

Secondary predication in the Baltic languages: a preliminary overview

Sekundārā predikācija baltu valodās: pārskata pirmvariantis

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The paper provides a discussion of semantic and morphosyntactic features characteristic to the secondary predication in Lithuanian and Latvian. The types of secondary predication, viz. depictives, resultatives and adverbials, are distinguished according to the semantics: adverbials are event-oriented, while depictives and resultatives are participant-oriented (the former denote an event, which is simply simultaneous with the main event, while the latter denote an event, which is related to the main event via causal relation). However, a rigid delimitation of the three types is impossible, as there is a number of constructions which oscillate between them both semantically and morphosyntactically. It is proposed that the zone between depictives, resultatives and adverbials is occupied by transitional, or borderline types of secondary predication. The borderline types analysed in the paper include posture constructions, “grow up” constructions and “slice” constructions. In order to visualize the relationships between the main and the borderline types, the principles of the semantic map method are applied and an extended preliminary semantic map of secondary predication is proposed.

Keywords: secondary predication, depictive, resultative, adverbial, posture, semantic map.

1. Introduction¹

Secondary predication has already received a considerable attention in the linguistic literature (cf. Hoekstra 1988; Goldberg 1995; Levin & Rappaport Hovav 1995; Geuder 2000; Rappaport Hovav & Levin 2001; Boas 2003; Rothstein 2003; 2004). The most prominent questions discussed in these works are the syntactic status of a secondary predicate (adjunct vs. argument) and the factors that license secondary predicates. Some studies apply a typological point of view in order to establish cross-linguistic properties of the types of secondary predication (Himmelman & Schultze-Berndt 2005; Loeb-Diehl 2005; Verkerk 2009 a, b; Riaubienė 2015).

As far as the Baltic languages are concerned, secondary predication has been more or less thoroughly discussed in individual languages (Valeckienė 1967; Lokmane 2000; Holvoet 2003; 2008; Holvoet & Tamulionienė 2005;

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Čižik-Prokaševa 2010; 2011; Vaičiulytė-Semėnienė 2014; Riaubienė 2014). A few works (Holvoet 2008; Logina 2014; Riaubienė 2016) aim to compare certain types of secondary predication in Lithuanian and Latvian. However, they mainly concentrate on resultatives with the exception of Holvoet (2008), who also compares the marking of predicative complements in the two languages.

The main goal of the paper is to present an overall picture of the secondary predication types in the Baltic languages. This goal, in turn, evokes further questions, which I will try to answer here. First of all, what semantic and morphosyntactic properties are typical of the core types of secondary predication? Secondly, what borderline types of secondary predication can be distinguished? Finally, how are the types of secondary predication related to each other semantically and formally?

The research appeals to the principles of the semantic map method, which allows to demonstrate the relationship between semantic concepts, on the one hand, and the relationship between the semantic concepts and their formal encoding, on the other hand. For a semantic map to be reliable, a representative language sample is needed, which is not available in this case. Therefore, the paper presents a tentative semantic map that should be verified by the data of a larger number of languages.

The data for the research were collected from the following sources: questionnaires filled by native speakers, the corpus of Lithuanian language (DLKT) and linguistic literature. Examples taken from the corpus, papers and grammars have a reference, while those taken from the questionnaires or constructed by the author do not.

The paper is structured, as follows: section 2 presents the definition of secondary predication and delimits the object of the research; sections 2.1–2.3 deal with the core types of secondary predication: depictives, resultatives, and adverbials respectively; section 3 discusses the borderline types: posture constructions, “grow up” constructions, and “slice” constructions (3.1–3.3, respectively); in section 4 the semantic map of secondary predication is built; finally, section 5 presents the conclusions.

2. Secondary predication

Secondary predication expresses the property of either a participant of an event or an event, e. g. (1)–(3). In (1) and (2), the adjectives denote the property of a participant: John was nervous when he walked and the wagon became full because it was loaded, while in (3) the adverb refers to the property of an action: the returning home was carried out in a happy manner. Secondary predication is a phenomenon of a clause level, and therefore it does not include attributes such as *mažas* and *didelį* in (4).

(1) Lithuanian

<i>Jon-as</i>	<i>vaikščiojo</i>	<i>nerving-as.</i>
John-NOM.SG	walk.PST.3	nervous-NOM.SG.M
‘John walked nervous.’		

(2) Latvian

<i>Viņš</i>	<i>piekrāva</i>	<i>vagon-u</i>	<i>piln-u.</i>
3SG.NOM.M	load.PST.3	wagon-ACC.SG	full-ACC.SG ²
‘He loaded the wagon full.’			

(3) Lithuanian

<i>Vaik-as</i>	<i>grįžo</i>	<i>laiming-ai.</i>
child-NOM.SG	return-PST.3	happy-ADV
‘The child returned happily.’		

(4) Lithuanian

<i>Maž-as</i>	<i>vaik-as</i>	<i>nešė</i>	<i>didel-į</i>	<i>krepsį-i.</i>
little-NOM.SG.M	child-NOM.SG	carry.PST.3	big-ACC.SG.M	bag-ACC.SG
‘A little child carried a big bag.’				

Traditionally, two types of secondary predication are distinguished: event-oriented adverbials, e. g., (3), and participant-oriented secondary predicates. The latter are further classified into depictives, e. g., (1), and resultatives, e. g., (2), according to the semantic relation between the main and the secondary predicates. However, the distinction between event-oriented and participant-oriented, as well as between depictive and resultative secondary predicates is not always clear-cut, and in such cases it is possible to speak about the borderline types of secondary predication.

Secondary predication usually constitutes an optional predication, which is expressed by adjuncts and which can be omitted without damaging the grammaticality of a sentence. Nevertheless, sometimes secondary predicates are obligatory: the case in particular is the so-called predicate complements (Holvoet 2003, 69; Holvoet & Tamulionienė 2005, 119; Schultze-Berndt & Himmelmann 2004, 65; Nītiņa & Grigorjevs 2013, 745–746), e. g. (5).

(5) Latvian

<i>Viņš</i>	<i>padarīja</i>	<i>Mērij-u</i>	<i>laimīg-u.</i>
3SG.NOM.M	make.PST.3	Mary-ACC.SG	happy-ACC.SG
‘He made Mary happy.’			

Although secondary predicates in (2) and (5) share some functional and formal similarities, their status in the argument structure is utterly different: the former is an adjunct, while the latter is a complement and cannot be omitted from the sentence.

Resultatives also pose a challenge for syntactic analysis at least in some languages. For example, in English resultatives based on transitive and unaccusative verbs function as typical adjuncts, e. g., (6) and (7), while resultative secondary predicates used with unergative verbs are obligatory and resemble complements,³ e. g., (8).

² The gender of the adjective is not marked in the glosses if in the respective case (usually the accusative) it is identical for masculine and feminine.

³ The two types of resultatives are also referred to as ‘control’ and ‘ECM’ resultatives in Wechsler (1997), ‘weak’ and ‘strong’ resultatives in Kaufmann & Wunderlich (1998).

