically homophonous with the actional passive, cf. (20).

- (20) Lithuanian (Geniušienė & Nedjalkov 1988: 373)
Dur-ys buv-o už.rakin-t-os, bet aš
 door-NOM.PL be-PST.3 lock-PST.PASS.P-NOM.PL.F but 1SG.NOM
ne-žin-au, kada j-os buv-o už.rakin-t-os.
 NEG-know.PRS-1SG when 3-NOM.PL.F be-PST.3 lock-PST.PASS.P-NOM.PL.F
 “The door was locked (past resultative), but I don’t know when it was locked (past passive).”

In cases like (20) the two types of passive can be distinguished only by context (for more details, see Geniušienė 2016). By contrast, in Latvian, the actional passive uses a different auxiliary *tikt* “get”, cf. (21).

- (21) Latvian (constructed)
Durv-is bij-a aiz.slēg-t-as, bet es
 door-NOM.PL be.PST-3 lock-PST.PASS.P-NOM.PL.F but 1SG.NOM
ne-zin-u, kā t-as tik-a
 NEG-know.PRS-1SG when DEM-NOM.PL.F get-PST.3
aiz.slēg-t-as.
 lock-PST.PASS.P-NOM.PL.F
 “The door was locked (past resultative), but I don’t know when it was locked (past passive).”

2.2.2 The perfect proper

The perfect proper, used to refer to (both dynamic and static) situations somehow relevant at the reference time, formally differs from the resultative in that it is based mainly on active participles (for perfect uses of the passive participles in Latvian, see Nau 2019). Accordingly, it neither affects the argument structure of the verb, nor puts any restrictions on the lexical input (see below). The most prominent function of the perfect in both Lithuanian and Latvian is the experiential one, which indicates that the event denoted by the verb phrase has occurred at least once in the past and is considered as a salient property of the subject in the current discourse, cf. (22).

- (22) PQ51:² [A is visiting a town she used to live in several years ago; now she lives somewhere else.]
- a. Lithuanian
Es-u čia gyven-us-i, taigi žin-au vis-as
 be.PRS-1SG here live-PST.PA-NOM.SG.F so know.PRS-1SG all-ACC.PL.F
gatv-es.
 street-ACC.PL
- b. Latvian
Es te esm-u dzīvoj-us-i, tāpēc zin-u
 1SG.NOM here be.PRS-1SG live-PST.PA-NOM.SG.F therefore know.PRS-1SG
šeit katr-u iel-u.
 here every-ACC.SG street-ACC.SG
 a=b “I have lived here, so I know every street here.”

The ‘current relevance’ meaning is intermediate between the resultative proper and the experiential, and it is generally difficult to keep it apart from either of the latter two meanings. According to Dahl & Hedin (2000), current relevance constitutes a

2. The Perfect Questionnaire (Dahl ed. 2000: 800–809).

continuum of subtle meaning distinctions which depend both on the context and on actionality features of the verb. First of all, it is primarily a discourse-oriented notion “in that the speaker portrays the consequences of an event as somehow essential to the point of what he is saying” (Dahl & Hedin 2000: 392). In particular, relevance is important for certain illocutionary effects, e.g. to make interlocutors react somehow to the state of affairs denoted. For instance, an utterance like ‘A bank has been robbed’ is suitable not so much just to inform interlocutors about some event, but to move and do something about it. Likewise, ‘The gong has sounded’ is primarily uttered not to inform about an acoustic event, but “to mean that it is time to have dinner” (Dahl & Hedin 2000: 391). The use of the perfect in this function is much more developed in Latvian than in Lithuanian. Thus, in (23) from PQ Latvian speakers allow the perfect while Lithuanian speakers prefer the simple past (cf. similar observation in Sakurai 2016: 199):

- (23) PQ40: [The window is open but A has not noticed that. A asks B: why is it so cold in the room?]
- a. Lithuanian
Aš atidari-au lang-ą.
 1SG.NOM open.PST-1SG window-ACC.SG
- b. Latvian
Esm-u atvēr-is log-u.
 be.PRS-1SG open-PST.PA.NOM.SG.M window-ACC.SG
 a=b “I have opened the window.”

A parallel corpus study (Arkadiev & Daugavet 2016) has shown that current relevance accounts for about a half of the uses of the present perfect in Latvian as opposed to less than 20% of the uses of the present perfect in Lithuanian, cf. (24).

- (24) Lithuanian (LiLa)
Bet dar reikė-s ir Natalij-os paklausinė-ti. K-ą
 but still need-FUT.3 and Natalia-GEN.SG interrogate-INF what-ACC
j-i yra su-galvoj-us-i.
 3-NOM.SG.F be.PRS.3 PVB-think-PST.PA-NOM.SG.F
 “We will still have to ask Natalia. What did she decide?”

Similarly, in Latvian, but not in Lithuanian, the present perfect can be used to express unexpected events in the recent past (the so-called ‘hot news’ function, see e.g. Dahl & Hedin 2000), though such usage does not seem to be very frequent, cf. (25). Lithuanian employs the simple past here (cf. Sakurai 2016: 203).

- (25) PQ56: [A has just seen the king arrive. The event is totally unexpected.] A: The king ARRIVE!
- a. Latvian
Karal-is ir ie.rad-ies! /ie.rad-ā-s!
 king-NOM.SG be.PRS.3 arrive-PST.PA.NOM.SG.M.REFL / arrive-PST.3-REFL
- b. Lithuanian
Karali-us at.vyk-o! /??yra at.vyk-ęs
 king-NOM.SG arrive-PST.3 / be.PRS.3 arrive-PST.PA.NOM.SG.M
 a=b “The king has arrived!”

The so-called perfect of persistent situation (‘universal perfect’, see e.g. Iatridou et al. 2001) is absent in Lithuanian (Arkadiev 2015: 9; Sakurai 2016: 200 fn. 5) and only marginally attested in Latvian (Nau 2005: 147–148). Compare the corpus Example (26). However, for both languages the default option in such contexts is the present tense, cf. the elicited examples in (27).

- (26) Latvian (Nau 2005: 147)
viņ-š vienmēr ir iz.cēl-ies ar
 3-NOM.SG.M always be.PRS.3 stand.out-PST.PA.NOM.SG.M.REFL with
t-o, ka vienmēr meklēj-is kaut k-o
 that-ACC.SG that always search-PST.PA.NOM.SG.M something-ACC.SG
jaun-u.
 new-ACC.SG
 “... he [=Gidon Kremer] has always stood out because he has always been looking for something new.”
- (27) PQ49: [A is still living in this town.] A: I LIVE here for seven years.
- a. Lithuanian
Aš gyven-u čia septyneri-us met-us.
 1SG.NOM live-PRS.1SG here seven-ACC.PL.M year-ACC.PL
- b. Latvian
Es šeit dzīvoj-u septiņ-us gad-us.
 1SG.NOM here live-PRS.1SG seven-ACC.PL.M year-ACC.PL
 a=b “I have been living here for seven years.”

As to the opposition between the perfect and the simple past, in Lithuanian the perfect (though not the resultative) seems to be largely optional, since in most contexts discussed in this section the simple past can be used instead (see Sakurai 2016); cf. a similar situation in Koine Greek (Crellin, this volume). The situation in Latvian is different, since not only is the perfect more rigidly opposed to the simple past, but it can also be used as a rhetorical device, namely: to juxtapose events in

a report in order to contrast them with a situation obtaining during speech time (Arkadiev & Daugavet 2016); compare:

- (28) Latvian (LiLa)
Esm-u sa-sildīj-us-i kartupeļ-us [...]
 be.PRS-1SG PVB-heat-PST.PA-NOM.SG.F potato-ACC.PL
sa-griez-u-si salāt-us, nu ie-klaus-o-s, kā
 PVB-cut-PST.PA-NOM.SG.F salad-ACC.PL now PVB-listen.PRS-1SG-REFL how
man-s vīr-s un viņ-a tēv-s atkal
 my-NOM.SG.M husband-NOM.SG and 3-GEN.SG.M father-NOM.SG again
lāpa pasaul-i.
 curse.PRS.3 world-ACC.SG
 “I heated [*lit.* have heated] the potatoes, [...], made [*lit.* have cut] the salad, and now I listen how my husband and his father are cursing the world again.”

In addition, in Latvian the perfect can be used as a device of reportive evidentiality (= reportativity), as in (29). The more common way to express reportativity in Latvian (as in Lithuanian, see e.g. Wiemer 2006a) is, however, by means of ‘bare’ past participles without any auxiliary.

- (29) Latvian (Nau 2005: 149)
Bet cit-i sak-a, ka klas-ē tu es-i
 but other-NOM.PL.M say.PRS-3 that class-LOC.SG 2SG.NOM be.PRS-2SG
varēj-is bū-t arī diezgan neciešam-s.
 can-PST.PA.NOM.SG.M be-INF also rather unbearable-NOM.SG.M
 “But other people say you could be pretty insufferable in class.”

2.2.3 Pluperfect

The past perfects or pluperfects in Lithuanian and Latvian are robustly represented. In fact, according to Arkadiev & Daugavet (2016) and Sakurai (2016), in Lithuanian the past perfect is used more frequently and more consistently than the present perfect. Some functions of the Baltic pluperfects can be considered to be compositionally derived from the combination of the perfect and the past tense, showing such functions as the past resultative in (30) and experiential with a reference time in the past, as in (31) from a narrative.

- (30) a. Latvian (LiLa)
Bij-ā-m no-šķied-uš-ies un
 be-PST-1PL PVB-sprinkle-PST.PA-NOM.PL.M.REFL and
nogur-uš-i.
 get.tired-PST.PA-NOM.PL.M

- b. Lithuanian (LiLa)
Buv-o-m nu-si-tašk-ę ir
 be-PST-1PL PVB-REFL-sprinkle-PST.PA.NOM.PL.M and
pavarg-ę.
 get.tired-PST.PA.NOM.PL.M
 a=b “We were sprinkled [with water] and tired.”
- (31) a. Latvian (LiLa)
Saimniece nedaudz uztraucās,
kaut gan sav-ā mūž-ā bij-a
 although RPOSS-LOC.SG lifetime-LOC.SG be.PST-3
pie-redzēj-us-i vēl vairāk.
 PVB-see-PST.PA-NOM.SG.F still more
 “The hostess was slightly worried, even though she had seen much in her life.”
- b. Lithuanian (LiLa)
Šeimininkė bemaž nesijaudino,
nes savo gyvenim-e buv-o mači-us-i dar ne
 because RPOSS life-LOC.SG be-PST.3 see-PST.PA-NOM.SG.F still not
toki-ų dalyk-ų.
 such-GEN.PL thing-GEN.PL
 “The hostess was almost not worried because she had seen even worse things in her life.”

However, no less prominent are non-compositional uses belonging to the domain of the so-called ‘discontinuous past’ (Plungian & van der Auwera 2006), such as annulled result (32) and the ‘stage setting’ use in the introductory sections of narratives (33). Both functions are cross-linguistically associated with pluperfects (Sičinava 2013).

- (32) PQ37: You OPEN the window (and closed it again)?
- a. Lithuanian
Ar buv-ai ati.dar-ęs lang-q?
 Q be-PST.2SG open-PST.PA.NOM.SG.M window-ACC.SG
- b. Latvian
Tu bij-i at.vēr-is log-u?
 2SG.NOM be.PST-2SG open-PST.PA.NOM.SG.M window-ACC.SG
 a=b “Did you open [*lit.* had opened] the window?”

- (33) a. Latvian (LiLa)
Bij-a at-nāk-us-i vien-a sportist-e,
 be.PST-3 PVB-come-PST.PA-NOM.SG.F one-NOM.SG.F athlete(F)-NOM.SG
atnes-a ieteikum-a vēstul-i no
 bring-PST.3 recommendation-GEN.SG letter-ACC.SG from
Olimpisk-ās komitej-as.
 Olympic-GEN.SG.DEF committee-GEN.SG
- b. Lithuanian (LiLa)
Buv-o at.ėj-us-i vien-a sportinink-ė,
 be-PST.3 come-PST.PA-NOM.SG.F one-NOM.SG.F athlete(F)-NOM.SG
atneš-ė rekomendacin-į laišk-q iš
 bring-PST.3 recommendatory-ACC.SG.M letter-ACC.SG from
Olimpini-o komitet-o.
 Olympic-GEN.SG.M committee-GEN.SG
 a=b “An athlete woman came [*lit.* had come], she brought a recommendation letter from the Olympic Committee.”

In Latvian, the pluperfect is also used to denote a sudden unexpected turn of events (34). Lithuanian uses the simple past in such contexts, just as in the ‘hot news’ contexts discussed above.

- (34) a. Latvian (LiLa)
Eins-zwei, un viņ-a bij-a uz-zīmēj-us-i
 Eins-zwei and 3-NOM.SG.F be.PST-3 PVB-draw-PST.PA-NOM.SG.F
uz Andželo vaiga sarkan-balt-sarkanās striņas.
- b. Lithuanian (LiLa)
Eins-zwei ir j-i iš-pieš-ė
 Eins-zwei and 3-NOM.SG.F PVB-draw-PST.3
ant Andželo skruosto raudonai – baltai – raudonas juostas.
 a=b “Eins zwei, and she drew [in Latvian *lit.* had drawn] red and white stripes on Angelo’s cheek.”

2.2.4 Future perfect

The future perfects in Lithuanian and Latvian have compositional uses, such as future anterior (35), but are more frequently used to express inferences about present states or past events (36), which can probably be considered a separate construction using the same formal means.

- (35) a. Latvian (LiLa)
Mēs vēl redzē-si-m-ies pēc t-am, kad es
 1PL.NOM still see-FUT-1PL-REFL after that-DAT.SG.M when 1SG.NOM
bū-š-u no-mir-us-i.
 be-FUT-1SG PVB-die-PST.PA-NOM.SG.F

- b. Lithuanian (LiLa)
Mes dar maty-si-mė-s, ir tada, kai aš bū-si-u
 1PL.NOM still see-FUT-1PL-REFL and then when 1SG.NOM be-FUT-1SG
mir-us-i.
 die-PST.PA-NOM.SG.F
 a=b “We will see each other even after I am dead [*lit.* will have died].”
- (36) a. Latvian (LiLa)
Bū-s pie.vāk-us-i kād-as patron-as, ja
 be-FUT.3 pick.up-PST.PA-NOM.SG.F some-ACC.PL cartridge-ACC.PL if
som-a tik smag-a.
 bag-NOM.SG so heavy-NOM.SG.F
- b. Lithuanian (LiLa)
Bus pagvelb-us-i kok-į patron-q, jei
 be-FUT.3 pick.up-PST.PA-NOM.SG.F some-ACC.SG cartridge-ACC.SG if
rankinuk-as tok-s sunk-us.
 hadbag-NOM.SG such-NOM.SG.M heavy-NOM.SG.M
 a=b “It seems that she has picked up some cartridge(s), since the bag is so heavy.”

2.2.5 Counterfactual perfect

In Lithuanian there is a formal distinction, on the one hand, between the subjunctive of the present perfect formed by means of the subjunctive form of the auxiliary, and, on the other hand, the supercomposed form of the counterfactual of the past perfect with two auxiliaries. For the first compare (37) with the subjunctive of the experiential perfect introduced by a negated propositional attitude verb homophonous with the past subjunctive (counterfactual) (38), and for the second see (39). The latter seems to be restricted to past time reference.

- Lithuanian (Arkadiev 2016: 124; examples from LKT)
- (37) *Aš neprisimenu, kad tu*
bū-tum raš-ęs apie ši-uos krūm-us.
 be-SBJV.2SG write-PST.PA.NOM.SG.M about this-ACC.PL.M bush-ACC.PL
 “I don’t remember you having written about these bushes.”
- (38) *Aš pagalvoju, kad ir tu*
bū-tum pri-ėm-ęs komunij-q, jeigu
 be-SBJV.2SG PVB-take-PST.PA.NOM.SG.M communion-ACC.SG if
bū-tum laisv-as.
 be-SBJV.2SG free-NOM.SG.M
 “I thought that you would also have accepted the communion if you had been free.”

- (39) *J-is nu-žvelg-ė man-e, lyg bū-čiau*
 3-NOM.SG.M PVB-glance-PST.3 1SG-ACC like be-SBJV.1SG
buv-ęs iš.vyk-ęs mažiausia šimt-q
 be-PST.PA.NOM.SG.M depart-PST.PA.NOM.SG.M at.least hundred-ACC.SG
met-ų.
 year-GEN.PL
 “He looked at me as if I had been away [*lit.* would have departed] for at least hundred years.”

2.2.6 Possessive perfects

Both Lithuanian and Latvian have developed constructions expressing the relation of possession between the result of the action denoted by the verb and its agent, i.e. the so-called “possessive perfect/resultative” (Nedjalkov & Jaxontov 1988: 9–10). These constructions are based on the structures expressing predicative possession in the respective languages; see also §3.5.3 for a discussion of similar constructions in Slavic.

As already mentioned above, Lithuanian employs for the possessive resultative the transitive verb *turėti* “have” and the active past participle.³ The lexical input of this construction is limited almost exclusively to verbs denoting acquisition or change of possession, such as *gauti* “get”, *rasti* “find”, including the productive reflexive-benefactive verbs such as *nu-si-pirkti* “buy for oneself” or *pa-si-statyti* “build for oneself”, cf. (40) and (41).

- Lithuanian (Arkadiev 2012: 105)
- (40) *Dar po savait-ės aš jau turėj-au*
 still after week-GEN.SG 1SG.NOM already have-PST.1SG
gav-ęs vis-us pinig-us už savo
 get-PST.PA.NOM.SG.M all-ACC.PL.M money-ACC.PL for RPOSS
sklyp-el-į.
 lot-DIM-ACC.SG
 “Already in a week I got [*lit.* had got] all the money for my lot.”
- (41) *ši-ose respublik-ose Maskv-os mer-as tur-i*
 this-LOC.PL.F republic-LOC.PL MOSCOW-GEN.SG mayor-NOM.SG have-PRS.3
pa-si-stat-ęs keli-as vil-as.
 PVB-REFL-build-PST.PA.NOM.SG.M several-ACC.PL villa-ACC.PL
 “In these republics the mayor of Moscow has built for himself several villas.”

3. Cf. Geniušienė & Nedjalkov (1988: 385–386), Arkadiev (2012: 105f.) and Wiemer (2012) for a fuller account.

However, one also occasionally finds in the possessive resultative verbs like *prarasti* “lose” (42), and verbs denoting mental or illocutive events (which do not change states), as in (43). These seem to have remained infrequent, though.

- Lithuanian
- (42) *Našlait-is* – *vaik-as*, *kur-is* *tur-i*
 orphan-NOM.SG child-NOM.SG which-NOM.SG.M have-PRS.3
pra.rad-ęs *vien-ą* *ar ab-u* *tėv-us*.
 lose-PST.PA.NOM.SG.M one-ACC.SG or both-ACC.M father-ACC.PL
 “An orphan is a child who lost [*lit.* has lost] one or both parents.”
 (Arkadiev 2012: 105, example originally from the internet)
- (43) *Turi-u* *su-galvoj-ęs* *siužet-ą*,
 have-PRS.1SG PVB-think-PST.PA.NOM.SG.M plot-ACC.SG
bet ieškau, kaip geriau jį išplėtoti.
 “I have invented the plot (for a novel), but I am considering how to develop it better.” (LKT)

The construction *turėti* + past active participle occurs as well in predications of inalienable possession, as in (44), for which no change of physical possession can be assumed. Such constructions can be considered the diachronic forerunners of the more grammaticalized ones shown above.

- (44) Lithuanian (LKŽe, sub *turėti*)
Ak-is *tur-i* *nuleid-ęs*.
 eye-ACC.PL have-PRS.3 lower-PST.PA.NOM.SG.M
 “He has his eyes lowered.”

Note that Lithuanian provides a counterexample to the claim that HAVE-based subjective resultatives imply a preceding stage of object orientation (see §3.5.2). The agreement pattern of the Lithuanian HAVE-resultative indicates strict subject orientation, and this is not an extension from object orientation. Note that *turėti* “have” and the participle have hardly lost any of their properties as independent verbs and do not combine into a clearly monoclausal predicative complex. That is, *turėti* shows almost no sign of auxiliation (on which see further in §3.5.2). One can still easily read the combination HAVE+PST.PASS.P+OBJECT-NP as a taxis construction with the participle as a secondary predicate: the object-NP cannot be omitted and can almost always be interpreted as an argument of HAVE, while the subject-NP can be interpreted as an argument of both HAVE and the participle. This transparent structure has a different genesis from all HAVE-based resultatives-perfects in Slavic, Germanic and Romance (Wiemer & Giger 2005: 48; Wiemer 2012: 72), and this conditions its being a counterexample to the claim referred to above.

By contrast, Latvian, lacking a transitive possessive verb, builds its possessive perfect by means of existential *būt* “be” and the agent/possessor in the dative case (e.g. Holvoet 2001: 171–175), cf. (45). This construction is restricted to transitive lexical verbs, however, it has extended its uses beyond literal possession, cf. (46).

- Latvian (Holvoet 2001: 172–173)
- (45) *Bet es jau nebiju muļķis,*
man līdzi bij-a pa-ņem-t-a neliel-a
 1SG.DAT with be.PST-3 PVB-take-PST.PASS.P-NOM.SG.F small-NOM.SG.F
kabat-as baterij-a.
 pocket-GEN.SG battery-NOM.SG
 “But I was not a fool, I had taken a small pocket lantern with me.”
- (46) *Bet Ernestam jau neko vairs nevajadzēja,*
viņ-am jau vis-s bij-a iz-teik-t-s.
 3-DAT.SG.M already all-NOM.SG.M be.PST-3 PVB-say-PST.PASS.P-NOM.SG.M
 “But Ernest needed nothing more, he had already said everything [he wanted to say].”

