Slavic "Quirky Subject" Constructions with *ē*-Statives: Origin and Development

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Abstract: This paper discusses the origin and development of constructions with \bar{e} -statives denoting sensation, emotion, perception, and cognition, which exhibit traces of non-nominative alignment in the history of Slavic languages. Patterns where the experiencer is encoded by the accusative or dative case were inherited from an earlier semantically aligned system, whose relics are found in other Indo-European languages as well. These structures have been subjected to various syntactic, morphological, and semantic changes in the history of Slavic, leading to the establishment of transitive constructions and thus the strengthening of syntactic alignment. The analysis shows that the pace of this process and the types of changes that \bar{e} -stative constructions underwent were determined by the level of the participant's volitivity and control.

1. Introduction¹

Constructions in Indo-European (IE) languages whose alignment differs from the canonical nominative alignment of late PIE have presented a great challenge for the past 150 years. As already pointed out by Delbrück (1900: 23–37), they fall into three categories: denoting (a) weather conditions, (b) experiences, and (c) modality. Although such structures vary, their common features are the following: (a) the verb is in the 3sG, and (b) the affected or experiencing person, if specified, is expressed by an oblique morphological case, most often accusative or dative. Being aberrant from the canonical structures with nominative subjects, these constructions instigated a fruitful discussion on subject types ("logical", "psychological", "grammatical") already in the epoch of *Junggrammatiker* (Graffi 2001: 73–109). The authors, who considered the subject to be strictly a grammatical category, called these structures "subjectless" (Miklosich 1883).

¹ The glosses adhere to the Leipzig Glossing Rules, with the additional abbreviations AOR 'aorist'; CONJ 'conjunction'; IMPF 'imperfect'; PART 'particle'. Another abbreviation used in this paper is OCS 'Old Church Slavonic'.

Further investigations, which included genetically unrelated languages, led to the question of whether the subject is a universal category present in the grammar of every natural language, as, for example, proposed by Keenan in 1976. However, a year later Foley and van Valin (1977) stated that "subject is not a valid theoretical construct (universal) in linguistic theory", and that the idea of the subject-predicate dichotomy as elemental was brought to us through traditional logic and grammatical traditions since the Greeks. They based their claims on the analysis of three languages typologically different from IE systems. Especially interesting in this respect was Lakhota, an active-stative language, which they claim does not appear to have any clauselevel referential structure, being a semantic-role dominated language. This is in accordance with a proposition given earlier by Klimov (1983: 106-07) in the framework of his contentive typology. He states that the nominative language type is characterized by a specific sentence type, determined by a transitivity feature, where, on the morphological level, the nominative and the accusative case have a clear "subject and object orientation" (see also Klimov 1972). Following Klimov, Gamkrelidze and Ivanov (1995: 271-76) argued that transitivity is the semantic basis both for nominative ("accusative") and ergative languages, while the active-stative ones do not have this feature at all. Similarly, Desnickaja (1951: 143) stated that "transitivity and intransitivity in their mutual opposition are historical categories, and their role and significance in a lexical-semantic system as well as in the grammatical system of a given language may not be viewed as primarily given or stable". Within a different theoretical framework, Hale (1983: 25) stated that there are languages in which lexical structure is configured differently from phrase structure. Recently we also encounter the term "semantic alignment", describing "the phenomenon whereby basic alignment property of a language can best be described by appealing to semantic factors, rather than syntactic ones" (Donohue 2008: 24). What is common in all these explanations is that there are languages that have only semantic valency.²

The first one to observe such a typological profile of early Proto-Indo-European (PIE) was Meillet (1908: 321–30). He argued that PIE was a system with autonomous sentence elements, where a word was self-sufficient to indicate its role in the discourse, with no "governing" of one word by another. Morphological cases were used depending on the intended meaning, expressing semantic roles, and there was no verb valency.³ The basic principles of syntactic structuring were apposition and agreement, connecting semantically

² While *syntactic valency* refers to a number of arguments in a clause, *semantic valency* of a verb refers to "the number of the semantic roles associated with it" (van Valin 2003: 92). Cf. Payne 2007: 169–70.