- (6) *John wiped the table (clean).*
 (7) *The lake froze (solid).*
 (8) *Mary danced herself tired.*

Although many attempts have been put forward to account for this difference, cf. Hoekstra (1988), Carrier & Randall (1992), Wechsler (1997), Washio (1997), Kaufmann & Wunderlich (1998), Rappaport Hovav & Levin (2001), the syntactic interpretation of resultatives (at least of a part of them) has not been agreed upon yet. For this reason, some linguists discard resultatives as secondary predicates in general (Himmelman & Schultze-Berndt 2005, 4).

As far as the Baltic languages are concerned, resultatives do not entail this problem: here they always function as adjuncts, e. g. (9).

- (9) Latvian
Vīna *nodejās* *slapj-a*.
 3SG.NOM.F dance.REFL.PST.3 wet-NOM.SG.F
 ‘She danced herself wet.’

The optional status of resultative secondary predicates in Lithuanian and Latvian is determined by verbal prefixation, which plays a crucial role in the formation of Baltic resultatives (Riaubienė 2016).

The paper provides a discussion of resultatives, as well as other optional secondary predication, but the predicate complements are excluded (for an exception, see 3.2).

2.1. Depictives

Depictive secondary predicates denote the state of a participant which holds at the time of the action denoted by a verb, e. g., (10) means that John was angry when he turned back.

- (10) Latvian
Jān-is₁ *dusmīg-s₁* *pagriezās*.
 John-NOM.SG angry-NOM.SG.M turn.back.PST.3.REFL
 ‘John turned back angry.’

In depictives proper, the two predications are related only temporally: no other semantic relation has to be involved. The action expressed by a verb and the state expressed by a secondary predicate must hold simultaneously. This temporal relation does not imply anything on the duration of the state: it could have started at any point in time before the action began, and it can continue until any point after the action ends (Himmelman & Schultze-Berndt 2005, 17).

In the Baltic languages, depictive secondary predicates can be freely predicated of both subject and direct object, e. g. (10) resp. (11) (Ulvydas 1976, 437; Nītiņa & Grigorjevs, 2013, 745). In addition, sometimes lower grammatical functions such as indirect object, oblique or even an adverbial can also control a secondary predicate (Ulvydas 1976, 451; Čižik-Prokaševa 2010, 132⁴), e. g. (12)–(14).

⁴ Čižik-Prokaševa (2010, 133) presents the following sentence as the instance of the depictive predicated of an oblique presumably because the controller bears the genitive

(11) Lithuanian

Jis *išgėrė* *arbat-q₁* *šalt-q₁*.
 3SG.NOM.M drink.PST.3 tea-ACC.SG cold-ACC.SG
 ‘He drank the tea cold.’

(12) Lithuanian

Ji *sūn-ui₁* *dar* *vaik-ui₁* *nupirko* *but-q*.
 3SG.NOM.F son-DAT.SG still child-DAT.SG buy.PST.3 flat-ACC.SG
 ‘She bought her son a flat when he still was a child.’

(13) Lithuanian

Su juo₁ *girt-u₁* *aš* *niekur* *neisiu*.
 with 3SG.INSTR.SG.M drunk-INSTR.SG.M 1SG.NOM nowhere NEG.GO.FUT.1SG
 ‘I will not go with him when he is drunk.’

(14) Lithuanian (from Čížik-Prokaševa 2010, 133)

priemen-ėje₁ *atsidūriau* *dar šilt-oje₁*
 porch-LOC.SG get.into.PST.1SG still warm-LOC.SG.F
 ‘I got into the porch when it was still warm.’

Example (13) bears an implicit conditional meaning (‘I will not go with him if he is drunk’), and at least theoretically can be treated as a separate type of secondary predication, viz. circumstantial or conditional secondary predicate (Halliday 1967, 78–91; Nichols 1978, 117). However, the main difference between circumstantials and depictives is concerned with the information structure (‘depictives are part of the focus domain and convey focal information while circumstantials do not’; Himmelmann & Schultze-Berndt 2005, 19), while morphologically the two constructions are usually identical (ibid., 15). For this reason, linguists do not make a distinction between the two types and often treat them both as depictives.

As the semantic relationship between the main and the secondary predicates is very loose (the predications must only overlap temporally), the property predicated by the latter is mainly related to the participant (at least in typical cases). A close semantic relationship between the secondary predicate and its controller is often indicated by morphological means cross-linguistically. Schultze-Berndt & Himmelmann (2004, 81) distinguish a few types of strategies that are used to indicate it: 1) strategies for indicating ‘restricted reference’, 2) predicative markers, and 3) relational markers. The most prominent strategy of the first type is agreement, which signals ‘restrictions on the controller of the depictive’ (ibid.). Predicative markers include special ‘predicative’ cases (such as *essive* in Finnic languages), adpositions or particles, which are used in the expressions of function, role or life stage (ibid., 85–86). Finally, relational markers such as instrumental

case. However, the genitive here functions as a semantic case determined by the negation and fully corresponds to the grammatical accusative case in the respective affirmative sentence. Hence, the controller is a direct object here (Holvoet & Semėnienė 2005, 53).

↳ *kur-io₁* *niekada* *ne-buvau* *matęs* *gyv-o₁*
 who-GEN.SG.M never NEG-be.PST.1SG see.PRTC.ACT.NOM.SG.M alive-GEN.SG.M
 ‘whom I have never seen alive’

and locative cases or adpositions signal the relationship between the depictive and its controller indirectly as they are also used to mark adverbial expressions.

All types of marking strategies mentioned above are attested in the Baltic languages. The most typical and frequent marking strategy for depictives in Baltic is agreement with the controller in case, number and (when appropriate) gender,⁵ e. g., (10)–(14). While adjectival depictives are marked by agreement, nominal depictives include predicative or relational markers. Lithuanian makes use of two markers: *už* ‘for, as’ and *kaip* ‘as’ (Vaičiulytė-Semėnienė 2007), e. g., (15) and (16).

(15) Lithuanian

<i>Jis</i> ₁	<i>tarnavo</i>	<i>už</i>	<i>piemen-į</i> ₁ .
3SG.NOM.M	serve.PST.3	for	cowherd-ACC.SG

‘He served as a cowherd.’

(16) Lithuanian

<i>Jis</i> ₁	<i>atvyko</i>	<i>į</i>	<i>miest-q</i>	<i>kaip</i>	<i>pasiuntin-ys</i> ₁ .
3SG.NOM.M	arrive.PST.3	to	town-ACC.SG	as	envoy-NOM.SG

‘He arrived to the town as an envoy.’

The marker *už* is a preposition, which requires the accusative case of a noun (this type of depictive constructions is obsolescent in the contemporary language; Holvoet & Tamulionienė 2005, 136). The marker *kaip* does not require a specific case: depictive secondary predicate agrees in case with the controller, e. g. (16) and (17).

(17) Lithuanian (from Holvoet & Tamulionienė 2005, 133)

<i>Mėgstu</i>	<i>Čiurlion-į</i> ₁	<i>kaip</i>	<i>tapytoj-q</i> ₁ .
like.PRS.1SG	Čiurlionis-ACC.SG	as	painter-ACC.SG

‘I like Čiurlionis as a painter.’

Latvian possesses predicative markers *kā* ‘as’ and *par* ‘for, as’, e. g., (18)–(19). While *kā* parallels Lith. *kaip*, the marker *par* corresponds to preposition Lith. *Per*, which is used as a predicative marker in Lithuanian dialects and Old Lithuanian texts (Holvoet & Tamulionienė 2005, 136).