2.2.7 Interim summary

The Baltic perfects, on the one hand, clearly retain their close connection to the resultative, and, on the other hand, have developed quite far beyond that. In terms of the stages of grammaticalisation of the perfect outlined in Harris (1982) and Squartini & Bertinetto (2000), the Lithuanian present perfect is at stage II (possessive resultative and experiential contexts) while the Latvian present perfect is at stage III (‘current relevance’, cf. Nau 2005). Notably, Latvian seems to employ the present perfect more consistently and systematically, while in Lithuanian the present perfect is in many contexts optional and can be substituted by other verbal forms, most commonly by the simple past. By contrast, the past perfects in both languages occupy a functional niche of their own and compete with the simple past to a lesser extent. The comparison of the functions of the perfects in Lithuanian and Latvian is schematized in Table 1 (cf. Arkadiev & Daugavet 2016). The last line refers to the extension of the future perfect into inferential functions which is encountered in many European languages with developed perfect paradigms (often called ‘epistemic extension’); see §2.2.4 above. This extension is independent of the evidential uses of participles which we discussed in §2.1 and §2.2.2.

Table 1. Functions of Lithuanian and Latvian Perfects

Tense	Function	Lithuanian	Latvian
Present Perfect	resultative	yes	yes
	experiential	yes	yes
	current relevance	marginal	yes
	universal	no	marginal
Past Perfect	resultative-in-the-past	yes	yes
	experiential-in-the-past	yes	yes
	annulled result	yes	yes
	introductory	yes	yes
Future Perfect	resultative-in-the-future	yes	yes
	inferential	yes	yes

2.3 Issues of grammaticalisation

Altogether, standard parameters of grammaticalisation (e.g. Lehmann 2015[1982]: Chapter 4) are not very suitable for describing the diachronic processes of resultative-perfects in Baltic. The most relevant parameter seems to be the expansion of the lexical input of the constructions, because it corresponds to the development of functions of erstwhile resultatives. In the following we first discuss the lexical input of the constructions and then turn to the assessment of the more traditional parameters of grammaticalisation.

2.3.1 *Lexical input*

As has already been noted in the preceding sections, the resultative proper is restricted to telic verbs denoting a change of state, cf. (1) and (16), including change of possession. Moreover, the choice of the active vs. passive participle is rigidly correlated with the participant conceptualized as the holder of the resultant state, cf. (16) vs. (17). By contrast, the perfect does not show lexical restrictions and is attested with all kinds of verbs, including transitive verbs that are not strictly telic (e.g., ‘hit’, ‘say’, ‘decide’) (24), intransitive (one-place) verbs like ‘live’ (22), and even meteorological (zero-place) verbs, as in (47).

- (47) Lithuanian (LKT)
Anot j-ų, jau daugiau kaip trisdešimt metų
 according.to 3-GEN.PL already more as thirty year-GEN.PL
nėra taip snigę.
 NEG+be.PRS.3 SO SNOW-PST.PA.NA
 “According to them, there has not been such a snowfall for thirty years already.”

On the aspectual side, the perfect proper freely combines with atelic and stative verbs, including ‘be’, cf. (48).

- (48) Latvian (LiLa)
Šajā pilsētā neviens nezināja,
ka esm-u bij-us-i latvieš-u balet-a
 that be.PRS-1SG be-PST.PA-NOM.SG.F Latvian-GEN.PL ballet-GEN.SG
liel-ā cerīb-a ...
 big-NOM.SG.F.DEF hope-NOM.SG
 “In this city nobody knew that I have been the great hope of the Latvian
 ballet ...”

The rather rigid restrictions on verbs appearing in the Lithuanian and Latvian possessive perfects have already been mentioned above (§2.2.6).

2.3.2 *Morphosyntactic parameters of grammaticalisation*

According to parameters of grammaticalisation from Lehmann (2015 [1982]: Chapter 4), the Baltic perfects can be considered to be only weakly grammaticalized, at least in terms of their formal properties, with the Latvian perfect slightly more advanced than the Lithuanian perfect. However, as will be shown below, it is unclear to what extent the parameters proposed by Lehmann are at all relevant for the constructions in question.

Phonological and semantic erosion. We find none of the former and encounter analytical problems when assessing the latter. The process of semantic bleaching seems to be applicable only to auxiliaries. The Lithuanian possessive *turėti* “have” has bleached only marginally. Although it has occasionally been attested with past active participles of verbs meaning lack or deprivation, or not implying change of physical possession, see Examples (42–43), the construction still implies a certain relation between the agent of the event and its resultant state, and this relation still fits squarely within the basic domain of usage of the possessive verb in Lithuanian.

As for BE-verbs, one may wonder what the relation between copular and existential ‘be’ is, and which kind of bleaching might be involved in the step “copular ‘be’ > auxiliary ‘be’”, since the latter does not seem to be more “abstract” than the former. The only tangible difference is related to argument structure: the existential or copular verb has a subject and a predicate nominal argument, whereas the constructions with the auxiliary inherit the argument structure of the lexical verb, including the case of zero-place verbs as in (47) above.

The *morphosyntactic integrity* of the periphrastic constructions is rather low, as evidenced by the fact that although usually the auxiliary and the participle follow each other without intervening elements, this is by no means a strict grammatical requirement, see examples in (49).

- (49) a. Lithuanian (LiLa)
Psichoanaliz-ė yra gana tiksliai
 psychoanalysis-NOM.SG be.PRS.3 enough precisely
iš-aiškin-us-i,
 PVB-clarify-PST.PA-NOM.SG.F
iš ko ji sudaryta.
- b. Latvian (LiLa)
Psichoanalīz-e ir diezgan precīzi
 psychoanalysis-NOM.SG be.PRS.3 enough precisely
no.skaidroj-us-i,
 clarify-PST.PA-NOM.SG.F
no kā tā sastāv.
 a=b “Psychoanalysis has explained precisely enough what it consists of”

The structural scope of the constructions is wide, as evidenced by the fact that the auxiliary is usually omitted in coordination, cf. examples in (50), but this can be a consequence of their low morphosyntactic integrity.

- (50) a. Lithuanian (LiLa)
suskaičiuoti visus pinigų, kuriuos dar turi,
es-i k-am nors pa-skolin-us-i ar
 be.PRS-2SG who-DAT INDF PVB-lend-PST.PA-NOM.SG.F or
investav-us-i ...
 invest-PST.PA-NOM.SG.F
- b. Latvian (LiLa)
saskaitīt visu naudu, kura tev vēl ir,
kur-u es-i aiz.dev-us-i vai
 which-ACC.SG be.PRS-2SG lend-PST.PA-NOM.SG.F or
investēj-us-i ...
 invest-PST.PA-NOM.SG.F
 a=b “[you should] count all the money that you still possess, have lent to somebody or invested ...”

The syntagmatic variability of the perfect constructions is high, as evidenced by the fact that the inverted order of the participle and the auxiliary is possible, see Examples (51) and (52).

- (51) Lithuanian (LKT)
Pas mus apie toki-us nè girdėj-ęs
 at 1PL.ACC about such-ACC.PL.M not hear-PST.PA.NOM.SG.M
nes-u!
 NEG+be.PRS-1SG
 “I have not even heard about such [mushrooms] at our place!”

- (52) Latvian (http://www.medniekiem.lv/discussion/2072/desc/, accessed September 22, 2016)
Redzēj-is esm-u vairāk-us gadījum-us ...
 see-PST.PA.NOM.SG.M be.PRS-1SG several-ACC.PL accident-ACC.PL
 “I have seen several accidents ...”

Special consideration should be paid to the behaviour of negation, which is non-trivial in the Baltic perfect constructions. In Lithuanian, negation can appear both on the auxiliary and on the participle with a difference in scope (for more details, see Arkadiev forthcoming), cf. (53) and (54).

- (53) Lithuanian (Arkadiev forthcoming, originally from http://www.almalittera.lt/img/uploads/pdf/Stikline-pieno.pdf)
Aš dar niekada anksčiau nes-u miegoj-us-i
 1SG.NOM yet never earlier NEG+be.PRS-1SG sleep-PST.PA-NOM.SG.F
vien-a kambar-yje.
 one-NOM.SG.F room-LOC.SG
 “I have never slept alone in a room before.”
- (54) *Aš es-u ne-miegoj-us-i pusantr-os*
 1SG.NOM be.PRS.1SG NEG-sleep-PST.PA-NOM.SG.F one.and.a.half-GEN.SG
par-os.
 24.hours-GEN.SG
 “I have not slept for 36 hours.”

Negation can even occur on both parts of the perfect construction, each with its own semantic contribution, cf. (55).

- (55) Lithuanian (Arkadiev forthcoming; LKT)
Niekada nes-u ne-padėj-ęs žmog-ui
 never NEG+be.PRS-1SG NEG-help-PST.PA.NOM.SG.M person-DAT.SG
vien dėl to, kad jis yra vienos ar kitos partijos narys.
 “It has never been the case that I didn’t help a person just because he was a member of a particular party.”

An areal parallel to these constructions is constituted by the negated pluperfect of the neighbouring Slavic dialects, see e.g. Mackevič & Grinaveckienė (1993: 107), cf. the schematic example in (56).

- (56) Lithuanian *Jis buvo tris dienas ne-valg-ęs.*
 Belarusian *Jon byu try dni n’a-je-ušy.*
 3SG.NOM.M be.PST.3 three days NEG-eat-PST.PA

By contrast, in Latvian, the negation almost invariably attaches to the auxiliary, cf. (57).

- Latvian (Arkadiev forthcoming; originally from
<https://spoki.tvnet.lv/literatura/Asinaina-roze-8-dala/665390>)
- (57) *Es ne-esmu ēd-us-i div-as dien-as.*
 1SG:NOM NEG-be.PRS.1SG eat-PST.PA-NOM.SG.F two-ACC day-ACC.PL
 “I have not eaten for two days.”

Attachment of the negation exclusively to the auxiliary might be considered indicative of a higher degree of grammaticalisation of the Latvian perfect with respect to the Lithuanian one, which still retains some properties of a biclausal construction.

2.4 Issues of diachrony

The diachronic development of the Baltic perfects awaits empirical investigation, which, however, is hampered by the lack of annotated diachronic corpora. This should include not only the oldest written texts from the 16th and 17th centuries,⁴ but also the pre-modern texts of the 19th century as well. The evaluation of isolated examples from old texts in the Baltic languages should also take into account philological considerations, in particular the potential influence of originals in other languages, such as German or Polish, as well as the linguistic background of the authors of original or translated Baltic texts. Here we provide only cursory remarks based on the information we could obtain from the very few works known to us that deal with the Baltic perfects from a historical perspective. The etymology of the participle suffixes will be commented on jointly with the Slavic ones in §3.2.

In general, the Baltic perfects show diachronic stability during the time span of the texts written in the Baltic languages, i.e. from mid-16th century onwards. This stability reveals itself both in the structure of the perfect constructions (e.g., no loss of agreement) and in their functions (no noticeable shifts toward general past). Thus, already in Old Lithuanian and Old Latvian texts periphrastic forms with past active participles are attested in the experiential or ‘current relevance’ meanings (Ambrasas 1990: 184), cf. (58) and (59):

- (58) Old Lithuanian
 (*Vilentas’ Catechism*, 1579, 1:14; quoted after Ford 1969a: 135)
- kok-i tulim-a warg-a es-my regey-es*
 what-ACC.SG.M great-ACC.SG misery-ACC.SG be.PRS-1SG see-PST.PA.NOM.SG.M
 “What great misery I have seen.”

4. The launching of the SLIEKKAS project (<http://titus.uni-frankfurt.de/sliekkas/>) will hopefully help resolve this. We thank the editors for bringing it to our attention.

(59) Old Latvian

(Glück's Bible, 1685–89, Jud. 15:16; quoted after Ambrazas 1990: 184)

esm-u es tuhkstosch-us Wihr-us
 be.PRS-1SG 1SG.NOM thousand-ACC.PL man-ACC.PL
kaw-is
 slaughter-PST.PA.NOM.SG.M
 “have I slain a thousand men.”

The perfect is attested with clearly atelic verbs, as in (60), depicting the words of Satan at the Last Judgment, where as a consequence the reference is to a situation no longer holding at speech time.

(60) Old Lithuanian

(Daukša's Postilla, 1599, 523: 39; example courtesy of Felix Thies)

pagal' mana, ne pagal' tawa wal-q
 according.to 1SG.POSS not according.to 2SG.POSS will-ACC.SG
giwen-us' est'
 live-PST.PA.NOM.SG.F be.PRS.3
 “It [the soul, feminine in Lithuanian] has lived according to my, not Your will.”

Past and future perfects denoting a resultant state holding at some past or future reference time are also attested, cf. (61) and (62).

(61) Old Lithuanian

(Vilentas' Catechism, 1579, 5:13; quoted after Ford 1969a: 136, 276)

idant tatai k-q buw-a isch-mok-ię gale-tu
 so_that that what-ACC be-PST.3 PVB-learn-PST.PA.NOM.PL.M can-SBJV.3
ischmani-ti
 understand-INF
 “so that they may be able to understand that which they had learned.”

(62) Old Lithuanian (Vilentas' Catechism, 1579, 6:2; quoted after Ford 1969a: 136)

kad tu t-q maž-a Catechism-a bu-s-i
 when 2SG.NOM DEM-ACC.SG small-ACC.SG Catechism-ACC.SG be-FUT-2SG
isch-mokin-es, tada im-k didesn-i
 PVB-teach-PST.PA.NOM.SG.M then take-IMP.2SG larger-ACC.SG.M
Catechism-a.
 Catechism-ACC.SG
 “When you will have taught this small Catechism, then take the larger Catechism.”

The pluperfect also occurs in contexts where it denotes a situation no longer holding, akin to annulled result, cf. (63):

- (63) Old Latvian (*Elger's Gospel*, 1671, John 2:9; quoted after Ambrazas 1990: 185)
 wyn-u bandia katter-s bya vden-s
 wine-ACC.SG taste.PST.3 which-NOM.SG.M be.PST.3 water-NOM.SG
 byis
 be.PST.PA.NOM.SG.M
 “[the master of the banquet] tasted the wine that used to be water” (cf. the
 German original: *kostet den Wein / der Wasser gewesen war*)

The following Old Latvian example of the future perfect appears to exemplify a use apparently not attested in the modern language, i.e. a quasi-resultative reading of the perfect based on an atelic verb. It remains unclear whether the author of the text, the scholar and priest Georg Mancelius, could be influenced by the German periphrastic future (for somewhat similar uses of the corresponding form in Old Czech see §3.6.5).

- (64) Old Latvian
 (*Mancelius' Postil*, 1654, II, 182:13–14; quoted after Ambrazas 1990: 184)⁵
 Way t-am [...] k-aß buh-ß nhepareise dsiewoj-is!
 woe that-DAT.SG.M who-NOM be-FUT.3 unrighteously live-PST.PA.NOM.SG.M
 “Woe to him who will live [*lit.* will have lived] unrighteously!”

Notably, the oldest original text in Lithuanian, Martynas Mažvydas' poetic introduction to his 1547 translation of Luther's *Enhiridion* (Ford 1969b: 13–16), does not contain a single perfect form in its 114 lines, even though contexts where the perfect could be used (at least in modern Lithuanian) are found, e.g. negative experiential, twice rendered by Mažvydas by the simple past forms, cf. *nekada negirdieau* “I have never heard” and *Bašņiczia nog deschimtes metu nebuwau* “I have not been to church for ten years”.

Let us also briefly discuss the situation with the perfect in Old Prussian (see Kaukienė 2004: 225–287). The syntax of its few extant texts, i.e. the three translations of Luther's Catechisms, largely follows the German original, including the use of simple vs. periphrastic tenses and even the order of the auxiliary and the participle (Kaukienė 2004: 253–258). Thus, according to Kaukienė (2004: 230, 236–237), of 45 instances of active indicative perfect in Old Prussian, only 10 do not directly correspond to the German periphrastic past tense, and out of these only three examples translate the German present or simple past. We have no data showing instances of German periphrastic tenses translated into Old Prussian by the simple

5. The example was checked against the electronic edition found at http://www.korpuss.lv/senie/static/Manc1654_LP2.html (Accessed March 12, 2017).

tenses, and the latter occur even less frequently in Old Prussian than the former (Trautmann 1910: 291).⁶ In the light of this, it is not surprising that, as Ambrazas (1990: 184) observes, in Old Prussian the perfect was often formed on the basis of atelic verbs, cf. (65).

(65) Old Prussian

(*Enchiridion*, 1561, 103₁₈; quoted after Ambrazas 1990: 184–185)

niaintont-s *ast ... swai-an* *subb-an* *mens-an*
 no_one-NOM.SG.M be.PRS.3 RPOSS-ACC.SG OWN-ACC.SG flesh-ACC.SG
dergē-uns
 hate-PST.PA.NOM.SG.M

“No one ever hated their own body” (= Eph. 5:29, cf. German original: *niemandt hat ... sein eigen fleisch gehasset*)

This situation is reminiscent of the role German played in the employment of the perfect (and other compound forms) in Slovincian (see §3.5.2).

3. Slavic

Slavic is traditionally divided (mainly by isoglosses on the basis of sound changes, syllable structure and some morpho(no)logical phenomena) into South, East and West Slavic; the latter two are often united under the label ‘North Slavic’.⁷ The oldest written form of Slavic is Old Church Slavonic (OCS), and Common Slavic (CS, 3rd–7th c. AD) is assumed to be a period in which the dialect area was relatively homogeneous. OCS emerged in the late 9th century on South Slavic soil, and subsequently became a kind of koine, with several recensions in different Slavic-speaking subareas (see §3.5.1). Its influence on later South and East Slavic and, in particular, on the predecessors of standard Russian has been considerable. It however must be stressed that there is no direct inheritance relation between OCS and East or West Slavic. The oldest genuinely East Slavic (Old Russian) documents date from the 11th century, while the oldest West Slavic documents reach back to the 12th (Czech) and the late 13th (Polish) centuries. Old Serbian/Slovene contacts with varieties of German are probably older than that, as is also the case at the western edge of South Slavic where there is contact with Italian.

6. “In Nachahmung des d[utschen] Perfektums hat in unsern Texten das balt[ische] periphrastische Perfektum gegenüber dem Prät[eritum] an Ausdehnung gewonnen.”

7. This basic divide proves only moderately relevant for the inner-Slavic diatopic differentiation of perfects.

Perfects in Slavic display an enormous internal differentiation, first of all as concerns variation in the means of expression and the range of admissible lexical input. A particular issue is the question of the extent to which the semantics and structure of perfects have been affected by the stem-derivational aspect (perfective vs. imperfective) opposition,⁸ which we will deal with in passing (see especially §§3.4.2–3).

We start with the basic morphosyntactic classification of perfects in Slavic (§3.1), which is followed by information on the provenance of the participles (§3.2). Then follows a survey of the functional distribution of perfects (§3.3) and of functional extensions into, and intersections with, other domains (§3.4). This brings us to diachronic issues (§3.5) and a survey of past and future perfects (§3.6). Main lines of development and areal patterns, with an account of language contact, will be summarized in §3.7.

3.1 Basic morphosyntactic classification

All Slavic perfects are based on anteriority participles, which combine with an auxiliary BE- or HAVE-verb. Altogether three basic types of perfects should be distinguished, cf. Table 2:

Table 2. Formal types of perfects in Slavic

	Auxiliary		Major types	Subtypes
			Lexical part (main verb)	(Restricted)
(A)	BE	+	<i>l</i> -participle ('short forms')	
(B)	BE	+	<i>n/t</i> -participle	<i>vši</i> -participle
(C)	HAVE	+	<i>n/t</i> -participle	<i>l</i> -participle ('long forms'; see fn. 11)
	(a) with inflected participle (mostly agreeing with the object NP)			
	(b) without agreeing participle, or with non-inflected participle (see below).			

Type A

- (66) Bulgarian (Maslov 1981: 253)
Kableškov e doše-l
 Kableškov be.PRS.3SG come[PFV]-LF(M.SG)
 "Kableškov has come, (he arrived) late at night [, he is at my place]."

8. This opposition is based on stem derivation and has been developing since CS times (cf. Wiemer & Seržant 2017 for a recent comprehensive account). For a comprehensive account of the relation between perfect types and aspect cf. Wiemer (2017).

The *l*-participle distinguishes gender and number, but exists only in the nominative.⁹ While in Balkan Slavic (Bulgarian, Macedonian, Torlak dialects in southeast Serbia) this paradigm has persisted from CS times as a perfect, in practically all other Slavic languages this perfect has turned into a general past. This change illustrates the ‘present anterior > past’ shift known for languages in the middle of the European continent (cf. Breu 1994: 56–58; Abraham 1999; Thieroff 2000: 282–287; Abraham & Conradie 2001; Drinka 2017). In North Slavic this process was probably accomplished earlier than in the relevant Germanic and Romance languages (see §3.5.1). On the fate of the BE-auxiliary see §3.5.2.

Type B

- (67) standard Russian (own knowledge)
V sad-u nov-ye derev’j-a posaže-n-y.
 in garden-LOC.SG new-NOM.PL tree-NOM.PL plant[PFV]-PST.PASS.P-PL
 “In the garden, new trees **have been planted** [*lit.* are planted].”