³ For the function of the nominative case, Meillet (1908: 308) used the term "subject", but for him it was a *topic*: "Le nominatif indique de quoi il est question dans la phrase,

related elements. Subsequently, a number of linguists elaborated the idea that PIE was a non-nominative, semantically aligned language, and that syntactic changes of PIE and its daughter languages are the result of typological transformation leading to the creation of syntactic alignment, caused by the rise of transitivity (see Burridge 1993; Gamkrelidze and Ivanov 1995; Krys'ko 1997; Bauer 2000; Lehmann 2002; Hewson and Bubenik 2006; Grković-Major 2007, 2010a; Barðdal and Eythórsson 2009; Luraghi 2010a; Pooth et al. 2019).

In the older stages of IE languages, we see a number of "syntactic archaisms" revealing this earlier typological profile: the so-called "absolute" verbs with no transitivity feature (Desnickaja 1984: 148) and only semantic valency, impersonal and absolute constructions (Bauer 2000), free word order, discontinuous constituents, null anaphora (Ponti and Luraghi 2018), etc. These syntactic archaisms are abundantly represented in the old Slavic languages as well (Grković-Major 2007, 2010a, 2011, 2012; Pavlović 2011). In the course of time, some of them disappeared, being replaced by new structures; some were reanalyzed; and some took up a marginal place in the system. However, some "syntactic residues" survived, and being non-canonical, formally marked structures, they became both semantically and functionally marked (cf. Havránek 1958: 79–80).

Among such syntactic archaisms in the Slavic languages are structures wherein the first participant is encoded by an oblique case. Their typology in contemporary systems is well described (Mrazek 1990). In this paper, we will focus on the origin and development of Proto-Slavic constructions with experiential \bar{e} -statives (infinitives in - $\check{e}ti$).

2. IE Constructions with Accusative and Dative Experiencers

Constructions with impersonal verbs and accusative or dative experiencers are well known from various IE languages (e.g., Bauer 2000: 93–145; Barðdal and Eythórsson 2009; Grković-Major 2012; Matasović 2013). This is a restricted set of verbs, mostly denoting unpleasant, negative experiences, both physical and emotional, such as Hittite *istarak-, irmaliya-, armaniya-* 'be(come) ill', *arsana, arsaniya-* 'envy', *kistanziya-* 'be hungry', etc. (Luraghi 2010b); Latin *paenitet*_{3SG} 'regret', *miseret*_{3SG} 'be sorry', *piget*_{3SG} 'bother', etc. (Piccini 2008); and Old English *grisan* 'fear', *hreowsian* 'trauern' ['mourn'], *yfelian* 'suffer', *tweogan* 'doubt' (Pishwa 1999), etc. We will illustrate them with well-known examples from Latin:

le 'sujet' ". Much later, Lehmann (1976) argued that early PIE was a topic-prominent language.

- (1) a. me pudet I_{ACC} be.ashamed_{3SG.PRS} 'I am ashamed'
 - b. mihi dolet I_{DAT} be.in.pain_{3SG.PRS} 'I ache'

While the encoding of the experiencer may vary, the common feature is a verb in the 3sg. As noted by Benveniste (1966: 227-36), 3rd person, as opposed to 1st and 2nd, is not a "person". This is reflected in the fact that the form of the PIE 3sg -*m* conjugation differs from the 1sg and 2sg, which have endings of pronominal provenance. The original status of the 3sg can be clearly seen in meteorological verbs with null valency⁴ (Delbrück 1900: 23–24), probably belonging to the oldest chronological layer of impersonals (cf. Savčenko 1974: 333). They refer to the existence of natural phenomena, which, as Wackernagel (2009: 154) stated, "could be represented in this simple form without any thought of a subject". He also points to the "strange" archaic use of the "indefinite" 3sg in early Latin legal phraseology, e.g., *si in ius uocat* 'if (one man) calls (another) to court', in the "Laws of the Twelve Tables" (5th c. BC) and the analogous Greek examples, claiming that "the agreement must be based on common inheritance, and this linguistic feature must be something very ancient" (Wackernagel 2009: 149-51). This brings us to the conclusion that 3sg initially just denoted a process.

The accusative experiencer seems to be older than the dative one (Delbrück 1900: 33). The morphological reconstruction of PIE cases, first given by Popov in 1879–81 (Popov 2012; see Krys'ko 1990, Danylenko 2016),⁵ speaks in favor of this assumption; a form called "proto-accusative", which subsequently gave the accusative case, was the first general oblique "case" in early PIE. A semantically diffuse form, expressing all kinds of circumstances under which an action or state took place, it generally meant "in reference to *x*". Its residues in the form of *accusativus relationis* are present in many old IE languages (Ernout and Thomas 1953; Whitney 2004; Fraenkel 1928; Krys'ko 1997; Grković-Major 2007, 2010b). Ernout and Thomas (1953: 19) considered it to be an appositive "autonomous determination" not governed by the verb. See, for example, (2):

⁴ Even Paul (1970: 131), who insisted that every IE sentence must have a subject and a predicate, admits that such sentences are truly subjectless. For more details about the origin of IE constructions with "meteorological verbs", see Grković-Major 2013.