(18) Latvian

<i>No</i>	<i>kar-a</i>	<i>viņš</i> ₁	<i>atgriezās</i>	<i>kā</i>	<i>varon-is</i> ₁ .
from	war-GEN.SG	3SG.NOM.M	return.PST.3.REFL	as	hero-NOM.SG

‘He returned from the war as a hero.’

(19) Latvian

<i>Viņš</i> ₁	<i>tur</i>	<i>strādā</i>	<i>par</i>	<i>šoferi</i> ₁ .
3SG.NOM.M	there	work.PRS.3	for	driver-ACC.SG

‘He works there as a driver.’

⁵ In Čižik-Prokaševa’s sample agreeing depictives (or ‘syntactic depictives’ in the author’s terms) constitute the great majority of examples: 795 out of 991 (Čižik-Prokaševa 2010, 151).

The Baltic languages employ relational strategies such as the instrumental and locative cases (Ulvydas 1976, 452–453; Nītiņa & Grigorjevs 2013, 747). Sometimes, depictives in instrumental also agree with the controller in gender and number in Lithuanian, e. g. (20).

(20) Lithuanian

*Jie*₁ *atvyko* *i* *miest-q* *pasiuntini-ais*₁.
 3PL.NOM.M arrive.PST.3 to town-ACC.SG envoy-INSTR.PL.M
 ‘They arrived to the town as envoys.’

Nominal depictives can receive the nominative case in Lithuanian (which can be replaced by the instrumental as in (20)), but such usage is very restricted, e. g., (21). The nominative in (21) is not determined by agreement as it might seem at first sight but rather is a relational strategy: if the controller takes other case than nominative, the depictive receives the instrumental, e. g., (22).

(21) Lithuanian

Iš *kar-o* *jis*₁ *grįžo* *didvyr-is*₁.
 from war-GEN.SG 3SG.NOM.M return.PST.3 hero-NOM.SG
 ‘He returned from the war as a hero.’

(22) Lithuanian

Iš *kar-o* *jo*₁ *grįžta*
 from war-GEN.SG 3SG.GEN.M return.PRTC.PST.PASS.N

*didvyr-iu*₁ / **didvyri-o*₁.
 hero-INSTR.SG / hero-GEN.SG
 ‘(I heard) he returned from the war as a hero.’

Depictives bearing the locative case are very rare in Lithuanian (Valeckienė 1967, 100–101; Čižik-Prokaševa 2010, 146–147), e. g., (23).

(23) Lithuanian (from Ulvydas 1976, 452)

*Monik-a*₁ *pabudo* *karšt-yje*₁ <...>.
 Monika-NOM.SG wake.up.PST.3 heat-LOC.SG
 ‘Monika woke up feverish.’

In (23), the secondary predicate is more oriented to the participant than to the event, and therefore it is treated as a depictive. Formally identical but more event-oriented cases are regarded as adverbials, cf. (39). Certainly, examples such as (23) and (39) show that a strict line between depictives and adverbials cannot be drawn.

2.2. Resultatives

Resultative secondary predicates denote the state of a participant which resulted from the action denoted by a verb, e. g., (24) can be paraphrased as ‘the car became yellow because it was painted’.

(24) Latvian

Viņš *nokrāsoja* *mašīn-u* *sarkan-u*.
 3SG.NOM.M paint.PST.3 car-ACC.SG red-ACC.SG
 ‘He painted the car red.’

In (24), the main predication denotes an activity event (i. e., painting), while the secondary predication expresses a change of state event (i. e. becoming red). Typically, the two events unfold incrementally and are related via causal relation (Dowty 1979, 93).

Resultative secondary predicates are usually claimed to be predicated of the direct object only. The main argument for this statement is sentences, which include unergative verbs and respectively do not have direct objects: in order to form a resultative, an additional argument (a NP or a reflexive) functioning as a direct object has to be introduced in such cases (Levin & Rappaport 1995, 53), e. g., (25)–(26) and their English translations.

(25) Latvian

<i>Mērij-a</i>	<i>sasēdēja</i>	<i>kleit-u</i>	<i>slapj-u.</i>
Mary-NOM.SG	sit.PST.3	dress-ACC.SG	wet-ACC.SG

‘Mary sat her dress wet (with sweat).’

(26) Latvian

<i>Jān-is</i>	<i>nosēdējās</i>	<i>stīv-s.</i>
John-NOM.SG	sit.PST.3.REFL	stiff-NOM.SG.M

‘John sat himself stiff.’

Resultatives based on unaccusative verbs, e. g., (27), can have subject controllers, but these are treated as underlying objects in phrase structure oriented grammars (Levin & Rappaport Hovav 1995, 53). In semantically oriented theories, the direct object restriction could be reformulated as the ‘patient restriction’: resultative secondary predicates can be predicated of patient arguments only.

(27) *The lake froze solid.*

The addition of an unsubcategorized argument has been also explained in terms of event structure: resultatives such as (24) and (27) are assumed to convey simple events, while resultatives such as (25) and (26) are treated as composed of two subevents, each of which must have its own argument (Rappaport & Levin 2001, 779; Kaufmann & Wunderlich 1998, 37).

The Baltic languages use different encoding strategies for resultatives: Latvian employs agreeing adjectives, e. g. (24)–(26), while Lithuanian makes use of deadjectival adverbs in *-(i)ai*, e. g. (28) and (29).

(28) Lithuanian

<i>Jis</i>	<i>nudažė</i>	<i>nam-q</i>	<i>raudon-ai.</i>
3SG.NOM.M	paint.PST.3	house-ACC.SG	red-ADV

‘He painted the house red.’

(29) Lithuanian

<i>Jis</i>	<i>švar-iai</i>	<i>nušluostė</i>	<i>stal-q.</i>
3SG.NOM.M	clean-ADV	wipe.PST.3	table-ACC.SG

‘He wiped the table clean.’

Resultatives bear a closer semantic relationship with the main predicate (i. e., the verb) than depictives do (the main predicate causes the state expressed

by the secondary predicate), and this factor underlies their expression by adverbs: “The use of the adverb for the resultative predicate should evidently be taken to mean that the resultant state is viewed as being present *in potentia* in the event itself and in this sense the secondary predication <...> is represented as event-oriented” (Holvoet 2008, 133).

In addition, both languages use prepositional phrases with prepositions Lith. *iki*, Lat. *līdz* ‘to, until’ to encode the resulting state, e. g. (30) and (31).

(30) Lithuanian

<i>Vaik-as</i>	<i>nusirėkė</i>	<i>iki</i>	<i>užkimim-o.</i>
child-NOM.SG	REFL.shout.PST.3	until	hoarseness-GEN.SG

‘The child shouted himself hoarse.’

(31) Latvian

<i>Viņš</i>	<i>piekāva</i>	<i>vīriet-i</i>	<i>līdz</i>	<i>bezsamaņ-ai.</i>
3SG.NOM.M	beat.PST.3	man-ACC.SG	until	unconscious-DAT.SG

‘He beat the man unconscious.’

Sometimes Lithuanian employs adjectival resultatives, but these are very restricted and, at least to my knowledge, are used with two verbs only: *pipilti* ‘to pour’ and *nu(si)rengti* ‘to undress smb (oneself)’, e. g. (32).