Depending on the construction (and the Slavic variety), the participle shows gender-number agreement with the subject, or it is indeclinable. Usually the neuter form (*-n-o / -t-o*) is used as the default form if an agreement controller is lacking. Exceptional are some north Russian dialects, in which also the morphological status of the *no/to*-form is debatable (see §3.5.4).

Type C

Here a HAVE-verb combines with a participle with *n/t*-suffix (see §3.2). Two subtypes should be distinguished. One type, illustrated in (68), is areally highly restricted, originating in south-western Macedonian dialects, from where it spread into the colloquial standard. In turn, Example (69) from Polish represents a pattern that is widespread over the majority of Slavic languages.

- (68) Macedonian (Velkovska 1998: 52)
Zna-eš, go ima-m zasaka-no
 know[IPFV]-PRS.2SG he.ACC have-PRS.1SG start.love[PFV]-PST.PASS.P.INDECL
kako tatko.
 like father
 “You know, I **started loving** him like a father.”

9. For more details see §3.2. Oblique case forms exist for *l*-participles with adjectival inflection (pronominal forms; see fn. 11) in West Slavic. These forms are predominantly used as NP-internal modifiers, but their nominative forms show up in certain resultative perfects (see 70, §3.3, §3.5.3).

- (69) Polish (own knowledge)
Ma-my zup-ę ugotowa-n-a.
 have-PRS.1PL soup[F]-ACC.SG prepare[PFV]-PST.PASS.P-ACC.SG.F
 “We **have** the soup **prepared**.”

The degree of auxiliation of the HAVE-verb varies (on criteria see §3.5.2). In most Slavic varieties the participle agrees with an object-NP in gender and number as well as for case (accusative or, under negation, the genitive); see (69). The neuter form is used if an object is lacking, in general it can be regarded as a default form whenever an agreement controller is either lacking or untypical (e.g., quantifying expressions; see §3.5.2). The Macedonian construction in (68) differs, as the participle occurs in the invariant form *-no/-to* (originally neuter singular), regardless of the form of the object (or whether there is an object at all). Further parameters of internal Slavic differentiation relevant for type B or C constructions are discussed in §§3.5.2–4.

Types A and B diachronically precede type C. As for type C, the *n/t*-participle is diachronically prior to the *l*-participle (see Figure 2), which has extended into type C only in some West Slavic varieties, e.g. in colloquial Czech, see (70) and further in §3.5.3.

- (70) Czech (colloquial)
Dveř-e má-m zacvak-l-é.
 door-ACC.PL have-PRS.1SG latch[PFV]-LF-ACC.PL
 “I **have** the door **latched**.”

In addition, there is a participle suffixed with {*vši*} (with allomorphs; here, and henceforth, curly brackets indicate morphemes):

- (71) Belarusian near the border with Lithuania (Braslav district; Erker 2015: 94)
fs'-a ulic-a by-l-a zyare-ŭšy
 all-NOM.SG.F street[F]-NOM.SG be-PST-SG.F burn.up[PFV]-PST.PA(INDECL)
 “The whole street **had burned up**.” [*lit.* “was burned up”]

This resultative is used primarily in the region where (East) Slavic is in contact with Baltic, but it is also well attested farther to the northeast, namely in the Pskov and parts of the Tver region, with offshoots to the east and south (Kuz'mina 1971, 1993: 142–146; Trubinskij 1984; Erker 2014; Požarickaja 2014a, 2014b); see further §3.6.4.

The subtypes exemplified in (70) and (71) never occur in the same area, and they are clearly secondary (in comparison to the major types A-C) in terms of age and areal spread (see §3.3, §3.5.3).

3.2 The provenance of the participles

The *l*-participle is an innovation which CS shared only with Armenian and Tocharian (not with Baltic). In all three languages they are considered to descend from a deverbial adjective or noun suffixed with **-l(o)*. However, the Slavic *l*-participle, which was derived from the aorist stem (now homophonous with, or replaced by, the infinitive stem), differs from its cognates. In contrast to Tocharian, where deverbial *l*-adjectives semantically resembled Latin gerundives in conveying root modality meanings (Thomas 1952; Seržant, this volume), there are, to our knowledge, no attestations of Slavic *l*-participles with modal functions. As for Classical Armenian, the difference concerns voice orientation and inflection: the CS *l*-participle was subjective (i.e., oriented towards the participant with which the finite verbal forms agreed in person and number) and was always inflected for number and gender. By contrast, its cognate in Classical Armenian did not inflect in predicative use and showed variable orientation; with intransitive verbs it targeted the nominative subject (= single argument), but with transitive verbs the more patient-like argument was the target (coded as nominative), agreement (for number) being indicated only in the auxiliary.¹⁰

The Slavic *l*-participle has generally been considered a verbal adjective, used only in the nominative as a predicative with a copula. Presumably, the initial (reconstructed) meaning of *l*-participles was restricted to states and to one-place stems (intransitive verbs), but subsequently, by the time of the appearance of OCS, started involving transitive stems and durative verbs (Trost 1968: 99–101; Večerka 1993: 88–89). Many centuries later, and independent of this expansion, *l*-participles acquired the so-called pronominal or ‘long’ forms of the adjectival declension.¹¹ These have turned into resultatives of type B or C in some West Slavic varieties (see §3.3, §3.5.3). Their development is dissociated from the general perfect > past shift attested for the original nominal (‘short’) forms of the *l*-participle (except for Balkan Slavic). The onset of this latter process can be observed already in OCS (see §3.6.1).

10. This led to an erstwhile ergative structure (the more agent-like argument of transitive verbs was marked with the genitive) and only later changed into NOM-ACC-alignment (cf. Kölligan, this volume).

11. During CS, pronouns of the Indo-European **j*-stem fused with adjective stems. The result was a new declension class by which the adjective inflection became consistently distinct from the inflection of nouns (Townsend & Janda 2003: 138–142; Wiemer 2011: 741f.). This applied to inflected participles as well. In the following, we will use the term ‘pronominal form’ (also called ‘long forms’) as a shortcut for participles whose desinences go back to this special adjectival inflection.

The participles marked with the *n/t*-suffix are ubiquitous in Slavic, with IE roots prior to CS.¹² They are generally dubbed ‘past passive participles’; however, at ancient stages they probably lacked diathetic orientation, just like the *(ea)l*-participles in Classical Armenian (see above) and cognate (and other) formations in earlier IE varieties (Arumaa 1985: 326–344), or like voice-neutral deverbal adjectives in typologically distant languages (Haspelmath 1994: 159f.). In fact, *n/t*-participles can often best be captured as predicative units that focus on the most affected participant; many manifestations are still visible in contemporary Slavic languages (Wiemer 2014: 1630f.). Regardless, *n/t*-participles have always been quite consistent markers of anteriority, and this predestined them to be nominal parts of perfect constructions. All Slavic languages have resultatives based on *n/t*-participles, and in most Slavic varieties these create a systematic ambiguity between objective resultative and (actional) passive (see §3.4.2).

Participles with the suffix {*vši*} are a typical instance of paradigmatic isolation and fossilization, and they started playing a role for Slavic perfects considerably more recently. They correspond to the nominative singular feminine form of the decayed paradigm with nominal inflection of active anteriority participles. These participles go back to the common Baltic-Slavic suffix **-ues* of deverbal adjectives; they are cognate with the Baltic past active participles treated in §2¹³ and ultimately descend from the PIE perfect participle suffix *us/uós* (Kümmel, this volume: §2.1.2.4). As such, in CS and early periods of documented Slavic they were used as predicates of dependent clauses. Thus, concomitantly with fossilization, syntactic reanalysis must have occurred due to which the isolated form gained the status of a main predicate.¹⁴ What has been left is their anteriority feature.

3.3 Functional distinctions, range of lexical input and areal spread

Perfects based on a BE- and a HAVE-verb clearly follow preferences of predicative possession. The northeast corner of Slavic, namely Russian, predominantly uses a location schema: AT (= possessor) + BE + NP_{NOM} (= possessee). HAVE-based

12. The *t*-suffix is cognate with Baltic (see §2). On the provenance and (re)distribution of the allomorphic *t*- and *n*-suffix in different parts of Slavic cf. Diels (²1963: 232–234, 241–243), Lunt (2001: 99f., 108–111) and Danylenko (2006: 225f.).

13. To be precise, the Baltic past active participles had an irregular form for the masculine singular and plural (which yields Lith. *-ęs* and *-ę*, respectively, vs. *-us*+CASE/NUMBER/GENDER in all other forms of the paradigm).

14. Cf. Wiemer & Giger (2005: 40f.). These participles have counterparts in standard languages, where they have turned into converbs (cf. Birzer 2010 on Russian and Wiemer 2014: 1634–1639 for a general Slavic survey).

perfects are correspondingly lacking in that area, while they become slightly more common in Belarusian and Ukrainian. They are fairly widespread across West Slavic, where HAVE-based predicative possession is also the predominant pattern (as in Germanic and Romance). In South Slavic an east-west cline from BE- to HAVE-based predicative possession is less obvious, as is the distribution of HAVE-based perfects (see §3.5.2).

This apparent fact requires two caveats. First, the absence (rarity) or presence (salience) of HAVE-based perfects is no reliable indicator of the voice-orientation of the whole construction. Second, the choice between BE- and HAVE-auxiliary in Slavic perfects does not match BE/HAVE-splits as we know them from Germanic and Romance languages, that is, it is not obvious that the choice between BE and HAVE is conditioned by verb classes or argument realization in a way comparable to Germanic or Romance (for exceptions in Slovincian and Kashubian see §§3.5.2–3). The relevance of both caveats will become evident below.

Another caveat concerns the data. Claims regarding type and token frequency of particular perfect constructions (*vis-à-vis* grams which they may replace) can more often than not only be given impressionistically. Corpus-based research in this domain is urgently needed but beyond the scope of this survey.

In this subsection we survey perfect functions encountered in Slavic, before discussing intersections with voice-related operations and evidentiality in §3.4.

The resultative proper is a salient function of B and C type constructions. See (67), (69)–(70) above, which illustrate objective resultatives. Subjective resultatives of types B and C occur in Macedonian, and they are widespread in West Slavic, see Examples (68) and (72), respectively. Compare the participles in (73a,c), which are derived from perfective verbs that do not have a direct object (see 73b,d):

(72) Czech, Hanakian dialects (Damborský 1967: 105)

Má-m rož-l-ý
have-PRS.1SG light[PFV]-LF-N

‘I have **lit up** (a cigarette) / **switched on** (light in the room).’

(73) Polish (own knowledge)

a. *Jestem*
wyspa-n-y / uśmiechnię-t-y / najedzo-n-y /
well.sleep- / smile- / eat.to.fill-PST.PASS.P-NOM.SG.M /
podpi-t-y / zapatrzo-n-y (w przyrodę).
drink.a.bit- / stare-PST.PASS.P-NOM.SG.M

‘I have [*lit. am*] slept enough / am with a smile / have eaten to my fill / am a little drunk / am focused and enchanted (by the environment).’

- b. *wyspać się*.REFL ‘sleep enough’ / *uśmiechnąć się*.REFL ‘(give a) smile’ /
najeść się.REFL ‘eat to one’s fill’ / *podpić* ‘drink a little bit’ /
zapatrzeć się.REFL (*w przyrodę*) ‘intensely gaze (into nature)’
- c. *Pień* *jest* *obrosnięt-y*
trunk[M]-(NOM.SG) be.PRS.3SG be.covered-PST.PASS.P-NOM.SG.M
mch-em.
moss-INS.SG
‘The trunk has [*lit. is*] covered with moss.’
- d. *obrosnąć* (*mchem*)
‘become covered (with moss)’

The type frequency of subjective resultatives of type B decreases to the east. In standard Russian they are largely possible only if the deriving stem exists in a causative-inchoative pair, e.g. *vzvolnovat’* ‘excite, make nervous’ vs. *vzvolnovat’sja* ‘get excited, become nervous’ (with the reflexive marker). Thus, although *Ona vzvolnova-n-a* ‘She is excited-PST.PASS.P-SG.F’ corresponds semantically rather to the inchoative verb *vzvolnovat’sja*, something like **naeden* (intended meaning ‘having eaten to one’s fill’) from *naest’sja* ‘eat to one’s fill’ or **ulybnut* (to mean ‘with a smile’) from *ulybnut’sja* ‘smile’ does not exist, because these verbs do not have causative counterparts.

Subjective resultatives based on *n/t*-participles are attested for South Slavic as well, but to a much lesser extent. The Macedonian type B and C perfects are a different story (see §3.5.2).

The *l*-perfect (= type A) can acquire a resultative function only with intransitive (largely one-place) verbs, and this probably corresponds to their primary resultative meaning, as is assumed for CS (see § 3.2). Thus, Example (66) from Bulgarian above can denote a resultant state because the subject-NP is the only affected participant. Ingestive verbs seem to be an exception; with them the *l*-perfect can focus on the state of the agent (not the patient). This, however, applies only to imperfective verbs, as in Russ. *Ja (uže) e-l / obeda-l* ‘I have eaten / had lunch (already)’ (i.e. ‘I’m not hungry’). Their perfective equivalents often cannot omit the object-NP (unless as zero anaphors), for which the resultant state would apply, too. Thus, in the imperfective aspect ingestive verbs are ambitransitive. This certainly explains their specific behaviour also in B-type perfects, e.g. of Macedonian (see 131), and in C-type perfects, e.g. in dialectal Czech (see 118). In the majority of Slavic languages, where the *l*-perfect long ago turned into a general past, only a few perfective intransitive verbs with narrow lexical collocations focus on resultant states (e.g., Russ. *Skaly navis-l-i* ‘The rocks are hovering (over us) [*lit. have hang over*]’; Ščeki *nabryak-l-i* ‘The cheeks have/are swollen’).

Turning to ‘current relevance’ (§2.2.2), in Slavic, like in Lithuanian, this function is not covered by the perfect constructions, but rather by perfective verbs either in the general past (for the majority of languages in which the perfect > past shift of the *l*-participle has been completed), e.g. Russian (74), or in the aorist in the languages where it is still used, among others, as default tense in narratives and with specified temporal location, e.g. in Macedonian (75):¹⁵

- (74) Russian (own knowledge)
- a. *Ograbi-l-i* *bank*.
rob[PFV]-PST-PL bank[M](ACC.SG)
“A bank has been robbed.” [*lit.* “(They) have robbed a bank.”]
- b. *Prozvuča-l* *gong*.
sound[PFV]-PST(SG.M) gong[M](NOM.SG)
“The gong has sounded.”
- (75) Macedonian (courtesy of E. Bužarovska and L. Mitkovska)
- a. *Ja ograbij-a bank-a-t-a*.
3SG.ACC.F rob[PFV]-AOR.3PL bank[F]-SG-ART-SG.F
“They have robbed the bank.”
- b. *Dzvon-o-t-o za večera zadzvoni*.
bell[N]-SG-ART-SG.N for dinner ring[PFV](AOR.3SG)
“The bell has rung for dinner.”

That is, there is no specialized pattern for marking current relevance in Slavic, regardless of how complex, or simple, a particular system of past tenses is. The use of a synthetic past tense instead of the (present) perfect to express current relevance makes Balkan Slavic more similar to Lithuanian than to Latvian (see §2.2.2), even though otherwise the Baltic languages and Balkan Slavic have very different past tense systems.

Likewise, ‘hot news’ does not constitute a function that might be saliently marked with any type of perfect in Slavic, although recency effects are sometimes created, first of all, by object-oriented *n/t*-resultatives, as in (76) from Russian.

- (76) Russian (own knowledge)
- Ministr ubi-t*.
minister[M]-NOM.SG kill[PFV]-PST.PASS.P(NOM.SG.M)
“The minister is (i.e. has been) killed.” (e.g., as a newspaper headline)

15. This pattern is very similar to Modern Greek (Dahl & Hedin 2000: 395–398). As for standard Macedonian, cf. Bužarovska & Mitkovska (2010), who discuss the distribution of the aorist vs. three different perfects on the basis of corpus data and a questionnaire study.

Evidently, the hot-news function can be derived from the specific context and the inherently state-changing semantics of the verb, as can the current relevance meaning. In addition, current relevance is naturally salient for resultative perfects of speech act verbs or other verbs of social interaction. These verbs are not telic in the strict sense, since they cannot entail any tangible resultant state, and yet they are associated with illocutions associated, in turn, with socially relevant situations obtaining after the respective speech acts have been uttered (see §3.5.4). Compare, for instance, (77) for Macedonian, (78) for Polish, (79) for dialectal Russian (Pskov region) and (80) for dialectal Belarusian from the Balto-Slavic contact zone:

- (77) Macedonian (Velkovska 1998: 54)
Veќе ima-m obezbede-no prevoz
 already have-PRS.1SG provide[PFV]-PST.PASS.P.INDECL transfer[M](SG)
na nekolku grupi turisti od mojata zemja vo Egipet.
 “I **have** already **ensured** the transfer of some tourist groups from my country to Egypt.”
- (78) Polish (own knowledge)
Spraw-ę już ma-my załatwio-n-ę.
 matter[F]-ACC.SG already have-PRS.1PL fix[PFV]-PST.PASS.P-ACC.SG.F
 “We **have** already **settled** the matter.”
- (79) dialectal Russian (Pskov region; Sobolev 1998: 75)
im tak-oe del-o ot načal'nik-ov
 3PL.DAT such-NOM/ACC.SG.N matter-NOM/ACC.SG from superior-GEN.PL
zapreti-vši.
 forbid[PFV]-ANT.P
 “this matter (has been) **forbidden** them by their superiors.”
- (80) dialectal Belarusian (Lida district; Erker 2015: 94)
dačk-á vyjša-ųšy za pravasláun-aya.
 daughter[F]-NOM.SG marry[PFV]-ANT.P for orthodox-ACC.SG.M
 “(my) daughter **has married** / **is married to** an orthodox (man).”

With the experiential meaning the lexical restrictions holding for resultative perfects are loosened even more than for current relevance. From the discourse perspective, the experiential might be distinguished from the current relevance meaning by its discontinuative character: although it is implied that an anterior event bears a certain relevance for the situation at stake, there is some disruption, or at least lack of immediacy.

In Slavic languages, the experiential function is marked with imperfective finite past tense verbs. This holds true irrespective of whether the *l*-form has become a general past or has remained a perfect (Wiemer 2017: §2.1). The experiential

meaning is associated with low specificity of temporal reference. In fact, it is a default in case the speaker just wants to assert that (or ask whether) the situation type denoted by the verb stem has occurred at least once over a certain time span. Since this time span includes the utterance interval, the distinction from the current relevance meaning (namely: disruption) or from the perfect of persistent situation (see below) can get blurred. The experiential meaning is difficult to distinguish from current relevance especially under negation, cf. (81).

- (81) Macedonian (Mitkovska & Bužarovska 2011a: 55)
T-oj nikogaš ne doaĝa-l kaj nas.
 3-SG.M never NEG come[IPFV]-LF(SG.M) at 1PL.ACC
 “He has never come to us.”

In south-western Macedonian dialects the *l*-perfect (= A-type) has acquired meanings of indirect evidentiality as its predominant function (see §3.4.1), but even in these dialects the *l*-perfect can still be used in experiential function (Makarova 2016: 222; 2017: 393). The distribution between B- and C-type perfects in the standard language and the western and southern dialects seems to be reversed. In the colloquial standard, the B-type perfect (BE + *n/t*) is more usual in the experiential function, while with the HAVE-perfect it “has not become common in the standard use, even though it is widely known in the western dialects, where the old [BE]-perfect is rarely used in this function” (Bužarovska & Mitkovska 2010: §4.3; cf. also Makarova 2016: 227; 2017: 395f. on the dialects). See an example from the colloquial standard (82) and an example from an Aegean dialect (spoken in Greece) in (83):

- (82) Macedonian (colloquial standard; Velkovska 1998: 53)
Jas cel život ima-m
 1SG.NOM entire(SG.M) life[M](SG) have-PRS.1SG
rabote-no vo trgovij-a-t-a.
 work[IPFV]-PST.PASS.P.INDECL in trade(F)-SG-ART-SG.F
 “I **have spent** my entire life **working** in trade [but I stopped some time ago].”
- (83) Macedonian (Aegean dialect; Topolinjska 1995: 209)
Jas ima-m veќе doaĝa-no tuka.
 1SG.NOM have-PRS.1SG already come[IPFV]-PST.PASS.P.INDECL here
 “I **have already been** [*lit. come*] here.”

Notably, even if this construction goes with a durative adverbial (e.g., *cel život* “entire life” in (82)), the meaning does not extend into that of a situation persistent at the present moment. As for Russian dialects, compare *žyto* “lived” in (87).

A perfect of persistent situation (compare Engl. ‘I have been X-ing’) has been noted only for Bulgarian with the A-type perfect based on imperfective verbs (Iatridou et al. 2001: 172), and is clearly very marginal; cf. (84).

- (84) Bulgarian (web-media, *PodMosta* <https://podmost.com/>;
accessed September 26, 2016)
Vinagi sām običa-l-a da piš-a.
always be.PRS.1SG love[IPFV]-LF-SG.F CONN write[IPFV]-PRS.1SG
‘I have always loved to write.’

The Macedonian equivalent of this could be expressed by using the *l*-perfect as well (*Sekogaš sum saka-l-a da pišuvam*, E. Bužarovska, p.c.). The productivity of this function across the lexicon remains to be established, however. The universal perfect is unusual, if not inexistent, with the newer perfects (types B and C). Slavic languages consistently use the imperfective present tense instead.