⁵ Popov's reconstruction of IE morphological cases was later accepted and developed by Gamkrelidze and Ivanov (1995: 233–52) within the active-stative typology of early PIE.

 (2) timeo Danaos fear_{1SG.PRS} Greeks_{ACC}
'I fear *in reference to* Greeks' > 'I fear Greeks'

Accordingly, impersonal constructions with the accusative experiencer may be interpreted as follows:

(3) me pudet (Latin)
I_{ACC} be.ashamed_{3SG.PRS}
'in reference to me there is shaming' > 'I am ashamed'

With the rise of the dative case in PIE, originally restricted to the category [+animate] or personified notions (Kuryłowicz 1964: 191, 196), the dative, as the "recipient case", started entering constructions with experiencer verbs. Its competition with the older accusative is seen in the daughter languages (1).

These patterns were subjected to various changes in Indo-European languages. They could be replaced by nominative alignment constructions in different ways and at a different pace, even within the same subgroup of languages. The history of the Romance languages shows that the majority of impersonal emotion verbs shifted to a personal conjugation (Bauer 2000: 129). Old English had approximately 40 impersonal verbs, some of them having both dative and accusative experiencers, e.g., *maetan* 'dream' (Bauer 2000: 132), but in the Middle English period they were being replaced by agent-like experiencers (Pishwa 1999: 132). On the other hand, the process has been slower in German, which offers, according to von Seefranz-Montag (1981: 536), "a slow motion picture of syntactic change in progress", with a tendency to replace them with dummy subject constructions.

3. Slavic Constructions with *ē*-Statives

Proto-Slavic (PS) had a number of \bar{e} -statives denoting physical, emotional, and mental states.⁶ Their infinitives (- $\check{e}ti$) are built with the PIE suffix * \bar{e} (<*eH1) (see Yakubovich 2014), which was used in Balto-Slavic to form intransitive aorists (Meillet 1934: 244).⁷ In the development of the IE verbal systems, the same suffix was used to form different categories expressing a state or a "situ-

(Latin)

⁶ On verbs in *-ěti,* see Vaillant 1966: 377–405.

⁷ The present tense of the primary statives was in $e^i/i > i$ (*mbněti_{INF}, mbniši_{2SG,PRS} 'think'), while the present tense of denominals was in (ě)je (*cělěti_{INF}, cělěješi_{2SG,PRS} 'heal'). Some of them have "anomalous" presents, such as *xotěti_{INF}, xošteši_{2SG,PRS} 'want, wish', where the old form is preserved only in the 3PL xotęt_b, while the rest of the present paradigm represents the old optative (Vaillant 1966: 403).

ation" (Beekes 1995: 230). According to Ivanov (1981: 221), PS \bar{e} -statives present a transformation of the inactive series of PIE verbs with "centripetal" semantics".⁸ In comparison to the *-mĭ* paradigm, this series was originally "defective", having only the 3sc. In other words, it was "structurally impersonal, without paradigmatic oppositions for person" (Gamkrelidze and Ivanov 1995: 257).

PS monovalent verbs denoting physical states (*stojati* 'stand', *běžati* 'run away', *sěděti* 'sit', *ležati* 'lie', etc.) became intransitives already in OCS (4a). Semantically bivalent statives (**dbržati* 'hold', *vbrtěti* 'turn around', etc.) developed syntactically transitive constructions, with nominative subjects and accusative objects (4b):

(4)	a.		coěste cand _{3DU.AO}	nodzě _R feet _{NOM.DI}	0	ego he _{GEN.SG}	
		'where his feet stoo drъžaaxo hold.back _{3PL.IMPF}		1		(OCS; <i>PsSin</i> 131.7)	
	b.			i he _{ACC}			
		'they held	him back'			(OCS; Mar Lk 4:42)	

On the other hand, statives denoting sensations, emotions, perception, and cognition do not always exhibit nominative alignment and have kept the accusative or dative experiencers throughout the history of Slavic.