(32) Lithuanian

<i>Moter-is</i>	<i>nurengė vaik-q</i>	<i>nuog-q.</i>
woman-NOM.SG	undress.PST.3	child-ACC.SG naked-ACC.SG

‘The woman undressed the child naked.’

Resultatives in Lithuanian are also claimed to be encoded by other formal means, such as the instrumental case or prepositional phrases with preposition *į* ‘to’ (Vaičiulytė-Semėnienė 2014). However, the great majority of such examples presented in Vaičiulytė-Semėnienė (2014) does not satisfy the definition of resultative secondary predication and rather belong to manner adverbials. For example, (33) is not a resultative because it does not show causal relation (*‘we became a row because we stood up’).

(33) Lithuanian (from Vaičiulytė-Semėnienė 2014, 14)

<i>Sustojome</i>	<i>į</i>	<i>eil-ę</i>	/	<i>eil-e.</i>
stand.up.PRS.1PL	to	row-ACC.SG		row-INSTR.SG

‘We stood up into the row.’

Nevertheless, some sentences containing preposition *į* ‘to’, e. g. (34), could be presumably treated as resultatives, cf. ‘the water became a mud because it was roiled’.

(34) Lithuanian (from Vaičiulytė-Semėnienė 2014, 7)

<i>Sudrumstė</i>	<i>vanden-į</i>	<i>į</i>	<i>juod-q</i>	<i>purv-q.</i>
roil.PST.3	water-ACC.SG	to	black-ACC.SG	mud-ACC.SG

‘(He/she) roiled the water into a black mud.’

The final remark concerns Latvian, which is an exceptional language with respect to the encoding of resultatives. It has been noticed that languages which make use of bounding verbal prefixes avoid adjectival resultative secondary predicates. Acedo-Matellán (2012) formulates a correlation between the presence of inflected adjectival resultatives and the absence of prefixation, and vice versa. He states that languages like Latin and Slavic, which express path and result by prefixes, cannot have inflected adjectival resultatives due to configurational (syntactic) restrictions, while the languages, which have inflected adjectival resultatives, e. g., Icelandic, do not express path and result by prefixes. Latvian clearly contradicts this correlation, as it possesses both verbal prefixes and agreeing adjectival resultatives. The origin of this feature of Latvian could be revealed by a thorough diachronic investigation. At present, it is only possible to hypothesise that the use of adjectival resultative predicates in Latvian might have been influenced by Finnic languages: such an assumption is implied in Holvoet (2008, 132).

2.3. Manner adverbials

Manner adverbials express the property of an action: they specify the manner, in which the action was carried out. Typical manner adverbials are exclusively event-oriented, e. g., (35) which can be paraphrased as ‘he ate and he did this in a quick manner’.

(35) Lithuanian

<i>Jis</i>	<i>valgė</i>	<i>greit-ai</i>
3SG.NOM.M	eat.PST.3	quick-ADV
‘He ate quickly.’		

However, sometimes manner adverbials can be participant-oriented, as well: “The fact that adverbials are not necessarily and exclusively event-oriented but instead may exhibit semantic orientation towards a participant has been widely noted in the (semantic) literature” (Himmelman & Schultze-Berndt 2005, 7). The semantic similarity between adverbials and depictives has been also noticed in the Grammar of Latvian Language (Nītiņa & Grigorjevs 2013, 743). For example, (36) and (37) resemble a depictive resp. a resultative: the former gives information about the emotional state of the participant at the time of the action (‘he was angry when he screamed’) (Himmelman & Schultze-Berndt 2005, 9; the so-called ‘transparent manner adverbial’ in Geuder 2000, 29–35), while the latter refers to the state of the participant which seems to be caused by the action (‘the cart became heavy because it was loaded up’).

(36) Latvian

<i>Viņš</i>	<i>dusmīg-i</i>	<i>ieklīdzās.</i>
3SG.NOM.M	angry-ADV	scream.PST.3.REFL
‘He screamed angrily.’		

(37) Lithuanian

<i>Jis</i>	<i>sunki-ai</i>	<i>prikrovė</i>	<i>vežim-q.</i>
3SG.NOM.M	heavy-ADV	load.PST.3	cart-ACC.SG
‘He loaded the cart heavily.’			

Despite the semantic similarity to depictives and resultatives, *dusmīgi* and *sunkiai* in (36) and (37) are treated as adverbials for formal reasons: at least in the Baltic languages secondary predicates are associated with agreeing forms, while adverbs are treated as typical encoding means for adverbials (Holvoet & Tamulionienė 2005, 123). Actually, (36) and (37) cannot be interpreted as proper secondary predicates from the semantic point of view too. Depictives convey the state of a participant that is utterly unrelated to the action denoted by a verb, while sentences such as (36) suggest that the state of the participant (being angry) influences the manner in which the action is carried out (Himmelman, Schultze-Berndt 2005, 9). (37) cannot be treated as a resultative proper, because the state denoted by the adverb does not apply to the actual object: “a property is predicated of an implicit resultant object (*a heavy load*) rather than of the explicitly expressed object (in this case, *the cart*)” (Holvoet 2008, 134).

As far as the formal encoding of manner adverbials is concerned, Lithuanian mainly employs deadjectival adverbs formed with the suffix *-ai*, e. g., *raudon-as* ‘red’ → *raudon-ai* ‘redly’, while Latvian usually makes use of deadjectival adverbs with the suffix *-i*, e. g. *ātr-s* ‘quick’ → *ātr-i* ‘quickly’. Other formal means, such as nouns in the instrumental or locative cases are also used, e. g., (38) and (39).

(38) Lithuanian (from Ulvydas 1976, 504)

<i>Stovi</i>	<i>vis-i</i>	<i>eilė-mis</i>	<i>tarpa</i>	<i>barak-ų</i>
stand.PRS.3	all-NOM.PL.M	row-INSTR.PL	between	barrack-GEN.PL

skersvėjų.

draught-LOC.SG

‘Everybody stands in rows between the barracks in a draught.’

(39) Lithuanian (from Ulvydas 1976, 504)

<i>Jis</i>	<i>sumušė</i>	<i>savo</i>	<i>prieš-us</i>	<i>ir</i>	<i>galėjo</i>
3SG.NOM.M	defeat.PST.3	POSS.REFL	enemy-ACC.PL	and	can.PST.3

ramybė-j gyven-ti.

peace-LOC.SG. live-INF

‘He defeated his enemies and could live in peace.’

Manner adverbials can be encoded by prepositional phrases including Lith. *su* ‘with’, *be* ‘without’, *iš* ‘from’, and other means. As these formal means do not occur in other types of secondary predication, they are not included in Table 2.

3. Borderline types of secondary predication

Prototypical cases of secondary predication discussed above have clear distinctive features. Adverbials are event-oriented, while depictives and resultatives are participant-oriented. The latter two are distinguished according to the relationship between the predications: in depictives, the main and the secondary predications have to be simultaneous only, while in resultatives they show a closer, viz. causal, relationship.

As mentioned before, however, a rigid delimitation of the types is impossible because there are many cases when secondary predication bears twofold features,

for example, adverbials can be participant-oriented, while depictives can express manner (Himmelmann & Schultze-Berndt 2005, 32).