Finally, and remarkably, newer perfects in some Slavic varieties are compatible with definite time adverbials. For the (standard and dialectal) Macedonian C-type perfect we observe this even with a time adverbial in focus position, cf. (85).

- (85) Macedonian (Velkovska 1998: 54)
Džonatan ima završe-n-o fakultet ušte
PN have(PRS.3SG) finish[PFV]-PST.PASS.P.INDECL faculty already
pred tri godini.
before 3 years
[lit.] ‘Jonathan has finished the faculty already three years ago.’

Moreover, the Macedonian HAVE-perfect can be used as a statement of fact whose relevance for the moment of speech has to be stressed, and this even extends to dead people or things that no longer exist (Friedman 1977: 91f.; Mitkovska & Bužarovska 2011a: §3.4.4). However, this perfect is not used to indicate functions of indirect evidentiality.

Northwest-Russian dialects constitute another area in which definite time adverbials occur with the perfect, although it is difficult to find examples with such adverbials in focus position (Wiemer & Giger 2005: 35, with further references), cf. (86) and (87).

- (86) Dialectal Russian (Sobolev 1998: 75, 78f.)
čerez troi sutki rodi-vši ona syn-a.
after three day+night give.birth[PFV]-ANT.P she.NOM son-ACC.SG
‘After three days and nights she bore a son.’ (southwest of Pskov)

- (87) *u menja s sem-i let po njan'k-am-to*
 at 1SG.GEN since 7-GEN year(GEN.PL) across nanny-DAT.PL-PTCL
pojde-no, u pop-of y d'jak-ov
 go[PFV]-PST.PASS.P.INDECL at priest-GEN.PL and deacon-GEN.PL
žy-to.
 live[IPFV]-PST.PASS.P.INDECL
 “With seven I started working as a nanny, I have lived with priests and deacons.”
 (north of Pskov)

However, despite this shift toward an actional perfect, the Macedonian and the East Slavic dialectal perfects can be used only to report, not as a narrative tense. In this respect, they resemble the Latvian present perfect (see 28 in §2.2.2).

3.4 Intersections with related domains

We should distinguish between extensions beyond the perfect domain that affected already established perfects, on the one hand, and systematic intersections of resultative participles with constructions relevant for voice, on the other. The former applies to extensions into indirect evidentiality (§3.4.1), which probably took place irrespective of the voice-orientation of the relevant participles in the particular variety. By contrast, given the diathetic lability of resultative *n/t*-participles (see §3.2), these participles have been the main input not only of perfect, but also of passive constructions. In addition, objective resultatives are systematically ambiguous with the actional passive in most Slavic languages (§3.4.2), as they are in Lithuanian (§2.1). This ambiguity can be considered ancient, although it presupposes that the participles (*-n/t-* in Slavic, *-t-* in Baltic) underwent stabilization of voice-orientation toward the more patient-like argument of transitive verbs. The subjective use of *n/t*-participles which we notice especially in West Slavic (see §3.3) can be regarded as a manifestation of the stabilization of orientation toward the most patient-like participant independently of numerical valency (one- vs. two-/three-place verbs). Presumably *n/t*-participles have changed their voice orientation more than once since CS times, and *l-* and *vši-* participles have also done so in dedicated micro-areas, possibly during the last 200–300 years (see §4.1).

Limitations of space mean that a comprehensive account of the relationship between perfects and all voice-related constructions must be deferred. In particular, we cannot go into the rise of impersonal (or backgrounding) passive constructions like the Polish *no/to*-participles (which are an equivalent of German *man*-clauses in the past tense) and its differences with respect to the cognate construction in Ukrainian or from Lithuanian uninflected *ta/ma*-participles.¹⁶

16. On Lith. *ta*-participles see §2.1, on the Polish and Ukrainian *no/to*-construction cf. Wiemer & Giger (2005: 61–66, 71f.), Wiemer (2006b: 283f.), Wiemer (forthcoming).

3.4.1 Evidential extension

Evidential extensions of the *l*-perfect do not bring about any alignment changes. Such extensions are conventionalized only in Balkan Slavic. By and large, they function in a similar way to that of the Baltic evidential extensions of past active participles (see §2.1). For a recent comprehensive survey see Makarcev (2014). One main difference is that Balkan Slavic uses only anteriority participles (namely the *l*-forms), which cover the whole range of indirect evidentiality.¹⁷ As a consequence, *l*-forms are used even for unwitnessed situations that are relevant for the moment of speech. For instance, (88a) can be read as a reportive or inferential of (88b):

- (88) Bulgarian (Friedman 2000: 331)
- a. *Ivan spja-l*.
PN sleep[IPFV]-LF(SG.M)
i. “Ivan must be asleep,” ii. “Ivan is said to be sleeping.”
 - b. *Ivan sp-i*.
PN sleep[IPFV]-PRS.3SG
“Ivan is sleeping.”

In Bulgarian this reading is claimed to be triggered (or indicated) by an omission of the BE-auxiliary in the third person (in Macedonian this auxiliary never occurs in the third person). However, put to an empirical test (on authentic texts), this claim turns out to be an idealization.¹⁸ This parallels the situation reported for the Baltic languages (see §2.1, §2.2.2).

The functional extension into indirect evidentiality has however created new forms: the evidential equivalent of the non-evidential present and imperfect and of all forms with the future marker Bg. *šte* / Mac. *ké* combine with the *l*-suffix (see Example 88a against 88b). This combination is not inherited from CS. Figure 1 presents the basic correspondences between evidential (‘non-confirmative’) and non-evidential (‘confirmative’) forms in Bulgarian (an analogous schema applies to Macedonian). The innovated forms are in bold. The exemplar forms belong to the verb *piše* ‘write.PRS.3SG’:

17. Friedman (1977 and subsequent works) has been dubbing them ‘non-confirmative’ forms, since their general function is that of marking non-witnessed events (plus mirative meanings). For an overview of terminology cf. Guentchéva (1996: 48–52) and Makarcev (2014: 7–36). In Aikhenvald’s terms (2004), we should speak of an evidential strategy, because marking of evidentiality by *l*-forms is neither obligatory, nor can they be considered reliable indicators of indirect evidentiality (against ‘ordinary’ perfect functions).

18. Cf. Guentchéva (1996), Friedman (2000: 332–336; 2001, 2004). As Friedman (2000: 334) puts it: “presence versus absence of the auxiliary is a pragmatic device encoding narrative perspective”. See further references there and in Sonnenhauser (2011).

indic.	present	imperfect	aorist	perfect	pluperfect	future	futurum exactum
	<i>piše</i>	<i>piše-še</i>	<i>pisa</i>	<i>e pisa-l</i>	<i>pisa-l be-še</i>	<i>šte piše</i>	<i>šte e pisa-l</i>
evid.	<i>piše-l (bi-l)</i>		<i>pisa-l (bi-l)</i>		<i>pisa-l bi-l</i>	<i>štja-l (bi-l) da piše</i>	<i>štja-l (bi-l) da e pisa-l</i>

Figure 1. Evidential extension of the perfect in Bulgarian (without *futurum praeteriti* and *futurum exactum praeteriti*)

As the paradigm shows, the evidential forms can be ‘supercomposed’ with the *l*-participle of the BE-verb (*bi-l*), while the non-evidential pluperfect is formed with the imperfect of BE (*be-še*); see §3.6.2. The evidential supercomposed forms remind us of the *Doppelperfekt* in German or the *passé surcomposé* in French, but they evoke strong epistemic overtones (doubt etc.).

Apart from the Balkans, no Slavic variety shows evidential extensions to perfects. Remarkably, they are unattested in regions with considerable Finno-Ugric or Baltic substrates and/or adstrates, that is we do not observe them in Belarusian in the vicinity of Baltic nor in Northwest- or North-Russian dialects (apart from some embryonic evidence in the latter; cf. Wiemer & Giger 2005: 38f.).

3.4.2 Objective resultatives as distinct from the actional passive

Particularly in earlier stages of Slavic, but also in many contemporary Slavic varieties, objective resultatives were (or are) systematically syncretic with the actional passive of the preceding temporal plane. Thus, for instance, the present tense resultative would be ambiguous with the passive of the past. By ‘passive’ we understand constructions which jointly fulfil three conditions: (i) The most patient-like core argument is marked as nominative subject; (ii) a morphological change is triggered in the verb (e.g. from finite form to participle); (iii) the focus rests on an event (or process), not on a resultant state. Syncretism of passive and resultative, thus, means that this focus could (or still can) vary. Consider the following example:

- (89) Old East Slavic (Second Novgorod Chronicle, 1207; Feoktistova 1961: 201)
v lét-o 6715 sverše-n-a cerkov’
 in year-ACC.SG complete[PFV]-PST.PASS.P-NOM.SG.F church[F](NOM.SG)
svjat-aja pjatnic-a
 holy-NOM.SG.F friday[F]-NOM.SG
 “in the year 6715 (= 1207) the church of the Holy Friday was [lit. is] **completed**”

We observe a similar situation in modern standard Czech, cf. (90).

- (90) Czech (Štícha 1986: 182f.)
Stavb-a je nedávno
 building[F]-NOM.SG be.PRS.3SG recently
oprav-ova- / -ě-n-á.
 repair[IPFV] / [PFV]-PST.PASS.P-NOM.SG.F
 i. [lit.] “The building is recently repaired.” present resultative
 ii. “The building has recently been repaired.” past passive

Note that here the ambiguity applies with the participle of either aspect (perfective or imperfective). This syncretism of objective resultative and event-related passive is very old; it was most probably inherited from CS and can be found in OCS.¹⁹ In fact, it is attested in quite many languages and was characteristic, among others, of pre-19th century German as well. Compare, for instance, Old Czech in (91a) and its equivalent from the 16th century German in (91b):

- (91) a. Old Czech (Biblie Královská; Večerka 1996: 218)
když by-l vyhná-n
 when be-PST(SG.M) expel[PFV]-PST.PASS.P(NOM.SG.M)
zástup
 crowd[M](NOM.SG)
- b. German (Bible translated by Luther, edition Dresden 1869)
Als aber d-as Volk ausgetrieben war
 when but ART-NOM.SG.N people[N](NOM.SG) expel.PASS.P be.PST.3SG
 (a=b) “When the crowd was expelled ...” (Matt. 9:25)

Here, it is only (knowledge about) the context which disambiguates in favour of an actional reading, not the participial constructions themselves. Compare this with the English translation and Examples (89)–(90).

According to an implicational relationship established by Nedjalkov & Jaxontov (1988: 36), the actional passive reading is most difficult to get in the present tense, while it is facilitated in the past and the future. This implication allows to predict that the actional passive reading is abandoned first (and the resultative reading overcome last) in the present tense. This is what we in fact observe in Russian: whereas predicative *n/t*-participles in the present tense, as in (89), were still attested with a possible reading of an actional passive in the 19th century, this possibility has drastically diminished by now. Compare predicative *n/t*-participles in the present tense, which sound awkward with definite time adverbials or manner adverbs, as in (92).

19. Cf., for instance, Večerka (1996: 217f.), who remarks that combinations of *n/t*-participles and present tense forms of BE in OCS were also employed to translate the Greek perfect or aorist passive.

- (92) Russian
Okn-o *otkry-t-o* *ʔbystro / ʔv dva časa*
 window[N]-NOM.SG open[PFV]-PST.PASS.P-NOM.SG.N quickly / in two hours
 [lit.] “The window is opened ʔquickly / ʔat two o’clock.”

No such restrictions occur in the past or future tense (*Okno bylo / budet otkryto bystro / v dva časa* “The window was / will be opened quickly / at two o’clock”), although a potential ambiguity remains as concerns the reference of definite time adverbials: does *v dva časa* “at two o’clock” specify the time of the event or of the subsequent state?

Whereas in Russian the syncretism of the objective resultative and the actional passive is resolved only by context, Polish and different varieties of Sorbian have broken it up by introducing an explicit morphological distinction, namely a specific passive auxiliary: Polish *zostać*[PFV] / *zostawać*[IPFV], dialectal Upper / Lower Sorbian *wordować* / *wordowaś*, colloquial Upper Sorbian *hodwać*. The Sorbian auxiliaries are matter-borrowings of Germ. *werden*, whereas in Polish we are dealing with a complex process of pattern-borrowing (on the two types of structural borrowing see Matras & Sakel 2007). These auxiliaries differ quite considerably as to their integration into the grammatical system and distributional restrictions. In this respect, Polish and Sorbian varieties are very similar to Latvian (see § 2.1) and German in having established an auxiliary which distinctly ‘dissimulates’ the actional passive from resultatives. We should emphasize that concomitantly in these Slavic languages the distinction between resultative state and process (or iterative) meaning is marked solely by the aspect of the participle (used together with the BE-auxiliary): the former is marked with participles of perfective stems, the latter with imperfective participles.²⁰

This clear distribution implies that Polish and Sorbian imperfective *n/t*-participles have largely lost their resultative function, and it testifies to a consistent integration of the participles into the aspect system of perfective vs. imperfective stems: imperfective predicative participles have neither become obsolete (as they tend to do in Russian), nor does their usage overlap with the functions of perfective participles, as it still does in the remaining Slavic languages. In the remainder of West Slavic, an overlap of perfective and imperfective *n/t*-participles for both the resultative and the actional passive meaning appears still to occur quite frequently (see the Czech example 90), and similarly for Serbian-Croatian. In the remainder of South Slavic, the distribution is less clear (Giger 2003: 363–368, 469–478; Wiemer 2017: §§ 2.2.1.1–3).

20. Cf. Wiemer (2004: 295f., 302f.), Wiemer & Hansen (2012: 91–95) and Wiemer (2017: § 2.2.1.1), with further references. See also § 3.4.3.

In general, the opposition of perfective and imperfective aspect proves relevant for Slavic perfects insofar as in many varieties imperfective *n/t*-participles tend to be suppressed in regular grammatical operations like the passive (as in standard Russian), or their distributional patterns vis-à-vis perfective *n/t*-participles do not enter into reliable functional oppositions. Clear exceptions are the passives of standard Polish and of the Sorbian languages (see above). Aspect choice proves crucial also with HAVE-based perfects in Polish (see § 3.4.3) and in Macedonian (see § 3.5.3), although for different reasons.²¹

3.4.3 Recipient passive

In standard Polish we come across a construction with HAVE-auxiliary and imperfective *n/t*-participle illustrated in (93) and (94):

- Polish
- (93) *Ząbk-i mia-ł ogląda-n-e*
tooth-ACC.PL have-PST-(SG.M) check[IPFV]-PST.PASS.P-ACC.PL.NVIR
w czerwc-u.
in June-LOC
“He had/got his teeth checked in June.”
- (94) *Co jakiś czas ma leczo-n-e zęb-y.*
PTCL some.time have.PRS.3SG cure[IPFV]-PST.PASS.P-ACC.PL.NVIR tooth-ACC.PL
“From time to time s/he gets his/her teeth treated.”

The syntactic relations superficially resemble HAVE-based resultatives. However, in (93)–(94) the subject-NP cannot be identified with the agent, while the HAVE-based resultative allows for either an agentive or a beneficiary reading. The HAVE-auxiliary with imperfective *n/t*-participles can only be read as a recipient passive (Bunčić 2015). This term (compare Germ. *Rezipientenpassiv*) includes semantic roles that are closely related to the notion of recipient, thus beneficiary/maleficiary and addressee. First, the subject-NP denotes a beneficiary (more rarely a maleficiary). Second, the construction does not refer to a state holding after some telic event; instead, its time reference corresponds to the tense of the auxiliary, i.e. no temporal shift from a telic event to a subsequent resultant state occurs. Imperfective participles can appear without just “copying” the resultative, or anterior, function of their perfective counterparts. Already this shows that we are not dealing with a perfect.²²

21. For a systematic assessment of the interaction between perfects and the aspect opposition in Slavic cf. Wiemer (2017).

22. Such claims have been raised from time to time; most recently by Piskorz (2012). For surveys, discussion and rejection cf. Łaziński (2001), Giger (2003: 369–434; 2016) Mendoza (2013), Bunčić (2015), Wiemer (2017: 148–150).

Imperfective *n/t*-participles have become indicative of the recipient passive in Polish, while this function is not excluded with perfective participles as well, but it then co-occurs with a resultative function (Wiemer 2017: §3.2.4.5). We find recipient-oriented interpretations of HAVE-based resultatives in Czech and Slovak as well (Giger 2000: 19; 2003: 91), cf. an ambiguous Czech example in (95).

- (95) Czech (courtesy of J. Panevová)
Má-m zaplace-n-o.
 have-PRS.1SG pay[PFV]-PST.PASS.P-SG.N
 (i) “I have paid.”
 (ii) “I got paid.”, i.e. “Someone paid for me.”
 subject = agent
 subject = beneficent (agent unknown)

Contrast this with the Polish Examples (93)–(94) in which the imperfective participles evoke an experiential or iterative reading. It is, thus, the aspect of the participle that regulates the actionality features of the whole construction: in Polish, only imperfective *n/t*-participles preclude a temporal shift to a resultant state, provided they do not “copy” the resultative meaning of their perfective counterparts, but are able to convey processes and other meanings common for imperfective verbs in the active voice. This property of imperfective participles parallels our findings concerning the Polish canonical passive (see § 3.4.2).

3.5 Diachronic development

We start with the earliest attestations of the Slavic *l*-perfect (*l*-participle + BE) as well as one remnant of the Indo-European perfect in §3.5.1, before we continue with auxiliatio (§3.5.2), diathesis orientation of the participial suffixes (§3.5.3) and the role of the lexical input (§3.5.4).

3.5.1 *The perfect in ancient Slavic*

The only extant reflex of the Indo-European perfect in Slavic was the 1st person singular form *vědě* “I know” attested in OCS, Old East Slavic, Old Czech and Old Slovene (Vaillant 1966: 76, 449). Functionally, it was a (stative) present tense devoid of any reference to a previous event, cf. (96).

- (96) Old East Slavic (Life of Andrew of Constantinople, 12th cent., RNC)
ni azo j-ego věd-ě kto s-e
 NEG+and 1SG.NOM 3-GEN.SG.M know-PRS.1SG who.NOM this-NOM.SG.N
jes-tb
 be.PRS-3SG
iže na mja tjaža tvoritb i straša mi i grozja mi
 “Neither do I know who it is who pursues me frightening and threatening me.”

The functions of the periphrastic (present) perfect in OCS remain a controversial issue, partly related to the possible discrepancies between different manuscripts as well as to the none too trivial correspondences between the uses of tenses in OCS texts and their Greek originals (on this see e.g. Trost 1972; MacRobert 2013), and partly to the peculiarities of the distribution of this form as opposed to the ‘typological prototype’ of the perfect as formulated e.g. in Dahl (1985: Chapter 5). The classic studies of the perfect in OCS include Dostál (1954), Bunina (1959: 55–78), Dejanova (1970: 129–150), Trost (1972); we base our brief exposition on the more recent studies by MacRobert (2013) and Plungian & Urmančieva (2015a, 2017, 2018).

At the most general level, it is necessary to state that, first, “the distribution of the aorist and perfect tenses in Old Church Slavonic is clearly independent of Greek” (MacRobert 2013: 388) and, second, that “there is a partial overlap between the aorist and the perfect in Old Church Slavonic: instances of these past tenses can be found in virtually identical contexts, or in the same context attested in different manuscripts” (MacRobert 2013: 388). This suggests that the distribution of the perfect as opposed to the aorist in OCS was dependent on factors not directly related to temporal or aspectual semantics, but rather belonging to the domain of discourse.²³

Plungian & Urmančieva (2015a, 2018: 422–423) observed that the OCS perfect is conspicuously absent from many resultative contexts,²⁴ where e.g. the English translation of the Gospel features the present perfect while OCS uses the aorist, cf. (97).

23. For discussion of the use of the perfect instead of the aorist in the 2nd singular in order to avoid the homonymy with the 3rd singular aorist, see MacRobert (2013). Such a purely formal distribution of tenses became the norm in the later versions of Church Slavonic, where “formal equivalence between Church Slavonic and Greek was given a higher priority than it apparently had in Old Church Slavonic” (MacRobert 2013: 389), but was not at all the rule in the most ancient OCS texts.

24. Detailed arguments against the purely resultative analysis of the OCS perfect have been presented already by Bunina (1959: 62–76).

(97) Old Church Slavonic

(Codex Marianus, John 11:41; Plungian & Urmančieva 2018: 422)²⁵*otvč-e xvalj-ǫ tebě vǫz-daj-ǫ jako*

father-VOC praise-ACC.SG 2SG.DAT PVB-give-PRS.1SG that

u-slyša mę

PVB-hear.AOR.2SG 1SG.ACC

“Father, I thank thee that thou hast heard (Grk. Aor. ἤκουσάς) me.”

On the other hand, the OCS perfect is systematically used in experiential contexts, e.g. (98).

(98) Old Church Slavonic

(Codex Marianus, Luke 19:8; Plungian & Urmančieva 2018: 424)²⁶*i ašte jes-mǫ k-ogo č-imǫ obidě-l-ǫ*

and if be.PRS-1SG who-GEN what-INS injure-LF-SG.M

vǫzvraštǫ cetvoricejǫ

“And if I have taken (Grk. Aor. ἐσυκοφάντησα) any thing from any man by false accusation, I restore him fourfold.”