3.1. Sensation and Emotion Verbs

Sensation and emotion verbs are analyzed together since the division between physical and emotional states is historically fuzzy. Emotion designations are the result of metaphorical and metonymical changes of words denoting concrete states, actions, and activities causing emotions or caused by emotions.⁹ Some \bar{e} -statives had undergone semantic shifts by the time of the first written records (e.g., OCS *skwrběti* 'be sad, worry, hurt' < 'be sharp, cut'; Petleva 1988–90: 52), but some of them were still polysemous, meaning both sensation and emotion (e.g., OCS *bolěti* 'be in pain physically, be in pain emotionally').

Verbs denoting negative sensations or emotions marked [-volitive] and [-control], such as PS *bolěti 'be in pain, be sick, hurt' or *svbrběti 'itch' (see

⁸ The PIE "semantically centripetal subject-version forms naturally became the means for marking intransitive semantics" (Gamkrelidze and Ivanov 1995: 292).

⁹ The first study dealing with the semantic sources of the words for emotions in (some) Indo-European languages was Kurath 1921, followed by Buck's 1949 comprehensive "dictionary of ideas".

Miklosich 1868–74: 353), have the construction corresponding to Latin *pudet me*:¹⁰

(5) a. srbi me (Slovenian) $itch_{3SG,PRS}$ I_{ACC} 'it itches me' b. boli me (Serbian) $hurt_{3SG,PRS}$ I_{ACC}

'it hurts me' / 'I am sick'¹¹

A body part affected by a negative sensation is expressed by the nominative case in all three branches of Slavic:

(6)	a.	zělo very.much	,	glava head _{NOM}		S
		'I have a stre				(Old Russian; SRJa 1: 281)
	b.	bolĭ hurt _{3SG.PRS}	,	zzyrdo ACC heart _N		
		'her heart h	urts/ad	ches'		(Old Czech; VW)
	c.	kada čoik when man		boli hurt _{3SG.PRS}	glava head _{NON}	Л
		'when a ma	n has a	a headache'		(Old Serbian; L)

We also find the dative experiencer:

(i) stidb nasb jestb shame_{NOM.SG} we_{ACC} exist_{3SG.PRS} 'we are ashamed'

(PP: 581, 1422)

The same kind of impersonal structure is found also in Old Czech, for instance, *mě jest túha* 'I am longing/I am sad'; *mě bude hněv* 'I will be angry'; *hrozno mě jest* 'I am terrified', etc. (Gebauer 2007: 316).

¹¹ Found in the 19th century and in some contemporary dialects. In the *RJA* (1: 537), such sentences are explained as subjectless, with the following specification: "it is not said what causes pain, but that there is pain".

¹⁰ Such verbs are rarely attested in old Slavic texts (not once in OCS), but this is understandable in view of the type and genre of the documents. For example, the majority of Old Serbian medieval documents are juridical texts, which do not permit expressions of sensations and emotions. The accusative experiencer is thus very rare, attested, for instance, in letters, in another type of experiential construction expressing the same semantics:

186	Jasmina Grković-Major						
(7)	a.		serce heart _{NOM}				
		'if a man's heart hurts'	(Old Russian; SK)				
	b.	hlava mu boli head _{NOM} he _{DAT} hurt _{3SG.PRS}					
		'he has a headache'	(Old Czech; Gebauer 2007: 386)				
	c.	ili ti e zabolěla or you _{DAT} Aux begin.to.hu 'or you got a headache'	glava rt _{3SG.PTCP.PRF} head _{NOM} (Old Serbian; PTP 71a)				

Taking into account comparative IE data, we might presume that the affected body part was originally expressed by accusativus relationis (see Desnickaja 1984: 89–199).¹² The replacement of the accusative (8a) by the nominative (8b) is seen in the history of Lithuanian:

(8)	a.		visą all _{ACC}		
		'I am aching all o		over'	(older Lithuanian; Piccini 2008: 445)
	b.	_	viskas all _{NOM}	skauda hurts	
	'I am aching all over'			over'	(Lithuanian; Piccini 2008: 445)

In some contemporary Slavic languages, such constructions are still impersonal, with no agreement between the nominative and the verb:

(9) boljalo zăb (Bulgarian) go hurt_{PTCP.PRF.N} he_{ACC} tooth_{NOM.M} 'he apparently had a toothache'

In others it has further developed into a structure where the nominative controls the agreement:

(10) bolela me je glava (Serbian) hurt_{PTCP.PRF.F} I_{ACC} AUX head_{NOM.F} 'I had a headache'

 $^{^{12}\,}$ Its trace in Slavic impersonal constructions is Russian mne golovu bol'no, while in personal constructions it was replaced by the instrumental case (see Gadolina 1958: 209-12).