I assume that prototypical depictives, resultatives, and adverbials constitute core nodes in the semantic space of secondary predication, while the zone between them is occupied by transitional types. Here I will present three borderline types: posture constructions, “grow up” constructions and “slice” constructions. The former two are testified by the data of the Baltic languages; the third one is supported by the data of other languages. The number of the borderline types is by no means final: in a more detailed research, additional types could be distinguished.

3.1. Posture constructions

Posture constructions, which denote the stance of a participant, e.g., (40), constitute an especially interesting case as they share features with all core types of secondary predication.

(40) Lithuanian

<i>Jis</i>	<i>gulėjo</i>	<i>aukštieknink-as.</i>
3SG.NOM.M	lie.PST.3	supine-NOM.SG.M

‘He lay supine.’

According to Himmelmann & Schultze-Berndt (2005, 31), “when the posture is that of the agentive participant, it may alter significantly the way in which an event is conceived”, and therefore “these expressions are situated between expressions of physical condition (the prototypical depictives) and manner expressions”. It is the semantic similarity to manner expressions that determines the encoding of posture constructions by the means typical of adverbials in some languages including Latvian, e. g., (41).

(41) Latvian

<i>Viņš</i>	<i>gulēja</i>	<i>augšpēdus.</i>
3SG.NOM.M	lie.PST.3	supine.ADV

‘He lay supine.’

I assume that at least in some cases posture constructions also share features with resultatives, and that the similarity to either depictives or resultatives is largely determined by the lexical aspect (Aktionsart) and semantics of a verb (Riaubienė 2014). When the main predicate is an accomplishment or an achievement and denotes posture, e.g., (42), it already implies a resulting stance, cf. Lith. *atsigulti* ‘to lie down’ implies horizontal posture. Here, the secondary predicate specifies the resulting posture in the same way as resultative secondary predicates specify the resulting state in the cases such as (29): the two predications in (42) stand in a causal relationship (‘he became supine/prone because he lay down’).

(42) Lithuanian

<i>Jis</i>	<i>atsigulė</i>	<i>aukštieknink-as</i>	/	<i>kniūbsč-ias.</i>
3SG.NOM.M	lie.down.PST.3.REFL	supine-	/	prone-NOM.SG.M

‘He lay (himself) down supine/prone.’

If the main predicate does not denote posture, the relationship between the predications is, just like in depictives, merely temporal (simultaneous) (Riaubienė 2014, 108), e. g. (43).

(43) Lithuanian

Jis miegojo aukštieknink-as.
 3SG.NOM.M sleep.PST.3 supine-NOM.SG.M
 ‘He slept supine.’

Finally, there is a third type of posture constructions, which can be judged neither as resultative nor as depictive, since they have neutralized this distinction (Riaubienė 2014, 107). They include state verbs, which denote posture or motor control, e. g., Lith. *sėdėti* ‘to sit’, *gulėti* ‘to lie’, Lat. *turēt* ‘to hold’ (also referred to as ‘inactive actions’ in Croft 1991, 97). For example, in (44) (also in (40)–(41)), the posture expressed by the secondary predicate could be interpreted as resulting from the action denoted by the verb (cf. ‘the bottle was upright because John held it’).

(44) Latvian

Jān-is turēja pudel-i stāvus.
 John-NOM.SG hold.PST.3 bottle-ACC.SG upright.ADV
 ‘John held the bottle upright.’

However, in resultatives proper the resulting state materializes when the action denoted by a verb terminates (the table becomes clean at the end of the action of wiping). In examples such as (44) the state, i. e., being in a vertical position, extends simultaneously with the action (cf. ‘the bottle was upright at the time John held it’), which is a feature of depictives. A specific extended causal relation found in posture constructions is referred to as ‘continuous causation’ in Holvoet (2008, 134–135).

As mentioned before, Latvian usually makes use of adverbs, e. g., (41) and (44), while Lithuanian employs both adverbs and adjectives to encode posture constructions, e. g., (45).

(45) Lithuanian

Jis susilenkė dvilink-as / dvilink-ai.
 3SG.NOM.M bend.PST.3 double-NOM.SG.M / double-ADV
 ‘He bent double.’

Some posture concepts such as Lith. *kniūbsčias* ‘prone’, *keturpėsčias* ‘on all fours’ and especially *aukštiekninkas* ‘supine’ are predominantly expressed by adjectives in Lithuanian, while notions such as Lith. *dvilinkas* ‘double’ and *stačias* ‘upright’ are encoded by both adjectives and adverbs alternatively (Riaubienė 2014, 114).

3.2. “Grow up” constructions

Secondary predicates used with the verbs Lith. *užaugti*, *išaugti*, Lat. *izaugt* ‘grow up’ also pose a challenge for interpreters. Some linguists argue that sentences

such as (46) and (47) contain resultative secondary predicates (Vaičiulytė-Semėnienė 2014, 7–11).

(46) Lithuanian

<i>Mergait-ės</i>	<i>užaugo</i>	<i>aukšt-os.</i>
girl-NOM.PL	grow.up.PST.3	tall-NOM.PL.F
‘The girls grew up tall.’		

(47) Lithuanian

<i>Mergait-ės</i>	<i>užaugo</i>	<i>daili-os.</i>
girl-NOM.PL	grow.up.PST.3	pretty-NOM.PL.F
‘The girls grew up pretty.’		

While semantics allows to treat *aukštos* in (46) as a resultative (cf. ‘the girls became tall because they grew up’), secondary predicate *dailios* in (47) cannot be interpreted as such (cf. ‘*the girls became pretty because they grew up’). The verb *užaugti* means ‘to reach physical and mental maturity’, which naturally implies that the patient increased in height or size. Therefore, secondary predicates denoting notions applicable to height or size, e. g., tall, big, long, resemble resultatives: they specify the resulting state already implied by the verb. Respectively, secondary predicates conveying states that do not depend on the process of growing, e. g., being pretty, are not causally related to the main predicate and do not denote the result. As they are not resultatives, the question is what they are.

The two predications in (47) are related temporally: the moment of growing up and being or becoming pretty are simultaneous (cf. ‘the girls were/became pretty at the time when they grew up’). Icelandic makes this simultaneity relation even more evident as it encodes respective examples by coordinated clauses, e. g., (48).

(48) Icelandic

<i>Sonur</i>	<i>hans</i>	<i>óx</i>	<i>og</i>	<i>varð</i>	<i>stór.</i>
son	his	grow.PST	and	become.PST	big
‘His son grew tall.’					

This would suggest that (47) is similar to depictives. On the other hand, another explanation is also available. It seems that in the Baltic languages ‘grow up’ verbs are undergoing a process of grammaticalization: in examples like (49), the verb *išaugti* resembles a copular verb meaning ‘become’.

(49) Lithuanian (DLKT)

<i>Ir,</i>	<i>diev-ai</i>	<i>žino,</i>	<i>koki-u</i>	<i>būd-u</i>
and	god-NOM.PL	know.PRS.3	what-INSTR.SG	manner-INSTR.SG
<i>jis</i>	<i>išaugo</i>	<i>toki-u</i>	<i>priešgyn-a</i>⁶?	
3SG.NOM.M	grow.up.PST.3	such-INSTR.SG.M	one.who.is.perverse-INSTR.SG	
‘And, god knows, how did he grow up so perverse?’				