According to Plungian & Urmančieva (2018: 424–428), the perfect in OCS is often employed not to relate events, but to characterize or interpret them in a sort of summary which may either precede or follow a narrative stretch (cf. Levinsohn, this volume). Thus, while the aorist is used to describe new events (in particular those belonging to the main narrative line), the perfect in OCS is often employed in those sections of discourse whose function is argumentative rather than purely narrative. This correlates well with the observation by Bunina (1959: 76) that in the OCS Gospels the perfect is predominantly used in direct speech rather than in the narrative. However, in other types of text the opposition between narration and argumentation becomes clearer, cf. the following fragments from John Chrysostom’s Homily on Christ’s resurrection from Codex Suprasliensis, all describing Jesus through reference to his acts (99a–c) and serving the purpose not of describing these acts for their own sake but of reaching the conclusion about their divine nature (99d):

25. Checked at PROIEL: http://foni.uio.no:3000/source_divisions/672

26. Checked at PROIEL http://foni.uio.no:3000/source_divisions/655

(99) Old Church Slavonic

(Codex Suprasliensis, 80, 91–92, 98;²⁷ Plungian & Urmančieva 2018: 428)²⁸

- a. *vъ pustyn-i pro-g'na-l-ъ slov-omъ množstv-o*
 in desert-LOC.SG PVB-drive-LF-SG.M word-INS.SG multitude-ACC.SG
běs-ъ
 devil-GEN.PL
 “He has driven away many devils in the desert by His word.”
- b. *po-xodi-l-ъ jakože po sux-u vrъxu morj-a*
 PVB-walk-LF-SG.M like on land-DAT.SG above sea-GEN.SG
 “He has walked on the sea as on land.”
- c. *bur-ъ větrъn-ъ utoli-l-ъ slov-omъ*
 tempest-ACC.SG windy-ACC.SG calm-LF-SG.M word-INS.SG
 “He has calmed the hurricane by His word.”
- d. *s-i děl-a vъ istin-ъ sptъ*
 this-NOM.PL.N act-NOM.PL in truth-ACC.SG be.PRS.3PL
boži-ę sil-y
 divine-GEN.SG.F power-GEN.SG
 “These acts are indeed those of a divine power.”

To summarize, the Old Church Slavonic perfect is peculiar in lacking a resultative ‘core’ and in being primarily a discourse-oriented form mainly employed as a means of information management. It remains an open – and hardly solvable – question to what extent these properties of the OCS perfect were determined by the nature of the extant texts in this language. Some light on this issue might be shed by the data from Old East Slavic, which is represented by a much more varied inventory of textual genres.

The consideration of the tense system of Old East Slavic (often called Old Russian) rests on the dichotomy between two major types of texts, i.e. ‘bookish’ texts (mainly chronicles, religious and literary texts) and ‘vernacular’ texts (letters, non-official inscriptions, many legal texts, etc.). In the former, which remained under the constant influence of Church Slavonic, the older synthetic tenses (aorist and imperfect) were still in productive use at least till the 14th century and even later, while the perfect concomitantly occupied a limited albeit important functional

27. Checked at TOROT <https://nestor.uit.no/sentences/168436>, <https://nestor.uit.no/sentences/168446>, <https://nestor.uit.no/sentences/168453>

28. These examples from Codex Suprasliensis feature the bare *l*-form with the omitted auxiliary, which is a characteristic of this particular text not shared by other OCS manuscripts, at least to any significant degree (see Plungian & Urmančieva 2015b for a tentative hypothesis about the discourse function of auxiliary omission).

niche. By contrast, in the vernacular texts the perfect ousted the synthetic tenses and became the major if not the only past tense already by the 12th century.

This is most clearly evident for the Old Novgorod dialect with its large corpus of extant vernacular texts, i.e. birchbark letters. As is shown by Zaliznjak (2004: 173–174), the perfect in the birchbark letters was the predominant past tense form from the very beginning of the 11th century (and thus was not really a perfect anymore). The situation in the Novgorod chronicles, however, was very different, with the aorist and the imperfect being the primary narrative tenses and the perfect largely limited to direct speech. The propensity of the birchbark letters to use the perfect can be linked to the specific genre of interpersonal communication aiming at argumentation and manipulation rather than narration. It is clear, however, that the perfect could also be used as a narrative tense, cf. the following very early example (possibly not without CS influence, as rightly pointed out to us by Hanne Eckhoff):

(100) Old Novgorod dialect

(birchbark letter No. 605, 1080–1130; Zaliznjak 2004: 271)

mene igumen-e ne pusti-l-e a ja
 1SG.GEN abbot-NOM.SG NEG let.go-LF-SG.M PTCL 1SG.NOM
praša-l-ǔ=sja nǔ po-sǔla-l-ǔ sǔ asaf-ǔmǔ
 ask.for.leave-LF-SG.M=REFL.ACC but PVB-sent-LF-SG.M with Asaf-INS.SG
kǔ posadǔbnik-u med-u dělja a pri-šǔl-a es-vě
 to mayor-DAT.SG mead-GEN.SG for PTCL PVB-go.LF-DU.M be.PRS-1DU
oli zvonǔ-l-i
 when ring-LF-PL.M

“The abbot did not let me go. I asked him for leave, but he sent me with Asaf to the mayor to get mead, and when we two came back, (they) were (already) ringing (the bells).”

The present perfect was also compatible with temporal adverbials such as ‘last year’ or other specifications of the moment of time when the event occurred, cf. (101) from a letter from the same period as the previous one.

(101) Old Novgorod dialect (letter on a lead slab, 1090–1120; Zaliznjak 2004: 261)

zaožerič-ǔ otrok-ǔ loni kri-l-i
 across.lake-ACC.SG.M servant-ACC.SG last.year buy-LF-PL.M

“The servant from the other side of the lake was bought last year [*lit.* they have bought].”

The perfect was also used in birchbark letters in such functions as resultative (102) and ‘current relevance’ (103), but all of them can be subsumed under the most general function of neutral reference to a situation in the past.

Old Novgorod dialect

- (102) (birchbark letter No. 222, end of 12th cent.– ca. 1220; Zaliznjak 2004: 442)

toprbrvo jes-mo pri-šl-ŭ
 now be.PRS-1SG PVB-go.LF-SG.M
 “Now I have come.”

- (103) (birchbark letter No. 119, 1110–1130; Zaliznjak 2004: 273)

vŭ-da-l-e jes-mŭ gjurŭgevic-u bez devjat-i
 PVB-give-LF-SG.M be.PRS-1SG Gjurgevič-DAT.SG without nine-GEN
kun-ŭ 2 grivn-ě vŭz-ŭm-ŭši vŭ-daže pročŭ
 kuna-GEN.PL 2 grivna-ACC.DU PVB-take-CVB.PST PVB-give.IMP.2SG away
ljud-ŭmŭ
 people-DAT.PL
 “I have given Gjurgevič two *grivnas* minus nine *kunas* [a certain sum of money]; take them and give them away to the people.”

A special discourse function of the perfect noted by Zaliznjak (2004: 175) is the performative use whereby the perfect refers to the current speech act, as in (104). Such a use in written texts may have its rationale in the inevitable temporal distance between the act of writing (e.g. issuing an order) and the situation of reading (perception of the order).

- (104) Old Novgorod dialect

(birchbark letter No. 344, end of 13th cent.; Zaliznjak 2004: 526)

jazo tobě brat-u svoj-emu prikaza-l-e pro
 1SG.NOM 2SG.DAT brother-DAT.SG RPOSS-DAT.SG.N order-LF-SG.M about
sebě [tak]o
 REFL.DAT thus
 “I order [*lit.* I have ordered] you, my brother, to do thus.”

It should also be noted that the Old Novgorod birchbark letters contain the earliest attestations of the North Russian perfect of type B composed of the *n/t*-participle and the agent phrase with the preposition *u*. Cf. the following example, still potentially ambiguous between an agentive and a locative interpretation (cf. Wiemer 2004: 308–310 for discussion).

(105) Old Novgorod dialect

(birchbark letter No. 607/562, end of 11th cent.; Zaliznjak 2004: 245)

Žiznobud-e po-gubl-en-e u syčevic-ǔ
 PN-NOM.SG PVB-kill-PST.PASS.P-NOM.SG at PN-GEN.PL
novgorod-ǔsk-e smǔrd-e a za n-im[i i]
 Novgorod-ADJ-NOM.SG.M peasant-NOM.SG PTCL behind 3-INS.PL.M and
z[a]dǔnic-ja
 inheritance-NOM.SG

“Žiznobud, a Novgorod peasant, has been killed by the Syčevics (or: at the Syčevics place); they also hold his inheritance [*lit.* behind them [*is*] inheritance].”

Turning to the ‘bookish’ registers, we find there an opposition between the regular narrative tenses (aorist and imperfect) and the perfect. The latter was never used in the main narrative line before the beginning of the 14th century (Zaliznjak 2004: 173) and rather served certain specific functions – albeit partly different from those established above for Old Church Slavonic (e.g. Petrušin 2004: 73–76 for a brief survey of main works and Silina 1995: 443–456 for an extensive analysis). First, we find the resultative perfect from intransitive verbs, as in (106), as well as from transitive verbs, as in (107), both denoting states resulting from past events and holding up to the (present) reference time. Note that in (106) both the *l*-form ‘has died’ and the passive *n/t*-participle ‘has been killed’ have this resultative function, while the event from the main narrative line ‘sent’ is expressed by the aorist.

(106) Old East Slavic (*The Tale of Boris and Gleb*, 12th cent., 440; Silina 1995: 447)²⁹

i pri-sla Jaroslav-ǔ kǔ Glǔb-u rek-a:
 and PVB-send.AOR.3SG PN-NOM.SG to PN-DAT.SG say-PRS.PA.NOM.SG.M
ne xod-i brat-e; o[tǔ]c-ǔ=ti u-mǔr-l-ǔ a
 NEG go-IMP.2SG brother-VOC father-NOM.SG=2SG.DAT PVB-die-LF-SG.M and
brat-ǔ=ti ubij-en-ǔ otǔ S[vja]topǔlk-a
 brother-NOM.SG=2SG.DAT kill-PST.PASS.P-NOM.SG.M from PN-GEN.SG

“And Jaroslav sent (messengers) to Gleb saying: don’t go, brother: your father has died and your brother has been killed by Svyatopolk.”

(107) Old East Slavic (*Prolog Lobkovskij*, 1262, 30b; Silina 1995: 447)

poneže bog pri-ve-l=mja v svjat-ǔi
 because God(NOM.SG) PVB-lead-LF(SG.M)=1SG.ACC in holy-ACC.DU
tvo-i ruc-ǔ i ne otluč-u=sja
 2SG.POSS-ACC.DU hand-ACC.DU and NEG leave-PRS.1SG=REFL.ACC
ot tebe
 from 2SG.GEN

“Because God has led me into thy holy hands, I will not leave you.”

29. Checked at TOROT <https://nestor.uit.no/sentences/159688ff>

The experiential perfect is also well attested, most notably from atelic verbs, including the verb ‘be’ itself, cf. (108) and (109).

- (108) Old East Slavic (*The Tale of Boris and Gleb*, 12th cent., 24g; Silina 1995: 448)
a i mnog-yxъ svjat-yxъ rak-y vidě-l-i jes-my
 but and many-GEN.PL saint-GEN.PL shrine-ACC.PL see-LF-PL.M be.PRS-1PL
 “[Nowhere is there such a beauty,] even though we have seen shrines of many saints.”

- (109) Old East Slavic
 (*The Life of Theodosius of Kiev*, 12th–13th cent., 98:2; Silina 1995: 449)³⁰
jako=že něs-tъ by-l-o nikoli=že
 how=PTCL NEG+be.PRS-3SG be-LF-SG.N never=PTCL
 “[And the cattle gave litter,] such as has never been before.”

Some examples of the perfect appear to indicate that it intrudes into the main narrative line (on this issue see also Taube 1980); thus, in (110) the perfect (without the auxiliary) is conjoined with the aorist.

- (110) Old East Slavic
 (*The Life of Theodosius of Kiev*, 12th–13th cent., 96:0; Silina 1995: 449)
po-oblači-l-o=sja n[e]b-o i
 PVB-cover.with.clouds-LF-SG.N=REFL.ACC sky-NOM.SG and
sъn-id-e dъžd-b
 PVB-go-AOR.3SG rain-NOM.SG
 “[C]louds covered the sky and it rained.”

Examples where the perfect from (proto)imperfective verbs denotes a durative or iterative situation in the past, i.e. is used similarly to the imperfect, are attested at least from the end of the 13th century, cf. (111):

- (111) Old East Slavic (*Russkaya Pravda*, 1280, 99:11; Silina 1995: 454)³¹
zane kormi-l i pečalova-l=sja
 because feed[IPFV]-LF(SG.M) and take.care[IPFV]-LF(SG.M)=REFL.ACC
 “[He may take the profit for himself,] because he fed and took care (of the orphans).”

On the other hand, we find examples of the perfect from apparently imperfective verbs in clearly resultative contexts, e.g. in inscriptions on various objects, cf. (112), where the ‘protoimperfective’ prefixless verb is used instead of a ‘protoprogressive’ prefixed one (see Kukuškina & Ševeleva 1991 and the ensuing literature on the

30. Checked at TOROT <https://nestor.uit.no/sentences/193022>

31. Checked at TOROT <https://nestor.uit.no/sentences/172285>

status of aspectual derivation in Old East Slavic), which would unambiguously signal the culmination of the event of making:

- (112) Old East Slavic (inscription, 12th cent.; Silina 1995: 455)
s-b *sъsud-ъ* *petr-ov-ъ* ... *kost-a*
 this-NOM.SG.M vessel-NOM.SG PN-POSS-NOM.SG.M PN-NOM.SG
děla-l-ъ
 make[IPFV]-LF-SG.M
 “This is Peter’s vessel ... Kosta made it.”

As has been shown by Petrušin (2004; with references to Istrina 1923 and Klenin 1993), the perfect could occur in the so-called ‘retrospective’ or ‘backshifted’ use, i.e. reference to an already known event preceding the main narrative line and whose results do not necessarily still hold at the reference time; in this function the perfect usually occurred in subordinate clauses. Thus, in (113) the event referred to in (113b) by the perfect (the assault of the Livonian Order against Pskov) is first introduced into the narrative by an aorist form a few clauses earlier (113a).

- (113) Old East Slavic
 (*Novgorod Primary Chronicle*, 1253, 132v-133r; Petrušin 2004: 82)
- a. *t-og[o]=že* *lět[-a]* *prid-oša* *němc-i*
 that-GEN.SG.N=PTCL year-GEN.SG come[PFV]-AOR.3PL German-NOM.PL
pod Pbskov *i* *po-žg-oša* *posad*
 to Pskov(ACC.SG) and PVB-burn[PFV]-AOR.3PL suburb(ACC.SG)
 “In the same year the Germans came to Pskov and burned the settlement.”
- b. *sam-i=bo* *na sebe* *poča-l-i*
 EMPH-NOM.PL=because on REFL.LOC begin[PFV]-LF-PL
 “[In the same year the Novgorodians] went with Pskovians to fight the Germans [...] and the Pskovians defeated them with the might of the Holy Cross:] because [the Germans] themselves began [this war] [...]”

Again, the function of this use of the perfect was not to narrate new events in their temporal succession, but to remind the reader of the chronicle of previous events somehow relevant to the main narrative line; according to Petrušin (2004: 86), situations encoded by the perfect belong to pragmatic presupposition. Cf. the following formulation by Cornelis van Schooneveld (1959: 165; quoted from Petrušin 2004: 86) on the Old East Slavic perfect: “The perfect denotes a process anterior to the moment of the utterance which, in contradistinction to the main body of the story, already belongs to objective knowledge.” In this function, the perfect was opposed to the pluperfect (see §3.6)

A few words should also be said about the formal aspects of the perfect in Old East Slavic, i.e. the use vs. gradual loss of the auxiliary. Already in the most ancient

vernacular texts the auxiliary was systematically used only in the 1st and 2nd persons (Zaliznjak 2004: 178–181; Silina 1995: 443–444), but not in the 3rd person, cf. (100) above. In the 1st and 2nd person the auxiliary was in almost complementary distribution with free nominative pronouns in the vernacular, which have gradually supplanted the auxiliary by the 17th century (see Zaliznjak 2008: 239–262 and recent typologically informed overviews in Kibrik 2013 and especially Budennaya 2018 with references therein). In bookish texts the consistent use of the auxiliary was the norm for all persons, albeit examples of auxiliary omission are attested even in earlier texts.

3.5.2 *Auxiliation*

The process of auxiliation, in particular of HAVE in perfects of Standard Average European-type languages, was scrutinized by Kuteva (2001). As many others, she assumes that different stages of auxiliation involve changes affecting not only the HAVE-verb, but different parts of the entire construction. The structural corollaries of this process are the loss of object agreement (and of inflection as such) in the participle, reanalysis into a verbal complex (inflected HAVE + participle) and the omissibility of the object. In accordance with her model (Kuteva 2001: 40), the most advanced stage has obviously been reached by the Macedonian HAVE-based construction: first, its participle is invariable and, thus, does not agree with any core argument, which may be considered an indication that HAVE and the participle have turned into a verbal complex. Second, the fact that this construction hardly knows any lexical restrictions (Wiemer 2017: §2.4) implies that objects can be omitted, so that the last of Kuteva's stages seems to be reached.

However, Kuteva's schema is primarily oriented toward structural changes and does not say much about how such changes might be correlated with the semantic evolution of the construction. In particular, a perusal of Slavic HAVE-based resultatives reveals that the omissibility of an object-NP need not correlate with the spread of lexical input, nor with a shift to an event-oriented perfect. For instance, Georgiev (1976) draws attention to a HAVE-based construction in Bulgarian whose participle agrees with an object-NP that cannot be omitted:

- (114) Bulgarian (Georgiev 1976: 299, slightly adapted)
Ima-m porāčan-i vāglišt-a, no ošte ne sa
 have-PRS.1SG ordered-PL coal-PL but yet NEG be.PRS.3PL
pristigna-l-i.
 arrive[PFV]-LF-PL
 “I have ordered coal, but it hasn't arrived yet.”

This resultative construction has not moved beyond an initial stage (Kuteva 2001: 41f.). Note that, despite its transparent compositional structure, this resultative does not code any possessive notion: the second clause indicates that the subject of the HAVE-construction has not yet got hold of what was ordered. Of course, this has to do with the lexical input: illocutionary acts do not imply resultant states; note that such verbs are often among the first attestations of objective resultatives in different languages (see §3.5.4). In addition, whether the subject-NP is an agent or only a beneficiary of the desired state is open to contextual interpretation. These semantic properties show that resultativity is not tied up to possession (see further §3.5.4). If we want to assume that possession is the starting point for ‘possessive perfects’, we are forced to also assume that semantic bleaching of HAVE has occurred already at this initial stage. Models like Kuteva’s cannot account for this. Nor do they account for another feature which has been considered as a reliable indicator of auxiliatation: in (114) one cannot omit the participle or, if one does, the meaning of the clause changes to its opposite (and the entire sentence becomes nonsensical): *?I have coal, but it hasn’t arrived yet*. That is, the participle still morphologically behaves like a modifier of the object-NP, although semantically and syntactically it is an indispensable part of the predication.

The same holds true for South Slavic beyond Balkan Slavic, i.e. farther to the northwest; see the Serbian Example (115) and the Slovene Example (116):

- (115) Serbian (courtesy of J. Grković-Major)³²
Ima-m skuva-n ručak
 have-PRS.1SG prepare[PFV]-PST.PASS.P(ACC.SG.M) lunch[M](ACC.SG)
za sutra.
 for tomorrow
 “I **have** lunch **prepared** for tomorrow.”
 (said by a woman, thus the participle agrees with the object)
- (116) Slovene (Nomachi 2006: 80)
Slik-o ima-m proda-n-o.
 picture[F]-ACC.SG have-PRS.1SG sell[PFV]-PST.PASS.P-ACC.SG.F
 “I have **sold** the painting.”

32. Cf. also Friedman (1976: 97). The marginal status of such constructions is confirmed by the fact that native speakers’ judgments about their use and acceptability vary enormously: they range from acceptance (under certain circumstances) to downright denial of their existence (explicable probably from prescriptivist norms).

These observations apply to the majority of HAVE-based resultatives in Slavic,³³ including high-contact varieties like the Resian dialects of Slovene (north-eastern Italy) and Molise Slavic (southern Italy); for some details and references cf. Wiemer (2017: §2.3). Analogous cases were noticed for Polish already by Nitsch (1913: 102), and we find similar examples all over Slavic where the HAVE-schema predominates for possession:

- (117) Polish (Nitsch 1913: 102)
- On ma t-o miejsc-e*
 he.NOM have.PRS.3SG DEM-ACC.SG.N place[N]-ACC.SG
sprzeda-n-e.
 sell[PFV]-PST.PASS.P-SG.N
 “He has sold this place.”

Most details pertinent for an assessment of auxiliation of HAVE-based resultatives are provided by West Slavic languages. Such resultatives existed already in Old Czech (end of 12th century), Old Polish (end of 13th century), and they are attested in the oldest Slovak documents from the early 17th century, but their degree of auxiliation has remained astonishingly low, and we can hardly observe shifts to an actional perfect. Almost all semantic and syntactic types known in the contemporary languages were already present (Giger 2003: 416–422; 2016: 284f.; Mendoza 2013, 2018). Admittedly, sometimes participles lacked agreement with an object-NP. However, such cases were infrequent, and most of them can be explained by the choice of the neuter as a default if agreement controllers were lacking or untypical, e.g. with quantifying expressions (see below). Moreover, in modern Polish, HAVE and the participle seem to be adjacent with each other more frequently than in earlier stages. However, this seems to be part a more general diachronic tendency of Polish, so that it is not clear how significant an increase in bondedness can be as an indicator of auxiliation (Mendoza 2018: 177f.).