Although it has a formal nominative subject (*glava*) and an accusative object (*me*), this is a pseudo-transitive, "quirky" construction, since the nominative denotes a stimulus, the accusative the experiencer, and the predicate (*boleti*) is intransitive.¹³

Eventually within the scheme of nominative alignment, the meaning of the predicate was reinterpreted as 'cause pain/restlessness' (see *RSANU* 2: 49; *SSKJ*). This change was supported by the fact that statives in *-ěti* shared the present *-i-* stem with the productive class of factitives in *-iti*, such as PS *gubiti 'kill', *staviti 'put', and *umoriti 'kill'.¹⁴ The reinterpretation of sensation predicates as causatives led to the introduction of verbs that originally signified actions causing unpleasant sensations. The experiencer became an object, with no specification of a subject:

(11)	a.	menja znobi I _{ACC} shive 'I shiver'	(Russian)
	b.	bode pierce _{3SG.PRS} 'it is piercing 1	(Slovenian)
	c.	guši choke _{3SG.PRS} 'it is choking 1	(Serbian)

Since emotions, unlike sensations, imply evaluation as a conscious mental activity, their experiencer has a certain degree of control, depending on the type of emotion and level of the volitivity feature. This semantic class of verbs gradually developed nominative subjects.

Negative emotion verbs with low or no volitivity and control features, such as **bojati sę 'be afraid' and *styděti sę 'be ashamed'*, were transformed

¹³ Sentences such as Serbian **Petar*_{NOM} *boli*_{3SG} *Jovana*_{ACC}, with the intended meaning that Petar causes Jovan pain, are not acceptable at all. The construction was gradually generalized by including other nouns denoting stimuli: $Petra_{ACC}$ *boli*_{3SG} *istina*_{ACC} 'Petar is hurt by the truth'. See Grković-Major 2012.

¹⁴ Although their present tense originally differed in accentuation, the two paradigms eventually were unified (Vaillant 1966: 437–38).

¹⁵ For more examples, see Mrazek 1990: 95–96. The affected body part can be specified with different prepositional phrases, which is a language-specific feature (Běličová and Uhlířova 1996: 57).

into reflexives expressing "middle", "centripetal" semantics already in PS.¹⁶ In this way, they developed "internal transitivity", with the accusative (object) **s* φ being coreferential with the subject:

(12)	azъ	esmь	ne	boite	sę	
	Ι	am	NEG	be.afraid _{2SG.IMP}	REFL	
	'it is me, do not be afraid'					(OCS; Mar Mt 14:27)

Negative emotion verbs exhibiting volitivity and control became intransitives. In the following example, OCS *trvpěti* 'suffer' expresses not only that a subject will suffer but that he is willing to do so. This further caused its semantic shift into 'endure':

(13)	trъpljǫ	do	kon'ca	
	suffer/endure _{1SG.PRS}	until	end	
	'I will (suffer >) endure	e until (the end'	(OCS; SS: 705)

A difference between a negative sensation and a negative emotion can be seen in the polysemous verb *bolěti*. If it meant 'be in pain, hurt physically', the experiencer was, as shown earlier, patient-like, but if it meant 'be in pain, hurt emotionally', it had an agent-like experiencer:¹⁷

(14)	dětištь	plačetъ	i	mati	bolitъ
	child	cries	and	mother _{NOM}	hurt _{3SG.PRS}
	'the chi	ld is cryin	ig and	the mother is	hurting (in emotional pain)' (OCS; <i>Supr</i> 312.8–9)

Changes in the constructions with negative emotion verbs were gradual and depended on their semantics. For example, PS **mbrzěti* 'be loathsome, repellent' is found in OCS only in the 3rd person with the dative experiencer:

(15)	vesъ	denъ	slovesa	moě	mrъzěaxǫ	imъ
	all	day	words	my	be.loathsome _{3PL.IMPF}	they _{DAT}
	ʻmy v	vords w	(OCS; <i>PsSin</i> 55.6)			

¹⁶ Reflexive verbs developed in IE languages lacking middle voice as a grammatical category (Večerka 1993: 130). Both categories express the same "centripetal" semantics. Cf. Shenker 1988.