The sentence above conveys wondering at his becoming a perverse person rather than his growing up. Actually, in (49) the verb *išaugti* could be replaced by

⁶ The noun *priešgyna* ‘the one who is perverse’ is one of a few Lithuanian nouns that have a common gender form.

the verb *tapti* ‘to become’ without a significant change in meaning. On the other hand, if the secondary predicate would be omitted, the sentence would have lost a necessary (or even obligatory) semantic component.

The grammaticalization of the verb *augti* ‘to become larger’ into a semantically vague verb meaning ‘become’ is attested in other languages.⁷ English verb *wax* ‘to increase in size’ that originated from IE **weg-* which is related to IE **aug-* ‘become larger’ (OED) is now usually used as a copular verb in expressions such as *to wax fat* ‘to become fat’, *to wax angry* ‘to get angry’.⁸ If the verb *augti* behaves like a copular-like verb, the secondary predicate it combines with should be treated as a predicate complement rather than an adjunct, cf. (5). Certainly, a detailed investigation is needed in order to prove the grammaticalization of the verb *augti*.

Secondary predicates are encoded by various formal means in “grow up” constructions. Both Baltic languages mark adjectival secondary predicates by agreement, e. g., (46)–(47) and (50).

(50) Latvian

<i>Viņa</i>	<i>izauga</i>	<i>daiļ-a</i>	<i>un</i>	<i>paklausīg-a.</i>
3SG.NOM.F	grow.up.PST.3	pretty-NOM.SG.F	and	obedient-NOM.SG.F

‘She grew up pretty and obedient.’

The expression of nominal secondary predicates differs in Lithuanian and Latvian. Lithuanian mainly makes use of two strategies: the instrumental case and preposition *į*, e. g., (51) and (52).

(51) Lithuanian

<i>Jis</i>	<i>užaugo</i>	<i>ger-u</i>	<i>žmog-umi.</i>
3SG.NOM.M	grow.up.PST.3	good-INSTR.SG.M	man-INSTR.SG

‘He grew up into a good man.’

(52) Lithuanian

<i>Jis</i>	<i>išaugo</i>	<i>į</i>	<i>stipr-ų</i>	<i>vyr-q.</i>
3SG.NOM.M	grow.up.PST.3	into	strong-ACC.SG.M	man-ACC.SG

‘He grew up into a strong man.’

Additionally, sometimes the instrumental case can be replaced by the nominative case in the same way as in depictives, e. g. (53) and cf. (21).

(53) Lithuanian

<i>Jis</i>	<i>užaugo</i>	<i>ger-as</i>	<i>žmog-us.</i>
3SG.NOM.M	grow.up.PST.3	good-NOM.SG.M	man-NOM.SG

‘He grew up into a good man.’

In Latvian, two marking strategies are employed too: preposition *par* and the locative case, e. g., (54) and (55).

⁷ Thanks to Axel Holvoet for pointing out this parallel.

⁸ An anonymous reviewer noticed that the same can be actually said about the verb *grow*, e. g. *He grew old*.

(54) Latvian

Viņa izauga par daiļ-u jaunav-u.
 3SG.NOM.F grow.up.PST.3 for pretty-ACC.SG maiden-ACC.SG
 ‘She grew up into a pretty maiden.’

(55) Latvian

Kartupeļ-i izaug lakst-os.
 potato-NOM.PL grow.up.PRS.3 shaw-LOC.PL
 ‘Potatoes grow up into shaw.’

As clearly shown by the examples, in both languages most of marking strategies used for secondary predicates in “grow up” constructions coincide with the strategies used for depictives, confirming the existence of a close semantic relationship between the two types.

3.3. “Slice” constructions

The data of the Baltic languages do not give a sufficient formal evidence to distinguish the “slice” type. “Slice” constructions include verbs like Lith. *supjaustyti*, Lat. *sagriezt* ‘to cut’, Lith. *sumalti*, Lat. *samalt* ‘to grind’, Lith. *supinti*, Lat. *sapīt* ‘to braid’, Lith. *surišti*, Lat. *aizsiet* ‘to tie’, which denote the creation of a new object (cf. slicing creates slices, braiding creates a braid, tying creates a knot). In Lithuanian and Latvian, these constructions include adverbs, which are treated as adverbials, e. g., (56) and (57).

(56) Lithuanian

Jis plon-ai suraikė duon-q.
 3SG.NOM.M thin-ADV slice.PST.3 bread-ACC.SG
 ‘He sliced the bread thin.’

(57) Latvian

Viņa cieš-i sapīna mat-us.
 3SG.NOM.F tight-ADV braid.PST.3 hair-ACC.PL
 ‘She braided her hair tight.’

However, in English they include adjectives (cf. the translations of the sentences (56) and (57)), and in Norwegian their encoding depends on whether the speaker wants to emphasize the resulting state of a participant (then an adjective is used) or the manner in which an action is carried out (in such case an adverb is employed), e. g., (58).

(58) Norwegian

John malte kaffen fin / fin-t.⁹
 John grind.PST coffee.DEF.SG.M fine.SG.M / fine-ADV
 ‘John ground the coffee fine.’

⁹ In Norwegian, deadjectival adverbs bear the affix *-t* and correspond to the form of neuter singular adjectives.

The use of adjectives which are typical encoding means for secondary predicates in the respective languages shows that these adjuncts are not proper adverbials. For this reason, some linguists treat “slice” constructions in line with resultatives (Legendre 1997). However, they are not proper resultatives either because the paraphrase of resultatives cannot be applied to them (cf. ‘*the bread became thin because it was sliced’). In (56) and (57), the secondary predicate denotes the state of the created entity rather than of the actual object (it is the slices that are thin and respectively it is the braid that is tight).

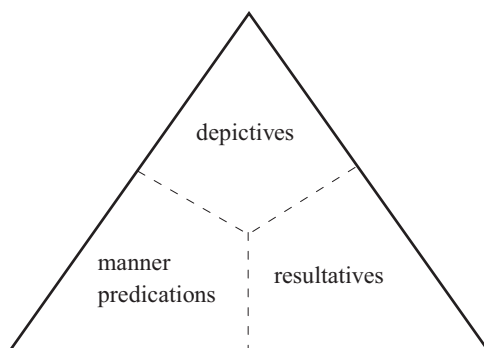
“Slice” constructions are sometimes referred to as spurious resultatives (Washio 1997, 17) or pseudoresultatives (Levinson 2010). As Levinson (2010) points out, here the state denoted by an adjunct does not result from the action, but rather is determined by the manner in which the action is carried out: it is ‘slicing thinly’ and not just ‘slicing’ that determines the property of the created entity. The causative interpretation arises because the adjunct modifies the entity, which comes into being as a result of an action: “The result-oriented interpretation of the modifier arises because the constituent it modifies is interpreted as an individual created by the event” (Levinson 2010, 155). To conclude, the type represents the extension of the meaning of resultatives in the following way: ‘an object *x* gains a property *y* due to “acting” (proper resultatives) > “acting in a manner *y*” creates an object *x* which has the property *y*’.

4. The semantic map of secondary predication

Semantic map is a tool for visualising semantic relationships between different meanings (‘functions’ in Haspelmath 2000) of a certain linguistic form. Some of these functions semantically are very closely related, i. e. directly, while others bear more distinct semantics and therefore are related indirectly. As a result, the functions represented in the semantic map constitute a network, which is assumed to hold universally.