Objectless resultatives can be subject-oriented, e.g. with ingestive verbs, as in (118) (compare it with the Macedonian Example (131) below):

- (118) Czech, Hanakian dialects, central Moravia (Damborský 1967: 105)
- Už má-m dojed-l-ý.*
 already have-PRS.1SG eat.up[PFV]-LF-SG.N
 “I have already eaten / had my fill.”

33. They apply even to the Lithuanian HAVE-based resultative (see §2.2.6). The latter differs from the bulk of Slavic HAVE-based resultatives only in that the active participles consistently agree with the subject.

Colloquial Polish provides a number of objectless resultatives from telic transitive verbs whose semantics is difficult to generalize. Here resultative and recipient-passive readings can co-occur (see §3.4.2); compare (119):

- (119) Polish (NKJP)
i gdzie ma-m posprząta-n-e (śmiech)
 and where have-PRS.1SG tidy.up[PFV]-PST.PASS.P-SG.N (laughter)
 “[I have my place where I live, for which I pay regularly,
 i. and where I have tidied up. [laughs]”
 ii. and where I get tidied up (by someone). [laughs]”

In either reading temporal reference corresponds to the tense of *mieć* “have”; in (119) the state is simultaneous to utterance time, regardless of whether a recipient-passive reading is involved (ii) or not (i). In none of the aforementioned cases do we observe a shift away from resultative states. If such instances are at all compatible with definite time adverbials (or conjunctions) these specify the time of the state, not of an associated preceding event.

The same applies to HAVE-resultatives whose base verbs do not imply any accusative-marked object at all, as e.g. in the Serbian Example (120) with a prepositional object:

- (120) Serbian (Nomachi 2012: 93)
Već ima-m polože-n-o za vožnj-u.
 already have-PRS.1SG put[PFV]-PST.PASS.P-SG.N for driving[F]-ACC.SG
 “I have already passed the driving test [*lit.* for driving].”

In yet other (very rare) cases lack of agreement applies if the potential agreement controller is a quantifying expression. We find such examples in Polish (121), Slovak (122) and Czech:

- (121) Polish (Weiss 1977: 371)
Część materiał-u ma-m już
 part[F](ACC.SG) stuff[M]-GEN.SG have-PRS.1SG already
porobio-n-e.
 do[PFV]-PST.PASS.P-SG.N
 “I have already done part of the stuff.”
- (122) Slovak (Giger 2016: 288)
Má kúpe-n-é liter vín-a.
 have.PRS.3SG buy[PFV]-PST.PASS.P-SG.N litre[M](ACC.SG) wine-GEN.SG
 “S/he has bought a litre of wine.”

Again, the focus of temporal reference remains on the resultant state.

Admittedly, for modern Czech and Slovak, Giger (2003: 394–403; 2016) pointed out that lack of agreement cannot in all instances be explained by the lack of a suitable agreement controller, cf. the Slovak example (123) with an overt accusative direct object:

- (123) Slovak (Giger 2016: 288)
Idete na hokej?
Nie, ja už má-m dohovore-n-é
 no 1SG.NOM already have-PRS.1SG agree[PFV]-PST.PASS.P-SG.N
televízi-u.
 television[F]-ACC.SG
 “Do you go to the hockey game? No, I **have** already **decided** on TV.”

In Czech we even encounter examples that look like subject agreement:

- (124) Czech (Giger 2016: 290)
Sv-é kúr-y má
 REFL.POSS-ACC.PL hen[F]-ACC.PL have.PRS.3SG
příprave-n-a i D. Havlov-á.
 prepare[PFV]-PST.PASS.P-NOM.SG.F too PN[F]-NOM.SG
 “D. Havlová **has prepared** her hens, too.”

Their frequency is very low (at least in writing), although not so negligible as to be dismissed as ‘errors’ (Giger 2016: 290). Nonetheless, the temporal reference even of these resultatives remains unchanged. Moreover, in practically all cases the participle is derived from a perfective stem.

Slovincian – the closest relative of Kashubian that died out in the early 20th century – went further than contemporary Czech in many respects. In the preserved recordings we not only find many instances where no agreement with an object-NP applied, but come across examples which resemble Czech (124) with subject agreement. The following example contains an *l*-participle (on this extension see §3.1, §3.5.3):

- (125) Slovincian (Lötzsich 1967: 30f.)
mā mōu-mā vojn-q přiěš-l-ī
 1PL.NOM have-PRS.1PL war[F]-ACC.SG go.through[PFV]-LF-PL
 “We **have experienced** (the) war.”

However, in most cases the participle of the HAVE-based construction was marked with the neuter (-*é*) and only rarely showed agreement with an object-NP (Lötzsich 1967: 30; Wiemer & Giger 2005: 83f). Lötzsich (1967: 28f., 38f.) gives many examples with participles both from transitive and intransitive verbs of either aspect,

including many loan verbs from German, the verb *mjȕc* “have” itself and GIVE as causative and existential verb. This seemingly unlimited extension of the lexical input was accompanied by symptoms indicating that the HAVE-resultative had turned into an experiential perfect (Example (125) can be read this way) or even a general past. See the following example with the temporal adverb *fčeráŕ* “yesterday”:

- (126) Slovincian (Wiemer & Giger 2005: 84)
jáo mó^u-m fčeráŕ na pol-ú rob^ŕju-n-é
 1SG.NOM have-PRS.1SG yesterday on field-LOC work[IPFV]-PST.PASS.P-N
 “Yesterday I worked on the field.” [*lit.* “I have worked”]

Heavy pattern-borrowing (or polysemy copying) from German permeated the entire network of complex verb forms in Slovincian, such as the perfect, the passive, the causative, and the future. An analogous situation obtained as well in 19th and 20th century Kashubian in the period of German rule (Wiemer & Giger 2005: 83f.; Knoll 2012: 89–95, 99–114, with references). This unprecedented case of pattern replication (not observed even in Sorbian) was obviously due to an extreme contact situation characterized by massive asymmetric Slavic-German bilingualism. It is therefore safe to assume that the occasional examples of subject agreement of the participle in HAVE-resultatives in colloquial Czech and the various instances of lack of agreement discussed above for West Slavic are due to unrelated, maybe even internal reasons.

So far, we have seen that Slavic HAVE-based resultatives show only limited symptoms of auxiliatation. Almost all have entered a stage where the auxiliary and the PASS.P form a complex with or without agreement of PASS.P and object. Even if objects can be omitted, temporal reference has not shifted toward a focus on events themselves. However, the loosening of lexical restrictions went further than morphosyntax: the input to HAVE-resultatives are not only telic verbs, but verbs conveying illocutions or socially relevant events, and this seems to mark off the start of the development, not its continuation (see §3.5.4). We observe only two exceptions to these restrictions: Pomeranian Slavic (Kashubian, Slovincian) which found itself under extreme German influence, and the Macedonian HAVE-based construction with uninflected participle.

In order to better assess the rise of the latter, we have to realize that Macedonian has not only the construction with the uninflected participle, but also the commonplace construction with participles showing object agreement. See Mitkovska & Bužarovska (2011b: §3.1), who cite examples from Topolińska (1983: 30), not only with an *n/t*-participle of a perfective transitive verb (127), but also with an *n/t*-participle of a perfective intransitive verb (128):

- Macedonian (Topolińska 1983: 30)
- (127) *Ima-m sedām jazovc-e utepa-n-i.*
 have-PRS.1SG seven badger-PL kill[PFV]-PST.PASS.P-PL
 “I have **killed** seven badgers.”
- (128) *Dvesta duš-e partizan-i ima-še pojde-n-i.*
 200 soul-PL partisan-PL have-IPRF.3PL go[PFV]-PST.PASS.P-PL
 “Two hundred partisan souls were [*lit. had*] **gone**.” (i.e. they died)

This construction has been known from different dialects all over Macedonia since the 19th century and could be traced to the early 18th century (L. Mitkovska, p.c.). One wonders whether this construction with participles that agree in number with object-NPs was the direct source from which the HAVE-perfect with non-agreeing participle emerged (Friedman 1976: 97f.; Makarova 2016: 224f.). Probably, the latter construction arose independently, in a way that would explain, first, why agreement marking was lost and, second, why this construction was originally restricted to a tiny region near Lake Ohrid. Gołąb (1984) provided an explanation on the basis of intense contact with Aromanian speakers, who partially shifted to local Macedonian. Following Gołąb’s argument, we can assume mutual pattern-borrowing of present perfect constructions by which Macedonian copied a structure with an indeclinable participle from Aromanian, while Aromanian adopted a Macedonian pattern consisting of a BE-auxiliary and an agreeing participle. This, in turn, led to a copied structure with the *n/t*-participle in Macedonian. Table 3 has been adopted (with slight modifications) from Makarova (2016: 231f.), who followed Gołąb (1984). Grey shadowing marks the newly introduced construction at the particular stage.

Table 3. Mutual pattern-borrowing of auxiliary-participle combinations (Macedonian – Aromanian)

	Macedonian	Aromanian
	“I have eaten dinner.”	
Stage 1 (inherited)	<i>sum večera-l(-∅)</i> be-PRS.1SG dine-PST.PA(-SG.M)	<i>am-^u cina-t[∅]</i> have-PRS.1SG dine-PST.PASS.P(INDECL)
Stage 2	<i>sum večera-l: ima-m večera-no</i> have-PRS.1SG dine-PST.PASS.P(INDECL)	← <i>am-^u cina-t[∅]</i>
Stage 3	<i>ima-m večera-no: sum večera-l</i> →	<i>am-^u cina-t[∅]: esk-^u cina-t-^u</i> be-PRS.1SG dine-PST.PASS.P-SG.M
Stage 4	<i>ima-m večera-no: sum večera-n(-∅)</i> be-PRS.1SG dine-PST.PASS.P(-SG.M)	← <i>esk-^u cina-t-^u</i>

Gołąb's reasoning implies that Macedonian and Aromanian speakers built up a common diasystem of past tenses by mutually adopting auxiliary-participle combinations that had not been employed before. It also implies that the BE+n/t-pattern occurred after the HAVE-pattern with indeclinable participle.³⁴ This model thus requires us to assume that the BE+n/t-pattern was reintroduced and is totally unrelated to subjective resultatives of the B-type which are so widespread in West Slavic (see §3.1, §3.3, §3.5.3). Moreover, there would be no relation to the HAVE-based resultative with agreeing participles of intransitive verbs (see 128 above), known also from northern dialects. The occurrence of participles from intransitive verbs might be explained by analogical expansion from transitive verbs (as in 127). This latter process has not occurred in Bulgarian.

As the West Slavic and the Macedonian HAVE-based constructions with uninflected participle demonstrate, lack of agreement with an object-NP cannot *ipso facto* be considered a reliable indicator of grammaticalisation. In addition, the Macedonian construction does not show other morphosyntactic symptoms of grammaticalisation, e.g. the HAVE-verb and the uninflected participle do not behave like clitic and prosodic host (which is remarkable since Macedonian is known for special clitics and clitic clusters). Their combination can be split up by a focused nominal object, as in (129). The linear order of the auxiliary and the participle can also be permuted if the participle is topicalized, as in (130).

Macedonian

- (129) *Ima-m pism-o napisa-no, a ne porak-a.*
 have-PRS.1SG letter[N]-SG write[PFV]-PST.PASS.P.INDECL CONJ NEG message-SG
 "It is a **letter** I have written, not a message." (E. Bužarovska, p.c.)
- (130) *Kakv-i vozač-i ste Vie? Polože-no ima-m*
 which-PL driver-PL be.2PL 2PL put[PFV]-PST.PASS.P.INDECL have-PRS.1SG
od 2005ta, [...] a redovno voza-m veke 4 godin-i.
 from and regularly drive[IPFV]-PRS.1.SG already year-PL
 "What kind of driver are you(PL)? I have **got** my license in 2005 [...] but regularly I have been driving already for four years."
 (forum.femina.mk; accessed September 26, 2016)

These facts do not speak in favour of grammaticalisation. Alternatively, one can argue that word order rules are not that important for grammaticalisation. Word order regularities in Slavic languages are generally motivated by pragmatic and not

34. Gołąb assumed exactly this order from stages 2 to 4, although there is no obvious reason why stages 2 and 3 might not have occurred in parallel or in reverse order. Makarova (2017: 397f.) considered the BE+n/t-pattern the most recent one, but only because it underlies stricter limitations than the HAVE-pattern (see §3.3).

syntactic factors; the significance of marked topic or focus structures thus gains another status compared to languages like German, in which, despite stricter syntactic rules, the analytic past tense (< perfect) allows for different splits as well. The comparison with German shows that information structure factors may overrule otherwise well-established syntactic rules that are assumed to be indicative of a decrease of syntactic variability. Furthermore, this comparison demonstrates that decrease of syntactic variability can turn out to be an epiphenomenal feature of grammaticalisation, since it forms part of a more pervasive property in German (in comparison with Macedonian).

As for BE-based perfects, the question of auxiliation makes little sense, for reasons similar to those in the discussion of Baltic perfects (§2.3.2). The A-type perfect has survived in Balkan Slavic (see §3.1, §3.3), and the behaviour of its BE-verb as a clitic presumably has not much changed since CS times. It has been integrated into the system of enclitics, but this is a general process in Balkan Slavic and not peculiar for auxiliaries in compound verb forms. The same has happened in Old East Slavic (Zaliznjak 2008: 221f.), though there the auxiliary was lost by the 17th century. Conversely, the retention of the BE-auxiliary as a clitic has not prevented the *l*-perfect from turning into a general past, as in Czech and Slovak, but also in Slovene. In Slovene (as well as in Upper Sorbian and Old East Slavic) the BE-auxiliary tends to be omitted in the third person,³⁵ while in Czech and Slovak it is omitted obligatorily (as is its semi-agglutinated cognate in Polish). In East Slavic this auxiliary was simply lost, while in Polish it has been lingering between enclitic and agglutinated status. In Balkan Slavic, again, the BE-auxiliary tends to be omitted in the evidential use of the *l*-perfect. However, this is no reliable rule and anyway “rather part of the process of total auxiliary loss in the third person” (Friedman 1986: 176; cf. also Friedman 2001). The difference in comparison to East Slavic is that the presence/absence of third person BE with the *l*-participle can be used for a distinction between deictically anchored utterances (= perfect) and utterances that are detached from the speaker origo (as in the narrative past or in evidential usage). This distinction was vital in early East Slavic, and in 14th c. Czech (Dickey 2013), until the ultimate decay of the aorist-imperfect system.³⁶

35. Meermann & Sonnenhauser (2016: 84f.) find it plausible to explain the retention of BE in the third person as a result of German influence.

36. The comprehensive assessment by Meermann & Sonnenhauser (2016) shows that the perfect > past shift in North Slavic (and Slovene) and the evidential extension of the *l*-perfect in Balkan Slavic are based on common tendencies affecting the BE-auxiliary across Slavic. The inner-Slavic development bifurcated by the 14th c., and this was obviously conditioned by independent factors.

This rough survey shows that the areal distribution of the BE-auxiliary – whether it has been lost, changed its behaviour as a clitic, or has been moving toward agglutination – by no means coincides with the present perfect > general past shift, which is so commonplace in the middle of the European continent (see § 3.1). By analogy, B-type resultatives have, *mutatis mutandis*, not been subject to auxiliatation effects, either. Their evaluation in terms of grammaticalisation depends, after all, entirely on the behaviour and lexical range of the participles (see § 3.5.4).

3.5.3 Diathetic orientation of participles

As mentioned in §3.2, it is difficult to determine at which period, and in which variety, *n/t*-participles had an orientation fixed toward the more agent-like or the more patient-like argument, or whether they were labile. Nedjalkov & Jaxontov (1988: 22) claim that in different languages objective resultatives are more frequent (in type terms) than subjective resultatives, which are, in turn, a precondition for possessive resultatives (since these are subjective resultatives applied to transitive bases). Whether this frequency relation reflects a diachronic sequence (objective > subjective resultatives) is not entirely clear. If we assume this, *n/t*-participles would have served as input for objective resultatives first, and this implies that they already had stabilized in this orientation. This leaves open the question of the age of subjective resultatives with *n/t*-participles well attested in West Slavic. Subjective resultatives with *n/t*-participles found, for instance, in Macedonian B-type constructions (131) and C-type constructions, both with the indeclinable participle (see 68 above) and with object-agreeing participle (see 129), are most probably recent phenomena (see §3.5.2, §3.5.4).

- (131) Macedonian, uttered by a female speaker (Makarova 2016: 226)
Jas sum jade-n-a.
 ISG.NOM be.PRS.1SG eat[IPFV]-PST.PASS.P-SG.F
 “I have eaten.” (implying “I am not hungry now.”)

Example (131) involves an ambitransitive ingestive verb. The situation might have been different for subject-oriented *l*-participles with ambitransitive verbs in West Slavic, as in Example (118) from Hanakian dialects (see §3.5.2). Since *l*-participles were subject-oriented already in CS times (§3.2), this is certainly not a new phenomenon. More spectacular is usage with transitive verbs without an object, as in (72) above from the same dialects (Wiemer & Giger 2005: 88): *Mám rožlý* “I have **lit up** (a cigarette) / **switched on** (light in the room).” Expansion to transitive verbs, with retained subject-orientation, certainly occurred later.

In turn, *vši*-participles started being employed with transitive verbs no earlier than the 19th century (Kuz'mina 1971: 134, 142); see Example (86). We may assume that their object-oriented use (as in example 137 below) is even more recent, since it

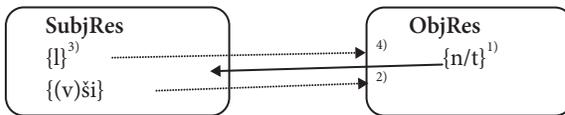
presupposes the use of transitive verbs. Most Russian dialects north and northeast of Pskov tend to employ only *n/t*-participles for resultatives of any diathetic orientation (Kuz'mina 1993: 133–142; Požarickaja 2014a), whereas East Slavic dialects in close vicinity to Baltic display a complementary distribution of *vši*-participles for subjective vs. *n/t*-participles for objective resultatives (Wiemer & Giger 2005: 33). The latter pattern corresponds to the strict diathetic distribution in Baltic (see §2.1).

Very occasionally, and only in Belarusian and Polish varieties spoken in immediate vicinity to Lithuanian, *vši*-participles have intruded into HAVE-based resultatives (type C). See Grek-Pabisowa & Maryniakowa (1999: 38–41) for ‘borderland Polish’ (Pol. *polszczyzna kresowa*) and Erker (2014: 138f.) on Belarusian:

- (132) dialectal Belarusian (Erker 2014: 138)
jan-á mé-l-a kupí-ŭšy kvarcír-u.
 she-NOM have-PST-SG.F buy[PFV]-ANT.P flat[F]-ACC.SG
 ‘She had bought a flat.’

In this construction only telic transitive verbs with an accusative object occur. These instances have to be considered pattern-borrowings from the Lithuanian construction discussed in §2.2.6. They differ from the Lithuanian model only in that the anterior participle is incapable of showing agreement; its subject orientation has remained unchanged.

Figure 2 summarizes the basic distribution and patterns of expansion of Slavic participial suffixes encountered in resultatives.



- ¹⁾ presupposes the diathetic stabilization of *n/t*-participles
²⁾ only in some Russian dialects of the Pskov region
³⁾ only in West Slavic (and in some adjacent East Slavic varieties)
⁴⁾ only in colloquial Czech, Hanakian (central Moravian) and in Kashubian, Slovianian

Figure 2. Chronological relation of suffixes spreading over resultatives/perfects

Figure 2 can be combined with a one-sided implication: if a Slavic language has resultatives with a HAVE-auxiliary, it also has them with a BE-verb. This applies for both subjective and objective resultatives (> perfects). We should further remember the more general implication that, if a language has subjective resultatives it also has objective ones (see above). Jointly, these implicational hierarchies predict that HAVE-based subjective resultatives are the latest stage to develop (if a language uses a HAVE-based resultative at all).

The critical case showing this in Slavic is Macedonian. Given the otherwise widespread occurrence of HAVE-based resultatives in South and West Slavic and the history of the Macedonian HAVE-resultative with uninflected participle (see §3.5.2), the subjective HAVE-perfect in Macedonian is exceptional, and is a late-comer. Consider the following example.

- (133) Macedonian (Topolinjska 1995: 210)
Jas ima-m uče-n-o tri godin-i na
 1SG.NOM have-PRS.1SG learn[IPFV]-PST.PASS.P-SG.N 3 year-PL on
bolgarsk-o skol'j-e.
 Bulgarian-SG school[N]-SG
 “I have studied for three years in a Bulgarian school.”

In terms of diathetic orientation, the exact opposite to the Macedonian HAVE-perfect is the expansion of the *l*-participle into objective resultatives observed in colloquial Czech, cf. (70), and Hanakian as well as in Slovincian and Kashubian. See (125) for a HAVE-based construction and (134) for a BE-based resultative:

- (134) Kashubian (Breza & Treder 1981: 134)
koni-e bė-l-ė zaprzėg-l-ė.
 horse[M]-NOM.PL be-PST-PL harness[PFV]-LF-PL
 “The horses were harnessed.”

