

Degrees of Verbal Structure in Slavic Participles

Slavic participles have often been analyzed as adjectival categories derived via V→A recategorization (e.g. Alexiadou et al. 2014; Borik & Gehrke 2019; Embick 2004). We argue instead that Slavic participles instantiate graded degrees of verbal structure and the recategorization analyses cannot capture the observed gradience in verbal properties. We support this claim by examining three domains: (i) passive participles in stative *have*-perfect constructions, (ii) past participles in the grammaticalized *have*-perfect in Macedonian and Kashubian, and (iii) Polish impersonal *-no/-to* forms. These constructions reveal a systematic hierarchy of verbalization within the participial domain.

In Polish, passive participles occur in stative *have*-perfect constructions:

- (1) Mam już zapię-t-e pas-y.
have.PRS.1SG already fasten-PTCP-ACC.PL seatbelts-ACC.PL
'I have the seatbelts already fastened.'

The participle in (1) agrees with the internal argument, and the two form a complement of lexical *have*. Several diagnostics indicate reduced verbal structure. The participle does not assign accusative case and disallows adverbial modification (as in **mam wczoraj zapięte pasy*, 'I fastened the seatbelts yesterday'). The object and the participle stand in an agreement relation, and the construction expresses a resultative state rather than an eventive perfect. These properties distinguish the stative perfect from eventive perfect constructions and suggest limited verbal behavior.

A distinct configuration is found in the *have*-perfect in Macedonian and Kashubian. In both languages, the auxiliary *have* selects an invariant neuter participial form (see Graves 2000, Mišeska Tomić 2006 for Macedonian; Stone 2002 for Kashubian):

- (2) Imam kupe-n-o knjig-i-te.
have.PRS.1SG buy-PTCP-SGN book-PL-DEF
'I have bought the books.' (Macedonian)
- (3) Mój wojec mō ten čôłn zbudovǫ-n-é.
my father have.PRS.3SG this ship.ACC.SGM build-PTCP-SGN
'My father has built that ship' (Kashubian, Elliott 2001: 137)

The participles in (2) and (3) are identical to the passive participle, but they differ syntactically from the stative perfect participle described above. The Macedonian/Kashubian construction permits one-place predicates (*imam spieno*, 'I have slept' in Macedonian), and it allows adverbial modification (*imam često piono mleko*, 'I have often drunk milk' in Macedonian). In addition, no object-participle agreement is observed.

Polish impersonal participles in *-no/-to* represent a further configuration:

- (4) Napisa-n-o list-y.
write. PTCP-SGN letters-ACC.PL
'The letters were written.' / 'One used to write letters.'

The participle in (4) assigns accusative case to its internal argument and merges an implicit external argument. Such participles allow adverbial modification (*często pito mleko*, 'one often drank milk') and can be formed from modal verbs (*musiano to wykonać, bo zbliżał się termin*, 'someone had to do this because the deadline was approaching', Jabłońska 2007: 258).

The three constructions discussed above differ systematically with respect to core verbal diagnostics: accusative case assignment, projection of external arguments, aspectual flexibility, adverbial modification, agreement and auxiliary selection. These contrasts motivate a hierarchy of participial categories corresponding to increasing degrees of verbal structure: stative passive participles exhibit agreement with the object and do not assign case or merge an external argument. Grammaticalized *have*-perfect participles are eventive, assign accusative case to their object and merge an external

argument (which is identified with the subject of the construction). Impersonal *-no/-to* participles also assign accusative and are in addition fully compatible with adverbial and modal modification.

We propose that the degree of verbal structure correlates with the structural position occupied by the participle in the syntactic structure. First, the participle in the stative *have*-perfect realizes a defective *v* (as independently argued in D'Alessandro & Roberts 2008), which does not introduce an external argument and does not assign accusative case. It is embedded inside a ϕ P headed by a ϕ -probe with unvalued features. The internal argument agrees with the ϕ -head and values its ϕ -features. Because defective *v* does not assign accusative case, the ϕ P complement of lexical *have* requires case licensing, which is provided by *have*. A structure like the one in example (1) has the following (simplified) representation:

(5) [vP v *mam* [ϕ P [ϕ [u ϕ] [vP *zapięte* [VP V [NP *pasy*[ϕ]]]]]]]

In contrast, the participle in the Macedonian/Kashubian *have*-perfect realizes a non-defective *v*. The participle heads vP. Here, *v* introduces an external argument and assigns accusative case to its complement: no ϕ P is projected and no agreement is established with the object. The auxiliary “have” merges higher in the functional structure and does not assign θ -roles or accusative case to the internal argument. The grammaticalization of the *have*-perfect thus involves reanalysis from a stative small clause configuration to a fully verbal vP structure. The sentences in (2)-(3) can be represented as (6):

(6) [TP EA [T *imam* [vP EA-[v *kupeno* [VP V [DP *knigite*]]]]]]]

Polish *-no/-to* forms represent a further step. They occupy a higher position in the clause, which we identify with MoodP; they merge an implicit external argument and assign accusative case. Their behavior indicates that they instantiate a more articulated verbal structure than passive participles, despite their morphological invariance. The sentence in (4) has the following structure:

(7) [MoodP Mood *napisano* [vP {EA} [v [VP V [DP *listy*]]]]]]]

The data demonstrate that participles in Slavic are neither uniformly adjectival nor uniformly verbal. Instead, they instantiate graded degrees of verbal structure determined by their position in the extended projection and reflected in their syntactic behavior. In conclusion, morphological identity does not entail structural identity, as shown by the neuter participle in the Macedonian *have*-perfect, which is morphologically identical to the passive participle, yet structurally distinct. Moreover, the gradient approach assumed here reconciles morphology and syntax without invoking recategorization operations in narrow syntax and provides a more unified account of participial variation across Slavic.

References

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