The number and arrangement of functions is established in terms of cross-linguistic comparison. A function is singled out and included in the map, if there are at least two languages, which encode it by different formal means (Haspelmath 2000, 6). Identically encoded functions have to occupy a contiguous area in the semantic map (ibid.).

A few semantic maps concerned with secondary predication have been already proposed. Himmelmann & Schultze-Berndt (2005, 29) present a semantic map for participant-oriented expressions. Their map reflects a fine-grained classification of depictives and does not include resultatives. Van der Auwera & Malchukov (2005) propose a semantic map of, as they refer to, depictive adjectivals. The map represents relationships between depictives and related phenomena such as attributes, predicate complements, adverbials, etc., but does not take into account resultatives. An attempt to construct a semantic map of resultative secondary predication is made in Riaubienė (2015). To my knowledge, the only semantic map, which deals with all core types of secondary predication is proposed in Verkerk (2009 a, b), see schema 1 (the map is represented as a triangle but it corresponds to semantic maps, where functions are presented as nodes connected by lines).



Schema 1. The semantic map of secondary predication (Verkerk 2009 a, 119).

In the map, each of the functions is adjacent to other two, which implies five encoding patterns (according to the author, all of them are attested cross-linguistically; Verkerk 2009 a, 120):

- 1) the all-purpose pattern (all types of secondary predication are encoded by the same strategy – the most common pattern);
- 2) the three-way split pattern (all types of secondary predication have their specific encoding strategy);
- 3) the resultative-excluding pattern (depictives and adverbials are encoded in the same way, while resultatives have a different marking);
- 4) the depictive-excluding pattern (resultatives and adverbials share the same strategy, while depictives have a distinct one);
- 5) the manner-excluding pattern (depictives and resultatives are marked by the same strategy, while adverbials are encoded differently) (Verkerk 2009a, 120).

Verkerk's semantic map is based on prototypical examples of resultatives, depictives, and adverbials, and therefore makes an impression that the types can be strictly delineated. In the following paragraphs I will present a tentative expanded semantic map which shows that the transition from one type to another is not abrupt but rather gradual. The semantic map is mainly built according to the data of the Baltic languages, which alone, of course, does not give sufficient formal evidence for distinguishing the functions and arranging them in the semantic space. The verification of the map with the data from genetically and geographically distant languages is a topic of a future research.

The semantic space of secondary predication consists of constructions which, in addition to the main predication, include an additional predication on a clause level (both predications must belong to the same clause). In the paper, the semantic space of secondary predication includes six functions: depictives, resultatives, adverbials, posture constructions, “grow up” constructions, and “slice” constructions. They are distinguished according to the 1) orientation towards a participant or an event, and 2) type of relationship between the main and the secondary predicates (simultaneity or causation). Table 1 below summarizes the distribution of the semantic features over the types of secondary predication.

	Orientation		Relationship	
	Participant	Event	Simultaneity	Causation
Depictives	+		+	
Resultatives	+			+
Adverbials		+		
Posture c.	+	+	+	+
<i>Grow up c.</i>	+		+	+
<i>Slice c.</i>	+	+		+

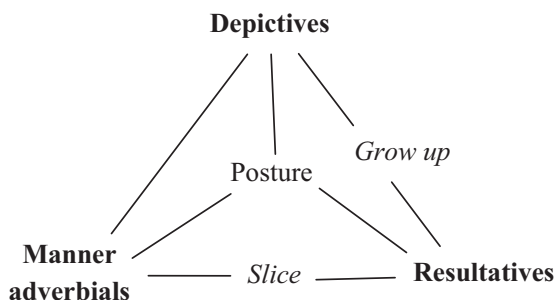
Table 1. Semantic features of the types of secondary predication.

Table 2 presents an overview of the morphosyntactic strategies that are used to encode the types of secondary predication in the Baltic languages.

	Lithuanian	Latvian
Depictives	Agr/Instr/Loc/Nom/ <i>kaip/už</i>	Agr/Instr/Loc/ <i>par/kā</i>
Resultatives	Adv/ <i>iki</i> /Agr/ <i>j</i>	Agr/ <i>līdz</i>
Manner adverbials	Adv/Instr/Loc	Adv/Instr/Loc
<i>Slice c.</i>	Adv	Adv
Posture c.	Agr/Adv	Adv
<i>Grow up c.</i>	Agr/Instr/Nom/ <i>j</i>	Agr/Loc/ <i>par</i>

Table 2. Encoding strategies for the types of secondary predication.

The expanded semantic map appeals to the triangular arrangement of the core types of secondary predication, see Schema 2 (cf. Schema 1).



Schema 2. An expanded semantic map of secondary predication.

The borderline types are deployed between the core types, and Table 1 gives a clue as to their arrangement. Since posture and “slice” constructions are both event-oriented and participant-oriented, they are directly linked to adverbials and to the relevant participant-oriented type or types: “slice” construction is related to resultatives (because it has the feature ‘causation’), while posture construction is related to both depictives and resultatives (it has the features ‘simultaneity’ and ‘causation’). As “grow up” construction is participant-oriented only, it is integrated between depictives and resultatives.

Table 2 gives some formal evidence for the arrangement of the functions. Morphosyntactic encoding supports the position of the “grow up” type between depictives and resultatives, as they share some specific strategies, e. g., in Lithuanian only the “grow up” type and depictives are marked by the nominative case, and only the “grow up” type and resultatives share preposition *i* strategy. As far as the posture type is concerned, Latvian data imply its closeness to manner adverbials (they share Adv strategy), while Lithuanian shows its proximity to depictives (they are both marked by agreement). The Baltic languages do not supply data for a direct link between the posture construction and resultatives to be drawn. Evidence comes from Russian, which encodes (or used to encode, since *navznič’* is archaic) the two constructions by adverbs that are fossilized prepositional phrases including the preposition *na* ‘on’, e. g., (59) and (60).

(59) Russian

<i>On</i>	<i>vyter</i>	<i>stol</i>	<i>nasuxo.</i>
3SG.NOM.M	wipe.PRF.PRT.SG.M	table.ACC.SG	dry.ADV
‘He wiped the table dry.’			

(60) Russian

<i>On</i>	<i>ležal</i>	<i>navznič’.</i>
3SG.NOM.M	lie.IMPREF.PRT.SG.M	supine.ADV
‘He lay supine.’		

On the other hand, the data of Lithuanian and Latvian imply that the posture construction is not a transitional node between depictives and adverbials in the strict sense, because the latter share encoding strategies, which are not typical of the posture construction, viz. the instrumental and locative cases (the area of identical marking has to be contiguous). Therefore, the posture construction occupies the position, which allows it to link directly to all core types, but which is not positioned between depictives and adverbials.

Finally, the position of the “slice” type can be also supported by the data from other languages. Its link to adverbials is confirmed by many languages including Latvian (in this respect, Lithuanian is not informative because it uses adverbs for two core types: adverbials and resultatives). Estonian data support a direct link between “slice” constructions and resultatives: it encodes them by the translative case, while manner predications and depictives are marked by other means,¹⁰ e. g., (61) and (62).

(61) Estonian

<i>Jaan</i>	<i>keet-is</i>	<i>muna</i>	<i>kõva-ks.</i>
John	cook-PST.3SG	egg.GEN.SG	hard-TRA
‘John hard-boiled the egg.’			