188

¹⁷ This is in accordance with Seržant's (2013: 305) conclusions that "there is a change in meaning concomitantly with the change from the original oblique case-marking into the nominative one".

Old Slavic languages had not only the dative but also the accusative experiencer (see Dal' 1881: 326; *VW*; *StStp*: 233; *RJA* 7: 100–01), which points to the common PS origin of such patterns. They have been subjected to various language-specific changes, both syntactic and semantic. In the history of Serbian and Croatian, the original meaning 'be loathsome, repellent' is preserved with the non-nominative experiencers:

(16) a. taj te dar sad mrzi this_{NOM} you_{ACC} gift_{NOM} now be.loathsome_{3SG.PRS} 'that gift is loathsome to you' > 'you do not like that gift' (older Serbian and Croatian; *RJA* 7: 100–01)¹⁸ b. Bogu to mnogo mrzi God_{DAT} this_{NOM} very.much be.loathsome_{3SG.PRS}

'that is loathsome to God' > 'God does not like it'

(older Serbian and Croatian; RJA 7: 100-01)¹⁹

The dative pattern was lost, while the accusative one is kept with the infinitive or the *da*-clause complement in contemporary Serbian and Croatian,²⁰ denoting a feeling of not wanting to do something. Its preservation was probably supported by the generalization of the type (11):

(17) a. mrzi me pisati loše kritike (Croatian) be.loathsome_{3SG.PRS} I_{ACC} write_{INF} bad reviews_{ACC} 'I do not feel like writing bad reviews' b. mrzi me da učim (Serbian) be.loathsome_{3SG.PRS} I_{ACC} COMP study_{1SG.PRS}

'I do not feel like studying'

On the other hand, the verb also developed a transitive construction, accompanied by its semantic change into 'hate':

(18) mrzim da učim (Serbian) hate_{1SG.PRS} COMP study_{1SG.PRS} 'I hate to study.'

¹⁸ The example is from the works of M. Nelješković, a 16th-century writer from Dubrovnik (see *RJA* 6: 947).

¹⁹ The example is from a Croatian Glagolitic book, *Korizmenjak* (1508) (see *RJA* 6: 943).

²⁰ They are present today in both standards, although in different ratio (see the Serbian web corpus, http://nlp.ffzg.hr/resources/corpora/srwac/, and Croatian web corpus, http://nlp.ffzg.hr/resources/corpora/hrwac/).

Positive emotion statives are found in two kinds of constructions from the earliest records. When meaning 'want', which presumes volitivity and control,²¹ PS **hotěti/hvtěti* 'want, wish' gradually developed transitive syntax with agent-like experiencers. However, the traces of semantic alignment are still found in the history of the Slavic languages; a patient is (rarely) attested in the genitive, mostly with abstract nouns (see *SDrJa* 3: 1381; *RJA* 3: 663–64), but often with the dative, which was dominant in OCS:

(19)	a.	emuže ašte xošteši damь ti what _{DAT.SG} ракт want _{2SG.PRS} give _{1SG.PRS} you _{DAT}
		'whatever you want I will give to you' (OCS; Mar Mr 6:22)
	b.	zlěmь dinarem ne htě grьci bad dinars _{DAT} neg want _{3PL.PRS} Greeks
		'the Greeks do not want bad dinars' (Old Serbian; PP: 43)
	c.	ne tolma xotja pobědě _{NEG} only want _{PTCP.NOM.SG} victory _{DAT}
		'not only wanting victory' (Old Russian; Pravdin 1956: 72)
	d.	jakému chceš, panno, muži which _{DAT.SG} want _{2SG.PRS} maiden _{VOC} husband _{DAT.SG}
		'which husband do you want, maiden?'
		(Old Czech; Gebauer 2007: 378)

On the other hand, the semantics of 'wish' (volitivity and no control) was expressed by the reflexive 3sg and a dative experiencer. The reflexive marks the "centripetal" predicate force, compatible with the recipient status of the experiencer. We find this type of construction already in OCS, but also in the old Slavic languages:

(20) a. poslušati sę jemu xoštetь zapovedii obey_{INF} REFL he_{DAT} wish_{3SG.PRS} commandments_{GEN.PL} n<e>b<e>sьпухь divine
'he wishes to obey the heavenly commandments'

(OCS; SSJa 4: 785)²²

²¹ Wanting, as a simple intentional state (*MIT*: 132), implies a degree of control of the first participant, insofar as intentions presume cognitive processes.