By analogy, the East Slavic *vši*-participles have consistently acquired object-orientation only in the very tiny region of Seliger and Toržok (north of Tver'; Kuz'mina 1993: 145; Wiemer & Giger 2005: 33). Only here do we encounter examples like (135):

- (135) North West Russian dialects (Kuz'mina 1993: 145)
korov-a proda-vši
 cow[F]-NOM.SG sell[PFV]-ANT.P
 “The cow has been / is sold.”

The transition from subject- to object-orientation might have produced syntactically ambiguous instances, as in (79), adduced in §3.3.1.

3.5.4 Range and extension of lexical input

By definition, resultatives are formed from telic verbs. The transition from a resultative to a more event-oriented perfect (and thence to a general past) is conditioned, first of all, by an extension of the input beyond this narrow base of verbal lexemes. As Lindstedt (2000: 368) pointed out, an increase in the number of atelic lexemes occurring in the construction is indicative of a switch from ‘current result’

to ‘current relevance’, since the specific cause-effect connection with the preceding event becomes looser.

On this basis, it is noteworthy that verbs denoting illocutionary or other socially relevant acts are among the first attestations of objective resultatives in different languages. This is one reason why resultatives have been claimed to arise, not as a device to mark temporal relations of resultant states, but to highlight obligations and other social commitments in everyday rhetoric (cf. Detges 2000). Remarkably, one of the first attestations of the Macedonian HAVE-perfect dated 1706³⁷ contains verbs conveying illocutions with social (or legal) consequences; in a sense, we are dealing with a kind of generic performative (compare the performative use of the perfect/past in Old Novgorod birchbark letters, see example 104 in §3.5.1):

- (136) Old Macedonian (Koneski 1965: 171)
- | | | | |
|----------------------------|----------------------------|-------------------------------|-----------|
| <i>ima-m̄</i> | <i>go</i> | <i>aforesa-n-̄</i> | <i>i</i> |
| have-PRS.1SG | he.ACC | excommunicate-PST.PASS.P-M.SG | and |
| <i>prokle-t-̄</i> | <i>i</i> | <i>zaveza-n-̄</i> | <i>do</i> |
| curse[PFV]-PST.PASS.P-M.SG | and | bind[PFV]-PST.PASS.P-SG.M | until |
| <i>strašen-̄</i> | <i>sut-̄</i> ³⁸ | | |
| terrible-M.SG | judgment-SG | | |
- “[whoever intends to steal it] I have (= declare) him excommunicated and cursed and bound/arrested (?) until Judgment Day.”

Within South Slavic, only in Macedonian did this construction extend its lexical input to intransitive verbs (see §3.3), and only here do we find it with inanimate subjects (e.g., *Nož=ov me ima iseče-n-o* “This here knife has cut me”; Friedman 1976: 98f., his translation) and with participles of imperfective verbs (Wiemer 2017: §3.2.5).

As for West Slavic, imperfective *n/t*-participles in resultatives constitute a clear minority, and intransitive verbs practically do not exist in any variety. An exception is a tiny class of ambitransitive verbs, see (118) above, and, in general, Slovincian, where there do not seem to have been any restrictions on the lexical input due to wholesale copying from German (see §3.5.2). Apart from that, if imperfective *n/t*-participles are employed predicatively they more often than not have the same resultative value as their perfective counterparts. Standard Polish and the Sorbian languages are exceptions (see §3.4.2).

37. Cf. Friedman (1976: 97), Makarova (2016: 224).

38. The participles agree with the pronominal object (*go* “him”). By this time, Macedonian dialects had already lost cases so that there were no accusative and nominative endings anymore capable of distinguishing subject and object (V. Friedman, p.c.).

In East Slavic, the Belarusian dialects of the Baltic-Slavic contact zone do employ imperfective participles, but in subjective resultatives with the *vši*-participle, while the few examples on *n/t*-participles (e.g. adduced by Erker 2015: 93) appear ambiguous inasmuch as they can also be read as verbal adjectives denoting a stable property, cf. (137).

- (137) dialectal Belarusian (Erker 2015: 93)
u nas xl'ep užo by-u
 at 1PL.GEN bread[M](NOM.SG) already be-PST(SG.M)
p'ěča-n-y.
 bake[IPFV]-PASS.P-NOM.SG.M
 “we already had **baked** bread [or: we had bread baked ?]” [lit. “... at us the bread already was baked.”]

By contrast, the Russian dialects farther to the north(east) employ imperfective *n/t*- and *vši*-participles to different degrees (Kuz'mina 1993: 140, Wiemer & Giger 2005: 37f.; Wiemer 2017: §3.2.3), cf. (138) and (139).

- North Russian dialects (Sobolev 1998: 75, 77)
 (138) *zdes' volk-am(i) mnogo xodi-vši i mnogo*
 here wolf-INS.PL much walk[IPFV]-ANT.P and many
utašči-vši ovec.
 pull.away[PFV]-ANT.P sheep.GEN.PL
 “Many wolves have been [lit. walked] here and have carried away many sheep.”
 (139) *siže-no by-l-o u menja.*
 sit[IPFV]-PST.PASS.P³⁹ be-PST-SG.N at 1SG.GEN
 “I have/had **sat** here.” [lit. “(it) was **sat** at me”]

Two more things deserve emphasis. First, the lexical groups of verbs that serve as inputs for subjective resultatives with *n/t*-participles in West Slavic differ markedly from the lexical inputs for subjective resultatives in the Northwest-Russian dialects and in Macedonian. Second, Russian dialects north(east) of Pskov are largely insensitive to agreement of *n/t*-participles. The formally neuter form (*-no/-to*) has turned into an indeclinable form, and in some dialects the formally masculine, feminine and plural forms behave alike. Thus, we find instances like *ona ujden-a* “she has left” (participle agreeing for feminine-singular) alongside with *ona ujden-Ø* (formally masculine singular) or *ona ujden-y* (formally plural). From the dialectological literature it is not very clear whether agreeing and non-agreeing participles can co-occur in the same specific dialect, or whether this is a matter of variation

39. Ending with unclear status.

scattered across different dialects (Kuz'mina 1993: 134–138; Wiemer & Giger 2005: 33; Požarickaja 2014a: 114f.). It seems justified to assume that this lack of agreement features, widespread in the northern part of Russian dialects, is a manifestation of Finnic contact influence. However, regardless of agreement loss, the relevant participial constructions have hardly started moving away from resultative or experiential functions.

3.6 Pluperfect, future perfect and related constructions

Slavic languages clearly support the view of the pluperfect as a separate gram type belonging to the domain of “frame past” (Dahl 1985: 144–149) or “discontinuous past” (Plungian & van der Auwera 2006), see primarily Sičinava (2013). Evidence for this comes from the divergent diachronic paths of perfects and pluperfects outside of more conservative Balkan Slavic: while in most Slavic languages the old (type A) perfects show early development into past tenses, pluperfects persist for a longer period (in some languages up to the present) and are either functionally stable or evolve into markers of the “antiresultative” like the Russian constructions with the fossilized neuter past tense of the copula *bylo*.

While in Baltic the perfect freely and productively combines with different tenses (semantically non-compositional interpretations of past and future perfects set aside; see §§2.1, 2.2.3–2.2.4), the situation in Slavic is very different. First, in most Slavic languages the relations between the past perfect (pluperfect) and the (original) present perfect are hardly trivial, not least because, apart from Balkan Slavic and North-West Russian and northern varieties of Belarusian, the pluperfect does not have any present perfect counterpart in modern Slavic languages (on Slavic pluperfects in general see e.g. Mološnaja 1996; Sičinava 2013). Second, the reflexes of the CS pluperfect (or, rather, pluperfects) in the modern Slavic languages have followed quite different developmental paths.

3.6.1 *Old Slavic*

As a starting point, consider that already in Old Church Slavonic there was variation in pluperfect formations: a pluperfect with the auxiliary in the aorist (*bě/bysto prišblъ* “had come”) and the auxiliary in the imperfect (*běaše prišblъ* “had come”). Lunt (2001: 113–114) draws a functional distinction between these two formations (“[t]he use of the imperfect auxiliary shows that the past moment is coordinated with some other moment, mentioned or simply implied by the context; the use of the aorist states an independent action, simply a moment in the past”), but gives no empirical support for his observations. See an example in the meaning of ‘discontinuous past’ in (140):

- (140) Old Church Slavonic (Codex Marianus, John 20:12)⁴⁰
i vidě dъva anōgela v bēlaxъ sēdēšta [...]
ide=že bě leža-l-o těl-o Iisusov-o
 where=PTCL be.AOR.3SG lie-LF-SG.N body-NOM.SG.N of.Jesus-NOM.SG.N
 “And she sees two angels in white sitting [...] where the body of Jesus had lain [before].”

Specifically for *Codex Suprasliensis*, Plungian & Urmančieva (2016) observe that the choice of the auxiliary correlates with information structure: the aorist of the auxiliary is used in this manuscript when the event described by the form of the pluperfect was already known, cf. (141), while descriptions of new events feature the imperfect of the auxiliary, as in (142).

- (141) Old Church Slavonic (Codex Suprasliensis, 19:510; Plungian & Urmančieva 2016: 2)⁴¹
i ukraši-šę měst-o t-o iżde=že
 and decorate-AOR.3PL place-ACC.SG that-ACC.SG.N where=PTCL
bě mōčēnik-ъ po-strada-l-ъ
 be.AOR.3SG martyr-NOM.SG PVB-suffer-LF-SG.M
 “And they decorated the place where that martyr had suffered.”

- (142) Old Church Slavonic (Codex Suprasliensis, 8:123–125; Plungian & Urmančieva 2016: 2)⁴²
ne u bo bē-aše dotolě vidě-l-ъ aggel-a
 NEG yet because be-IPRF.3SG until.then see-LF-SG.M angel-GEN.SG
aky kъ člověku bo besēdova i vōzira na=ņb
 “[Having heard that, the blessed man became frightened,] since he had not yet until then seen an angel speaking to a man and looking at him.”

In Old East Slavic (cf. Sičinava 2013: 187–204 for an overview and comprehensive references) we observe two formations in a kind of register variation: the ‘standard’ pluperfect with the aorist or imperfect of the auxiliary, mainly attested in bookish registers, and the more colloquial ‘supercompound’ pluperfect with the perfect form of the auxiliary. Though their ranges of uses overlapped, the supercompound pluperfect was mainly attested in the contexts of annulled result, cf. (143), where the use of the pluperfect in reference to an act of giving an oath implies that the oath was subsequently broken and hence serves as an accusation of treason.

40. TOROT <https://nestor.uit.no/sentences/42941>

41. TOROT <https://nestor.uit.no/sentences/137614>

42. TOROT <https://nestor.uit.no/sentences/134520>

- (143) Old East Slavic (Hypatian Chronicle, 1161; Sičinava 2013: 194)
a xrbst-ǫ jes-te by-l-i čělova-l-i ko mně
 and cross-ACC.SG be.PRS-2PL be-PST-PL.M kiss[IPFV]-LF-PL.M to 1SG.DAT
 “You had sworn to me by kissing the cross [that you wanted to have me as your duke, and now you have broken your oaths.]”

The ‘standard’ pluperfect also had such uses, but occurred as anterior or resultative in the past as well, cf. (144):

- (144) Old East Slavic (Kiev Chronicle, 1146; Sičinava 2013: 188)
i bě Igor-ǫ razbolě-l-ǫ=sę v
 and be.AOR.3SG PN-NOM.SG fall.ill[PFV]-LF-SG.M=REFL.ACC in
porub-ě i bě bolen-ǫ velmi.
 prison-LOC.SG and be.AOR.3SG ill-NOM.SG.M very
 “[Izjaslav, the son of Mstislav, came to Kiev,] and Igor had fallen ill in the prison and was very ill.”

3.6.2 South Slavic

Of the modern Slavic languages retaining the old pluperfects, those with the most transparent relationship between the past and the present perfect are Bulgarian and Macedonian. Consider the meanings of the Bulgarian pluperfect according to Maslov (1981: 256–258), which include such compositional functions as resultative in the past (145), temporal precedence with respect to a past event (146), and experiential in the past (147):

- Bulgarian
 (145) *Čel-o-t-o mu be-še runtav-o, kosm-i-t-e*
 forehead-SG-DEF-SG.N 3SG.M.DAT be-IPRF.3SG shaggy-SG.N hair-PL-DEF-PL
se bja-xa zavi-l-i na malk-i kolelc-a.
 REFL.ACC be-IPRF.3PL curl[PFV]-LF-PL PREP little-PL circle-PL
 “It’s (ox’s) forehead was shaggy, the hair had curled into little circles.”
 (Maslov 1981: 256)
- (146) *Goljam-a-t-a dōšterj-a kōrpe-še nov-a-t-a*
 big-SG.F-DEF-SG.F daughter-SG mend[IPFV]-IPRF.3SG new-SG-DEF-SG.F
pokrivk-a za mas-a, koj-a-to baj Mit’o be
 cover-SG for table-SG what-SG-REL Mr PN be.AOR.3SG
izgori-l s cigar-a-t-a si.
 burn.[PFV]-LF(SG.M) with cigarette-SG-DEF-SG.F REFL.DAT
 “The elder daughter was mending the new table-cloth that Mr. Mitjo had burned with his cigarette.”
 (Maslov 1981: 257)

- (147) *Gospož-a Xristina ima-še loš-a slav-a. [...] Vednōž Levski*
 lady-SG PN have[IPFV]-IPRE.3SG bad-SG fame-SG once PN
be-še prenoštiva-l u neja.
 be-IPRE.3SG spend.night.[PFV]-LF(SG.M) at her
 “Mrs Khristina enjoyed bad fame. [...] Once Levski had spent a night at her place.”
 (Maslov 1981: 257)

Functions such as reference to a past event not relevant for the present (‘discontinuous past’), as in (148), and counterfactual in conditional protases with past time reference, as in (149), are also attested:

- Bulgarian
 (148) – *No az ne sōm kra-!! – I az ne*
 but 1SG.NOM NEG be.PRS.1SG steal[IPFV]-LF(SG.M) and 1SG.NOM NEG
bja-x ubiva-l.
 be-IPRE.1SG kill[IPFV]-LF(SG.M)
 “– But I have not stolen! – I had not killed (before), either. [But when there was need, I killed two people.]”
 (Maslov 1981: 257)
- (149) *Večerta, kogato se vōrnax (Aor) v kōšti, polučix (Aor) ot bašta si tokava plesnica,*
če ako be posledva-l-a i vtor-a, sigurno
 that if be.AOR.3SG follow[PFV]-LF-SG.F and second-SG certainly
štja-x da padn-a v nesvjast.
 FUT-PST.1SG CONN fall[PFV]-PRS.1SG in unconsciousness
 “In the evening, when I returned home, father gave me such a blow, that had a second one ensued, I would certainly have lost consciousness.”
 (Maslov 1981: 259)

In Macedonian, in parallel to the three different perfect constructions, at least two pluperfects coexist, viz. the inherited one with the past tense of the BE-auxiliary and the *l*-participle and the new one with the HAVE-auxiliary with the neuter passive participle. According to Friedman (2002: 32), the two pluperfects are functionally differentiated: the BE-pluperfect expresses the temporal precedence of one event to another event in the past, cf. (150a), while the HAVE-pluperfect “is marked for past statal resultativity”, cf. (150b) with a past experiential meaning:

- (150) Macedonian (Friedman 2002: 32)
 a. *Toj mi ja pokaž-a, no jas veke*
 he.NOM 1SG.DAT 3SG.F.ACC show[PFV]-AOR.3SG but 1SG.NOM already
ja be-v vide-l.
 3SG.F.ACC be-IPRE.1SG see[IPFV]-LF(SG.M)
 “He pointed her out to me, but I had already seen her (I spotted her before he did).”

- b. *Toj mi ja pokaž-a, no jas veće*
 he.NOM 1SG.DAT 3SG.F.ACC show[PFV]-AOR.3SG but 1SG.NOM already
ja ima-v vide-no.
 3SG.F.ACC have-IPRF.1SG see[IPFV]-PST.PASS.P.INDECL
 “He pointed her out to me, but I had already seen her (on some previous occasion).”

In Bosnian-Serbian-Croatian, according to Alexander (2006: 283), the pluperfect can be formed either with the synthetic imperfect of the auxiliary ‘be’ (*bijah išao* “I had gone”) or with the compound past (*bio sam išao* “I had gone”) with no difference in meaning. An example of the past resultative / anterior use is given in (151).

- (151) Serbian-Croatian (Mološnaja 1996: 572)
Selo pod Susjedom bijaše (IPRF) kao mrtvo, sve je spavalo (PRF). A i na gradu
sv-e je usnu-l-o bi-l-o.
 all-NOM.SG.N be.PRS.3SG fall.asleep[PFV]-LF-SG.N be-LF-SG.N
 “The village near Susjed seemed dead, everyone was sleeping. In the town everyone had fallen asleep, too.”

The compound past type of the pluperfect has in principle been retained in Molise Slavic (spoken in southern Italy and isolated from Serbian-Croatian for 400 years), but the BE-verb no longer inflects and the *l*-participle can be truncated. We thus have, for instance, *sa bi doša* (BE + particle (< *bio*) + truncated *l*-participle) “I had come” (Breu 1998: 352).

3.6.3 Modern West Slavic

In the West Slavic languages the pluperfect is obsolete, although still attested on rare occasions in written registers to signal anteriority in the past, cf. the Slovak Example (152) and the Polish one in (153).

- (152) Slovak (Mološnaja 1996: 566)
Čita-l list, ktor-ý mu bo-l-i
 read[IPFV]-LF(SG.M) letter(ACC.SG) which-ACC.SG.M 3SG.DAT be-LF-PL.M
donies-l-i deň predtým.
 bring[PFV]-LF-PL.M day before
 “He was reading the letter that they had brought to him the day before.”
- (153) Polish (Swan 2002: 262)
Podgórszk-i przedtem już zauważy-ł by-ł
 PN-NOM.SG earlier already notice[PFV]-LF(SG.M) be-LF(SG.M)
zbiegowisk-o.
 gathering-ACC.SG
 “Podgórski had already noticed the gathering earlier.”

As for the Sorbian languages, the pluperfect is in use in the written standard (cf. Šewc-Schuster 1984: 171), but is largely obsolete in the colloquial language (Scholze 2008: 214).

3.6.4 Modern East Slavic

The modern East Slavic languages feature both the continuants of the old ‘super-compound’ pluperfect and some innovative formations. The former are manifested in two types of construction, one directly reflecting the old pluperfect with the agreeing *l*-form of the *be*-auxiliary, the other, a more specifically East Slavic development, containing a frozen neuter *l*-form of the auxiliary (Rus., Bel. *bylo*, Ukr. *bulo*). The pluperfect with an agreeing auxiliary is absent from Standard Russian and Southern Russian dialects, but is retained in Ukrainian and Belarusian as well as in the North Russian dialects. The functions of this construction include past anteriority (154) and annulled result (155); cf. Sičinava (2013: 296–313).

- (154) Belarusian: past anteriority (Sičinava 2013: 308)

Kator-yja ne pajš-l-i by-l-i z-za hod
 which-NOM.PL NEG go[PFV]-LF-PL be-PST-PL because.of age(GEN.PL)
sva-ix
 RPOSS-GEN.PL

na vajnu, sjadzeli sabje ũ svaim haradku.

“Those who had not gone to war because of their age, stayed in their small town.”

- (155) Ukrainian: annulled result (Sičinava 2013: 310)

C-i hroš-i vin pozyčy-v bu-v
 this-ACC.PL money-ACC.PL 3.NOM.SG.M borrow[PFV]-LF(SG.M) be-LF(SG.M)
u mene svojeji peršoji vizyty do mene.

“He had borrowed this money when he first visited me [uttered at the moment the loan is returned].”

Uses in past counterfactuals are also attested, cf. (156).

- (156) Ukrainian (Sičinava 2013: 311)

I j-omu=b=že lehše bu-l-o, jak-by todi
 and 3-DAT.SG.M=SBJV=PTCL easier be-LF-SG.N if-SBJV then
povez-l-o bu-l-o.
 succeed-LF-SG.N be-LF-SG.N

“It would have been easier for him (now), if he had been lucky then.”

In Standard Ukrainian this construction is still current, though not frequent, while in Belarusian it is mostly considered as a feature of archaic registers. Note that (154) illustrates standard Belarusian. Belarusian dialects in vicinity of Baltic use the *vši*-participle (instead of the *l*-participle); see below.

In the North Russian dialects (Arkhangelsk and Vologda regions), the pluperfect with the *l*-form of the auxiliary⁴³ has discontinuous past as the most prominent function (cf. Požarickaja 1991, 2014b; Sičinava 2013: 198–203), cf. (157):⁴⁴

- (157) North Russian dialects: discontinuous past
Skol'ko-to tože by-l on ved' side-l,
 how.much-INDF also be-LF(SG.M) he(NOM) PTCL sit[IPFV]-LF(SG.M)
a potom-to vsju žizn' predsedatelem rabotal (Past).
 “He had been [*lit.* had sat] in prison for some time, but afterwards he worked
 as a head of the kolhoz for the rest of his life.” (Sičinava 2013: 199)

In Standard Russian, the only direct reflex of the Old East Slavic pluperfect is the fossilized formula *žil-był (žila-była, žili-byli)* “once upon a time there was” [*lit.* “lived-was”], originally used as an introduction in traditional folktales, but nowadays also used in fiction and the press.

Another productive vestige of the old pluperfect in Standard Russian is the construction with the invariable particle *bylo* (be.PST.SG.N), whose functions only partly overlap with those of the pluperfect. The morphosyntax and peculiar semantics of this construction have been subject to many studies, see Barentsen (1986), Sičinava (2013: 204–295) and references therein. The main function of this construction is to signal “a disturbance of the natural flow of events” (Barentsen 1986: 52), i.e. either an attempted or imminent event that did not take place, as in (158), or an event that occurred but did not reach the desired result, as in (159). Note that the result not reached in (159) is not the ‘target state’ of the telic verb ‘take’ but rather the pragmatically natural consequences of the act of taking a glass, i.e. drinking out of it.

- Standard Russian (Sičinava 2013: 258)
- (158) *Pozaby-l by-l-o vam skaza-t'*
 forget[PFV]-LF(SG.M) be-PST-SG.N 2PL.DAT say[PFV]-INF
 “I almost forgot to tell you [about another quite remarkable fact.]”
- (159) *Vzja-l by-l-o rjumk-u, posmotre-l na*
 take[PFV]-LF(SG.M) be-PST-SG.N glass-ACC.SG look[PFV]-LF(SG.M) at
neě, postavi-l na mest-o.
 3.ACC.SG.F put[PFV]-LF(SG.M) at place-ACC.SG
 “He took the glass, looked at it, and put it back [without drinking].”

43. Importantly, there is no consensus among scholars as to whether this construction is a reflex of the Old East Slavic ‘supercomposed’ pluperfect, see e.g. Požarickaja (1991).

44. In the source the examples are rendered in standard Russian orthography, so the transliteration does not reflect the original phonology.

Similar constructions are attested in Ukrainian and, more marginally, in Belarusian as well, cf. examples (160–161):

- (160) Ukrainian (Sičinava 2013: 300)
Hercen, ščo poviry-v bu-l-o v social'n-u
 PN(NOM) that believe[PFV]-LF(SG.M) be-PST-SG.N in social-ACC.SG.F
respublik-u ...
 republic-ACC.SG
 “Herzen, who once came to believe in a social republic [later changed his opinion].”
- (161) Belarusian (Belarusian-Russian parallel corpus, RNC)
Haražnik-i by-l-o paduma-l-i, što paramah-l-i,
 garage.owner-NOM.PL be-PST-SG.N think[PFV]-LF-PL that win[PFV]-LF-PL
jak u pačatku leta ũsix vyklikali ũ padatkovuju ins'pekcyju, dze vypisali padatak
i štraf.
 “The garage owners thought that they had won, but when the summer began all of them were summoned to the fiscal office and had to pay taxes and fines.”

It remains unclear whether all three East Slavic languages have developed the construction with the invariable particle stemming from the neuter auxiliary in parallel, or whether its use in Belarusian and Ukrainian arose as a result of Russian influence. Some standard Belarusian grammars treat the construction as a calque from Russian and stigmatize its use (Sičinava 2013: 299).

Another pluperfect construction, attested in the North West Russian dialects and in the North Belarusian dialects, as well as in the Polish varieties in Lithuania and Belarus, is based on the invariable *vši*-participle. It is used more generally in the locally innovated perfect constructions (see §3.1). Thus, in these varieties, in contrast to standard East Slavic languages and standard Polish, the pluperfect, rather than being an isolated form, belongs to the whole paradigm of perfect constructions, similarly to Balkan Slavic and Baltic. The contact influence of the latter is evidently responsible for the sustainability of the perfect paradigm in these Slavic varieties. These pluperfect constructions are used in the past resultative (162), past anterior (163), and ‘discontinuous past’ (164) meanings.

- (162) North West Russian dialects (Trubinskij 1984: 161)
Ja fsta-fšy by-l-a, kak Pavel=to
 1SG.NOM get.up[PFV]-ANT.P be-PST-SG.F when PN=PTCL
prosnu-l-sja.
 wake.up[PFV]-PST(SG.M)-REFL
 “I had already got up when Pavel woke up.”

- (163) Belarusian dialects (Sičinava 2013: 303)
Kahda parczizan-y by-l-i atstupi-ušy na star-uju
 when guerrilla-NOM.PL be-PST-PL retreat[PFV]-ANT.P at old-ACC.SG.F
zon-u, n'emc-y dz'areŭn'-u vypal'i-l'-i.
 zone-ACC.SG German-NOM.PL village-ACC.SG burn.down-PST-PL
 “When the guerrillas had retreated to the previous zone, the Germans burned the village down.”
- (164) North West Russian dialects (Kuz'mina 1971: 165)
ët-i vs-e polj-a ranše zaros-šy
 this-NOM.PL all-NOM.PL field-NOM.PL earlier overgrow[PFV]-ANT.P
by-l-i les-om
 be-PST-PL forest-INS.SG
 “These fields used to be covered with forest before.”

3.6.5 Future perfect

Apart from Balkan Slavic and East Slavic in the proximity of Baltic or Finnic (Northwest-Russian dialects, northern Belarusian), there are hardly any future perfects in modern Slavic.

In Bulgarian, the future perfect formed by the periphrastic future of the BE-auxiliary and the standard *l*-form of the main verb employed in other tenses of the perfect, displays a range of uses closely resembling those attested in Lithuanian and Latvian, i.e. anterior in the future, (165), and inferential (166).

- Bulgarian (Maslov 1981: 260)
- (165) *Kogato nie pak sreštнем* (Present with future reading),
vie šte ste večē zabravi-l-i dori i
 2PL.NOM FUT be.PRS.1PL already forget[PFV]-LF-PL even and
ime-t-o mi.
 name(SG)-DEF-SG.N 1SG.DAT
 “When we meet next time, you will have forgotten even my name.”
- (166) *Deteto je jalo* (Perfect) *nešto zeleno.*
Ot nego šte mu je priloša-l-o.
 from it.OBL FUT 3SG.M.DAT be.PRS.3SG become.bad[PFV]-LF-SG.N
 “The child has eaten something unripe. It must have been the cause of his sickness.”

In Serbian-Croatian the so-called “second future” with the *budu*-form of the BE-auxiliary and the *l*-form of the lexical verb is only used in temporal and conditional clauses with reference to future events (Alexander 2006: 260–261); see (167).

- (167) Serbian-Croatian (Browne & Alt 2004: 40)
Kad (ako) bud-emo govori-l-i s Marij-om, sv-e
 when (if) be.FUT-1PL speak-LF-PL.M with Marija-INS.SG all-NOM.SG.N
će bi-ti jasn-o.
 FUT be-INF clear-NOM.SG.N
 “When (if) we speak with Marija [in the future], everything will be clear.”

In North West Russian dialects the perfect with the anterior participle in *-vši* is also attested with the future auxiliary (Kuz'mina 1971: 181); however, it is not clear from the presentation which meanings these constructions express. Example (168) is most probably interpreted as resultative in the future, while (169) might have an inferential interpretation.

- North West Russian dialects (Kuz'mina 1971: 181)
 (168) *umer-ši=to vs-e bud-em*
 die[PFV]-ANT.P=PTCL all-NOM.PL be.FUT-1PL
 “We will all be dead.”
 (169) *sejčas ony daleče bud-ut uexa-vši*
 now they.NOM far be.FUT-3PL drive.away[PFV]-ANT.P
 tentative translation: “They must have driven far away by now.”

The situation was different in ancient Slavic languages, which had a periphrastic form consisting of the *l*-form of the lexical verb with the *budu*-future of the BE-auxiliary (on Old East Slavic see Andersen 2006 and Pen'kova 2014, on Old Church Slavonic see Lépišsier 1960). According to the recent comprehensive study by Pen'kova (2016), this form had three basic uses: (i) anteriority in the future, i.e. the ‘classic’ future perfect, as in (170); (ii) succession or posteriority in the future, as in (171); and inference about past or generic events, as in (172).

- (170) Old Czech (Gospel, 14th cent., John 12:24, WLČ 1845: 1070; Pen'kova 2016: 478)
ač zrn-o žitn-é padn-a w zem-i
 if corn-NOM.SG wheat-NOM.SG.M fall-PRS.PA.NOM.SG.M in earth-LOC.SG
u-mr-l-o [ne]-bud-e, to sam-o
 PVB-die[PFV]-LF-SG.N NEG-be.FUT-3SG then alone-NOM.SG.N
ostan-e
 remain[PFV]-FUT.3SG
 “If a corn of wheat falling on the ground does not die [*lit.* will not have died], it will remain alone.”

(171) Old East Slavic

(*Life of Andrew of Constantinople*, 12th cent. 3636–3638; Pen’kova 2014: 166)

da bud-etъ imě-l-a soton-u

CONN be.FUT-3SG have-LF-SG.F Satan-ACC.SG

obi-vš-a=sja okolo sebe

wreathe-PST.PA-ACC.SG.M=REFL.ACC around REFL.GEN

“[The magician ordered her to gird herself under her clothes] so that she would have Satan wreathed around her.”

(172) Old East Slavic (*Tale of Akir the Wise*, 12th cent., 83; Pen’kova 2016: 481)

ubožestv-o prinudi-l-o=i bud-etъ

poverty-NOM.SG force-LF-SG.N=3.ACC.SG.M be.FUT-3SG

“[My son, if a poor man steals, pardon him, since it is not himself who did it:] poverty must have forced him.”

The last, purely modal, function of the future perfect, well attested in the eastern part of the Slavic area, was not known to Old Czech (Pen’kova 2016: 481). By contrast, the latter has developed this form into a pure future tense that was later ousted by the synonymous form with the infinitive, cf. (173).

(173) Old Czech

(*Spor duše s telem*, 14th cent., WLČ 1845, I, 369; Pen’kova 2016: 479)

má-š u-mřie-ti, i bud-eš pyka-l

have-PRS.2SG PVB-die[PFV]-INF and be.FUT-2SG suffer[IPFV]-LF(SG.M)

“You must die and will be suffering.”

Such an extension of the future perfect into the domain of plain future was attested across Slavic (including Old East Slavic; cf. Pen’kova 2016: 479). However, the construction has fallen into disuse in most parts of the Slavic area. The only modern Slavic language whose future tense forms continue the old Slavic future perfect is Slovene. A *budu*-future with the *l*-participle exists in Polish as well, but its direct descentance from the CS *futurum exactum* has been questioned for a variety of reasons (Whaley 2000; Błaszczak et al. 2014: 185–191). In Polish, only imperfective verbs allow for the periphrastic future with either the *l*-participle or the infinitive, while in Slovene the future with the *l*-participle is the only formation and is possible with verbs of either aspect. From Polish the imperfective future with the *l*-form has spread into eastern Slovak and western Ukrainian dialects (Pen’kova 2016: 479).

3.7 Summary on Slavic

We may summarize the main features of perfects in Slavic and of their development as follows.

In general, resultatives – as the first stage in the functional development of a perfect gram – demonstrate an astonishing stability, i.e., in the majority of cases, their propensity to become event-oriented perfects has been shown to be low over the period of many centuries. The big exception is the construction of BE+*l*-participle, which has performed an entire run through all stages from resultative (in CS) to general past (with narrative uses) in northern Slavic and Slovene. The general past stage was reached early, probably somewhere between the 12th and 14th centuries (see §3.5.1). Only in Balkan Slavic has the *l*-perfect been preserved, which can be regarded as largely reflecting a stage known from OCS. Instead, it has undergone an extension into indirect evidentiality.

Pluperfects and future perfects have survived as productive grams only in Balkan Slavic and those East Slavic dialects that have been exposed to Baltic and/or Finnic contact. In both these areas we notice transparent uses of the pluperfect as a resultative/anterior in the past, which is clearly sustained by the respective contact languages.

The experiential meaning has not developed out of resultatives in most Slavic varieties. The experiential meaning is tightly connected to imperfective aspect, while ‘current relevance’ is associated with perfective aspect, regardless of the absence/presence of a dedicated (non-resultative) perfect and of the relative complexity of the past tense system in the given variety. Interaction with the new stem-derivational aspect opposition (PFV: IPFV stems) requires that resultative perfects have been associated with perfective passive participles (of telic verb stems), so that imperfective participles have been continually ousted (particularly in standard Russian). Otherwise, imperfective passive participles either ‘copy’ the resultative default of their perfective counterparts, or they have been integrated into the aspect system to the extent that their distribution coincides with the aspect functions of finite verbs in the active voice; however, the latter has happened consistently only in standard Polish and Upper Sorbian.

HAVE-based constructions are particularly resistant to change. They are widespread all over West and South Slavic, but only in two areas have they moved somewhat in the direction of an actional perfect (independently of one another): (i) Macedonian (Ohrid region), (ii) in West Slavic, namely: (a) colloquial Czech, (b) Pomeranian Slavic. An area in which BE-based resultatives have shown signs of an actional perfect are (iii) Northwest-Russian dialects. In all three cases contact with non-Slavic languages appears to have played a role: Aromanian, possibly also Albanian and Greek for (i), German for (ii), Finnic and/or Baltic, depending on

the concrete location, for (iii). However, the mere fact of contact cannot explain everything, since even in high-contact situations resultatives happen to remain rather unaffected by contact (e.g., Molise Slavic, Resian; Sorbian).

South and West Slavic HAVE-based resultatives also provide excellent illustrations of the fact that structural features of grammaticalisation need not go hand in hand with changes in function and/or the lexical input (see §3.3, §3.5.4, §4.2).

4. Bringing the threads together

In a pan-Slavic perspective, the successive, possibly sometimes even parallel, development of perfects has been based on three different types of participles and on two different quasi-auxiliaries (BE vs. HAVE). This yields three different construction types on the basis of participles multiplied with the auxiliary opposition, thus a theoretical maximum of six types. Actually, all six types have been, or are still, attested, albeit to a very different extent in terms of age, continuity, areal spread and various arguable parameters of grammaticalisation (see §4.2). No Slavic variety has more than three types, the 'leaders' being Macedonian (BE+I, BE+n/t, HAVE+n/t), on the one hand, Pomeranian Slavic (Kashubian, extinct Slovincian) and some Czech varieties (BE+n/t, HAVE+n/t, HAVE+I), on the other. The same holds true for diathetic orientation: across Slavic, none of the six types is *prima facie* reliable indicator of subject- or object-orientation, but for each particular variety a fairly clear pattern obtains. Problems arise only if a particular type spreads at the expense of another (e.g. n/t-participles in those north Russian dialects which do not have *vši*-participles, and vice versa). In sum, the history and synchronic picture of perfects in Slavic is much more complicated than in Baltic because of multiple layering and intertwining of different resultative constructions which also showed different spread in the lexicon and sometimes developed into other perfect functions.

4.1 Main lines of diachronic development and patterns of areal spread

Baltic and Slavic share only one 'hard core' feature of perfects, which is the etymology of the *t*- and the **ues*-participles. As for the former, it is impossible to determine whether prior to documented stages, and if so at which period, Slavic or Baltic varieties used the *t*-participle (in Slavic in morphologically-determined variation with the *n*-participle) in any stabilized diathetic orientation. However, we can be rather sure that at the earliest documented stages of either group, (n/) *t*-participles still betrayed many traits of purely resultative participles focusing on the most affected participant. This brought about their complex interaction with voice-related constructions which, through the history of Baltic and Slavic, have

been interfering with diverse perfect constructions all over both groups. In Slavic, *l*-participles extended into objective resultatives only in some West Slavic varieties and much later (probably not before the 17th century); *vši*-participles in some Russian dialects did so even more recently (not earlier than in the 19th century). These ‘switches’ of diathetic orientation, in both BE- and HAVE-based constructions, do not have equivalents in Baltic, which differs markedly from Slavic perfects in the strictly complementary distribution of participles between subjective and objective resultatives. There is no reason to doubt that this state is ancient.

In addition, Baltic does not betray a plethora of HAVE-based resultatives comparable to West and South Slavic. Latvian lacks a HAVE-verb, while the meaning ‘have’ for Lith. *turėti* is recent (Latv. *turēt* has only the older meaning ‘hold’). The Lithuanian HAVE-based resultative, with low type and token frequency, reveals some typologically curious properties, which also make it a counterexample to otherwise valid implicational hierarchies holding between resultatives/perfects in a language (see §§2.2.6, 3.5.3). Thus, Baltic is conservative with regard to HAVE-based perfects (as it lacks them almost entirely), but this feature corresponds to a larger areal cline, as Finnic lacks a HAVE-verb as well, whereas the use of *imet’* ‘have’ in Russian (the north-eastern-most representative of Slavic) is fairly restricted and (as in Finnic) is dominated by the location-pattern in the expression of possession. In other respects, Baltic standard varieties are very different from standard varieties of their closest Slavic neighbours (Russian, Belarusian, Polish).

The picture differs drastically for Slavic dialects: East Slavic and Polish dialects in contact with Baltic varieties have accommodated to the latter, and not the other way around. This applies in almost all aspects: construction types, diathetic orientation of the participles, admissible lexical input, and the elaboration of the paradigm (including pluperfects and future perfects) as a whole. This might be indicative of Baltic substrates. Only the functional expansion into indirect evidentiality has not been followed by the Slavic dialects of the region (in contrast to Slavic on the Balkans). Concomitantly, convergence between East Slavic dialects and Baltic and Finnic brings about a huge difference between Slavic standard varieties and the dialects of that area; by contrast, as concerns perfects, Baltic varieties are much more homogeneous.

4.2 On grammaticalisation parameters

Regardless of the aforementioned differences between Baltic and Slavic perfects (and resultatives), they have in common an overall low degree of grammaticalisation. They do not correlate well with accepted structural parameters of grammaticalisation, and they show that these parameters need not reliably correlate with the functional development from resultatives to other kinds of perfects (or further into

a general past). Above we already commented on auxiliatio (see §§2.3.2, 3.5.2). We have also argued that the expansion of lexical input to participles (from telic to other verbs) is probably a more reliable and telling parameter than structural criteria (see §§2.3.1, 3.5.4). We need not repeat these arguments here, but briefly put the pertinent pieces together.

1. Phonological erosion (attrition):

It either does not occur, or proves irrelevant for functional development.

2. (Morphological) decategorisation (concomitant to other processes):

This parameter proves applicable to Slavic (but hardly to Baltic) resultatives/perfects, inasmuch as in some cases perfects involve participles which show loss of agreement features and/or have remained as isolated (fossilized) forms after their original paradigms decayed. The *vši*-participles are the result of both loss of agreement and paradigmatic isolation. Their productivity and functional development correlates with geographical closeness to Baltic. In turn, the indeclinable participle in the Macedonian HAVE-based perfect is, with all likelihood, a pattern-borrowing from Balkan Romance, its rise thus not conditioned by becoming a (non-resultative) perfect.

As for West Slavic, in cases when HAVE-based resultatives seem to lose agreement, and in the rare instances when they acquire subject-orientation (in Czech), they do not move into actional perfects, but remain resultatives. The same applies to HAVE-based constructions with the *l*-participle. In Slovincian the loss of agreement co-occurs with a shift toward an actional perfect (or even further into a general past), but this obviously was the side-effect of global polysemy copying from German compound tenses (and verb complexes in general); see §3.5.2.

3. Semantic bleaching:

This criterion is hardly applicable to BE-verbs. As for HAVE-verbs, Lith. *turėti* is hardly affected (see §2.2.6). In Slavic, the loss of semantic content of HAVE-verbs seems to correlate to a certain extent with the formation of auxiliary complexes (see §3.5.2 and further below). However, a more principled caveat is appropriate here: the regularly attested use of verbs denoting speech acts or other kinds of social interaction as the input of HAVE-based resultative perfects in their earliest attestations (see §3.3, §3.5.2, §3.5.4) casts doubt on the idea that so-called possessive perfects are primarily conditioned by a strong association with possession (cf. also Detges 2000 for Ibero-Romance).

4. Morphosyntactic integrity, syntagmatic variability, and syntactic scope:

Integrity is low, variability high, and scope has remained wide as evidenced by the omission of auxiliaries in coordination. In particular, the order BE/HAVE – participle (with or without intervening material) can be altered for reasons of information structure. Combinations of BE/HAVE and participle do not differ in

this respect from other multi-word expressions. Finally, nowhere do we observe the coalescence of the components of periphrastic constructions. In languages with stricter rules pertaining to clitics, as in South Slavic, *BE*, but not *HAVE*, is subject to essentially the same constraints as other clitics in the respective languages.

5. Paradigmatic variability:

In most varieties, participles with different suffixes and *BE* vs. *HAVE* cannot be substituted for one another without a change of grammatical meaning. In this respect, their distribution is often close to being complementary. Exceptions may be colloquial and Hanakian Czech, Slovincian and Kashubian (*n/t*- vs. *l*-participles with either *BE* or *HAVE*) and some Russian dialects (*n/t*- vs. *vši*-participles). In Macedonian, B-type and C-type perfects cannot be ‘mixed up’ since the *n/t*-participle is inflected in the former and indeclinable in the latter.

Therefore, paradigmatic variability tends towards zero. Among all Lehmann-like parameters, decategorisation and lack of paradigmatic variability appear to be the only reliable indicators of grammaticalisation for Baltic and Slavic perfects.

Now, recall that a reliable parameter indicative of a move from resultative to event-oriented perfect functions is an increase in the admissible lexical input, i.e. loosening of the constraint on telic verbs. This is arguably a parameter of grammaticalisation as well. The increase in admissible lexical input and the decrease in paradigmatic variability have in common that they are related to distributional processes operating on the inventory of lexical units; in this they differ from all other parameters. We may thus conclude that the grammaticalisation of perfects in Baltic and Slavic are best characterized in terms of distributional properties, not in terms of morphosyntactic properties visible at surface level.

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- LKŽe The Dictionary of the Lithuanian Language, electronic version, <http://www.lkz.lt>
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