²² This example is from a 13th-century Russian Church Slavonic text whose archetype was translated from Latin in Bohemia. The angle brackets in the example indicate letters that are omitted in the original manuscript.

(20)	b.	němaju oprava kako b-i-ть se htělo
		not.have _{3PL.PRS} things CONJ AUX-they _{DAT} REFL wish _{PTCP.PRF}
		'they do not have as many things as they wish'
		(Old Serbian; PP 286)
	c.	mne s nim rostatisja ne xočetsja
		I_{DAT} with him part _{INF.REFL} NEG wish _{3SG.PRS.REFL}
		'I do not wish to part with him'
		(Old Russian; Borkovskij 1968: 139)
	d.	zachtělo se mi masa
		$wish_{PTCP,PRF}$ Refl I_{DAT} meat _{GEN,SG}
		'I wished for meat' (Old Czech; Gebauer 2007: 13)

As the transitive agent-like type was grammaticalized, the "quirky" reflexive pattern was reinterpreted into '*x* feels like' and extended to incorporate other verb classes in all three branches of Slavic (Borkovskij 1968: 137–43; Georgieva 1969: 74–75; Grković-Major 2004: 198). Today this modal construction is productive in South and East Slavic (Běličová and Uhlířová 1996: 60), denoting a recipient-like experiencer situation. Ivić (1973: 86) distinguishes two basic types—the first one marked [+volitive] (21a), the second [–volitive] (21b)—while Mitkovska (2019: 283) thoroughy analyzes a continuum of the "various modal nuances from necessity and urge through need, craving, desire, inclination to determination" in South Slavic:

(21)	a.	ide	mi	se	u	bioskop
		go _{3SG.PRS}	I_{DAT}	REFL	in	movies
		ʻI feel like g	going to	o the m	ovie	es' (Serbo-Croatian; Ivić 1973: 86)
	b.	kija	m	i se	2	
		sneeze _{3SG.P}	P_{RS} I_D	AT RI	EFL	
		'I have an urge to sneeze'				(Serbo-Croatian; Ivić 1973: 86)

3.2. Perception and Cognition Verbs

Perception and cognition verbs are analyzed together because they historically constitute a continuum: physical perception evolves into "mental perception" ('see' > 'know', 'listen' > 'obey').²³

²³ Due to the general closeness of these two domains, Talmy (2003: 139) postulates a cognitive domain of "ception, which encompasses the traditional notions of 'perception' and 'conception'".

These predicates are found in two types of constructions, which mark different degrees of their experiencer's volitivity and control. On the one hand, they gradually developed transitive syntax with agent-like experiencers. But still in the oldest records we see traces of semantic alignment. In OCS, as well as in the early Slavic languages, there is a competition in formalizing the second participant, which could be expressed by different cases. For example, with *slyšati* 'listen' it could be denoted by genitive (source), dative (goal), oreven by *accusativus relationis* (22); and with *mbněti* 'think', by the double accusative²⁴ (23):

 (22) ioanъ že slyšavъ vъ ozilišti děla °xva John ракт hear_{PTCP.PST} in prison deeds_{ACC} Christ's
'when John heard in prison about the deeds of the Christ' (OCS; Mar Mt 11:2)

(23)	vy	bo	běsъni	sǫšte	ny	
	you _{NOM}	PART	insane _{NOM.PL}	be _{PTCP.PRS.NOM.PL}	we _{ACC}	
	cělomodrъnyę		běšeny	mьnite		
	wise _{ACC.PL}		insane _{ACC.PL}	think _{2PL.PRS}		
	'you, being insane, think that we, who are wise, are insane'					
					(OCS; <i>Supr</i> 116.6)	

At the same time, the process of establishing transitive syntax with the accusative object (24) or complement clause (25) was underway:

(24)			slyšali listen _{PTCP.PRF}		slovo word _{ACC.SG}	°bžie God's	
	'in order to listen to God's word'					(OCS; <i>Mar</i> Lk 5:1)
(25)	NEG	think		COMP	pridъ come _{1SG.AOR} me to abolish t	$abolish_{\mathit{INF}}$	zakona law _{GEN.SG}

(OCS; Mar Mt 5:17)

The second type of construction found in the old Slavic languages denotes lower control of the first participant. It consists of a reflexive 3sg and a dative

²⁴ The double accusative with perception, cognition, and communicative verbs is a syntactic archaism, replaced by complement clauses in the history of Indo-European languages (Ambrazas 1990: 148–49).

experiencer. Among perception verbs it is found only with the non-volitive *viděti* 'see',²⁵ when a person is not sure what s/he perceives:

(26)	a.	mně sja vidit I _{DAT} refl see _{3SG.PRS}
		'it seems to me' (Old Ukrainian; Borkovskij 1968: 141)
	b.	vidí mi se $see_{3SG.PRS}$ I _{DAT} REFL (211.C. 1.1(
		'it seems to me' (Old Czech; Kosek 2012: 10)
	C.	ako vi se vidi
		if you _{DAT} refl see _{3SG.PRS}
		'if it seems to you' (Old Serbian; PP 800)

The identical pattern, with the same semantics, is found with mbněti in OCS and Old West and South Slavic:²⁶

(27)	a.	čъto ti what you _{DAT}				S		
		'how does it seem to you?'			(OCS; Mar Mt 17:25)			
	b.	mnyeffe think _{3SG.IMPF}			bych _{AUX}		PTCP.PRF	na břězě on shore
		'it seemed to me that I stood on the			l on the	shore' (Old Czech; VW)		
	C.	mněše think _{3SG.IMPF}				,	Ancilešь Achilles	,
'it seemed to him that Achilles was killed' (Old Serbia					bian; T: 58–59)			

This type of construction with perception and cognition \bar{e} -statives is today almost completely lost and is found only in some dialects (*BER* 4: 191).

²⁵ The group of visual (as well as auditory) perception verbs exhibits the opposition [-volitive] : [+volitive], e.g., OCS viděti 'see' : zbrěti, ględati, sbmotriti, all 'watch'—i.e., active vs. inactive perception (cf. Verhoeven 2007: 50).

²⁶ This pattern also existed in Old East Slavic but belonged to the higher registers (Borkovskij 1968: 138), which is indicative of its Church Slavonic origin.

4. Conclusions

The syntactic development of PIE and its daughter languages testifies to the gradual establishment of syntactic alignment caused by the rise of transitivity. This is reflected in the changes of PS constructions with \bar{e} -statives denoting negative sensations, emotions, perception, and cognition. The pace of this process and the types of changes the \bar{e} -stative constructions were subjected to were determined by the level of the participant's volitivity and control.

Statives denoting negative bodily sensations, characterized by the features [-volitive] and [-control], exhibit traces of semantic alignment in the history of Slavic: their participant was encoded by the accusative or dative. The accusative pattern was eventually reinterpreted and generalized by including causatives, and being aberrant from the dominant alignment, it became a marked structure, denoting the aberrant status of the participant: a patient-like experiencer. The fact that semantic markedness corresponds to syntactic markedness points to a kind of isomorphism between the two linguistic levels.

Since emotions always include evaluations, experiencers of emotion statives have a certain degree of volitivity and control. However, they evolved differently depending on the level of that degree. If denoting "centripetal" non-volitive negative states, they gave reflexives, becoming "internally transitive" already in PS. In this way, they formalized the double "middle" nature of their agent- and patient-like experiencer. Verbs marked [+volitive] evolved into intransitives with agent-like experiencers from the earliest records. Positive emotion statives marked as [+volitive] eventually gave transitives with agent-like experiencers. Although they have nominative subjects from the earliest written sources on, the process of creating transitive constructions was gradual, since it took time for the accusative objects to be grammaticalized. The same applies to perception and cognition verbs, which also eventually developed transitive syntax with agent-like experiencers.

Non-volitive positive emotion, perception, and cognition statives also had impersonal reflexives with dative-like experiencers (recipients) in the history of Slavic. While the pattern with emotion statives was preserved and then grammaticalized as a modal construction denoting a recipient-like experiencer with other verb classes as well, this possibility no longer exists with perception and cognition verbs. This is because, compared to other semantic classes of experiential statives, their experiencer has the highest control over a situation. This is in accordance with Haspelmath's (2001: 63–64) conclusion that "cognition predicates show the strongest affinity with the agent-like experiencer construction".

Finally, we want to point out that the gradual changes of PS experiencer \bar{e} -stative constructions caused by the rise of transitivity leading to the creation of the syntactically aligned systems encompassed different linguistic levels.

This was a multifaceted process which included morphological and syntactic innovations, followed by semantic reinterpretations and shifts, while semantic shifts could also lead to syntactic changes.

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