(62) Estonian

<i>Jaan</i>	<i>viiluta-b</i>	<i>liha</i>	<i>(väga)</i>	<i>õhukese-ks.</i>
John	slice-PRS.3SG	meat.GEN	(very)	thin-TRA
‘John slices the meat very thin.’				

¹⁰ However, Estonian uses the translative case to mark “grow up” constructions, as well.

The semantic map presented in Schema 2 is compatible with the data of the Baltic languages: all marking strategies mentioned in Table 2 occupy a contiguous area. In addition, the semantic map has been checked against the data of English, Russian, Estonian, Danish, Icelandic, and Spanish (these data are not provided as they would increase the length of the paper considerably) and has proved to be correct.

5. Conclusions

Depictives, resultatives, and adverbials constitute the core types of secondary predication and are easily delineated in typical cases. However, there is a number of constructions, which cannot be strictly attributed to one of these types due to their ambivalent features. It is proposed that such borderline types occupy a transitional zone between the core types in the semantic space of secondary predication.

The data of the Baltic languages allow to distinguish two borderline types. Posture constructions denote the stance of the participant of an event and are linked directly to all core types of secondary predication. “Grow up” constructions express the property of a participant, which either results from the action denoted by a verb or is simultaneous with the action denoted by a verb. Consequently, the type is positioned between depictives and resultatives.

The data of other languages show that more borderline types can be distinguished. Formally “slice” constructions are identical to adverbials in the Baltic languages, but in other languages they are often expressed by means characteristic of resultatives. Semantically, “slice” constructions are linked directly to both adverbials and resultatives.

The Baltic languages make use of different encoding patterns for the core types of secondary predication. Lithuanian employs the depictive-excluding pattern: it usually marks depictives by agreement, while adverbials and resultatives are mainly encoded by adverbs. Latvian uses the adverbial-excluding pattern: it employs agreement for depictives and resultatives, while adverbials are expressed by adverbs.

The question why the two closely related Baltic languages have different encoding patterns needs a more detailed investigation. More research is also needed in order to establish the status of the verbs Lith. *užaugti*, Lat. *izaugt* ‘to grow up’, which show certain signs of grammaticalization. And finally, the analysis of the data of a larger language sample is also very much required as, first of all, it would specify the position of the borderline types in the semantic map and, secondly, it would presumably allow to distinguish even more borderline types.

Abbreviations

ACC	accusative	NEG	negation
ACT	active	NOM	nominative
ADV	adverb	PASS	passive
DAT	dative	PL	plural
DEF	definite	POSS	possessive
F	feminine	PRF	perfective

FUT	future	PRS	present
GEN	genitive	PRT	preterit
IMPRF	imperfective	PRTC	participle
INF	infinitive	PST	past
INSTR	instrumental	REFL	reflexive
LOC	locative	SG	singular
M	masculine	TRA	translative

Language material

1. DLKT: *Dabartinės lietuvių kalbos tekstynas*. Vytauto Didžiojo universitetas, Kompiuterinės lingvistikos centras. Available: <http://donelaitis.vdu.lt> [last viewed 05.01.2016].
2. OED: *Online etymology dictionary*. Available: <http://www.etymonline.com/> [last viewed 05.01.2016].

References

1. Acedo-Matellán, Víctor. 2012. Adjectival resultatives cross-linguistically: a morphophonological account. *TOC: Proceedings of ConSOLE XVII*. Available: <http://media.leidenuniv.nl/legacy/console17-acedo-matellan.pdf>, 1–25 [last viewed 05.01.2016].
2. Boas, Hans C. 2003. *A Constructional Approach to Resultatives*. California, Stanford: CSLI Publications.
3. Carrier, Jill, Randall, Janet H. 1992. The Argument Structure and Syntactic Structure of Resultatives. *Linguistic Inquiry* 23: 2, 173–234.
4. Croft, William. 1991. *Syntactic categories and grammatical relations: the cognitive organization of information*. Chicago: University of Chicago Press.
5. Čižik-Prokaševa, Veslava. 2010. Depiktyvų žymėjimas lietuvių kalboje [The marking of depictives in Lithuanian]. *Acta Linguistica Lituanica* 62–63, 128–157.
6. Čižik-Prokaševa, Veslava. 2011. Preliminarus lietuvių kalbos depiktyvų ir kitų į situacijos dalyvį orientuotų antrinių predikatyvų semantinis žemėlapis [A tentative semantic map of Lithuanian depictives and other secondary participant-oriented predicates in Lithuanian language]. *Lietuvių kalba* 5. Available: <http://www.lietuviukalba.lt/index.php/lietuviu-kalba/article/view/32/81> [last viewed 05.01.2016].
7. Dowty, David R. 1979. *Word Meaning and Montague Grammar*. Dordrecht, Boston, London: D. Reidel Publishing Company.
8. Geuder, Wilhelm. 2000. *Oriented adverbs. Issues in the Lexical Semantics of Event Adverbs*. Doctoral dissertation. Universität Tübingen.
9. Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago, London: The University of Chicago Press.
10. Halliday, Michael A. K. 1967. Notes on transitivity and theme in English, Part 1. *Journal of Linguistics* 3, 37–81.
11. Haspelmath, Martin. 2000. The geometry of grammatical meaning: Semantic maps and cross-linguistic comparison. *The New Psychology of Language*, vol. 2. Tomasello, Michael (ed.). Mahwah, NJ: Lawrence Erlbaum. Available: www.eva.mpg.de/~haspelmt/SemMaps.pdf, 1–30 [last viewed 17.01.2016].

12. Himmelmann, Nikolaus P., Schultze-Berndt, Eva (eds.). 2005. *Secondary predication and adverbial modification*. Oxford: Oxford University Press.
13. Hoekstra, Teun. 1988. Small clause results. *Lingua* 74, 101–139.
14. Holvoet, Axel. 2003. Laisvieji predikatyvai ir jų sintaksiniai ryšiai [Free predicatives and their syntactic relations]. *Lietuvių kalbos darbai 1: Sintaksinių ryšių tyrimai*. Holvoet, Axel, Judžentis, Artūras (eds.). Vilnius: Lietuvių kalbos institutas, 67–78.
15. Holvoet, Axel. 2008. Secondary predicates in Baltic. *Secondary predicates in Eastern European languages and beyond*. Schroeder, Christoph, Hentschel, Gerd, Boeder, Winfried (eds.). Oldenburg: BIS Verlag, 125–140.
16. Holvoet, Axel, Tamulionienė, Aurelija. 2005. Antriniai predikatyvai [Secondary predicates]. *Lietuvių kalbos darbai 3: Gramatinių funkcijų tyrimai*. Holvoet, Axel, Mikulskas, Rolandas (eds.). Vilnius: Lietuvių kalbos institutas, 117–137.
17. Holvoet, Axel, Semėnienė, Loreta. 2005. Veiksnių ir tiesioginio papildinio sąvokos [The notions of subject and direct object]. *Lietuvių kalbos darbai 3: Gramatinių funkcijų tyrimai*. Holvoet, Axel, Mikulskas, Rolandas (eds.). Vilnius: Lietuvių kalbos institutas, 39–64.
18. Kaufmann, Ingrid, Wunderlich, Dieter. 1998. *Theorie des Lexikons, 109: Cross-linguistic patterns of resultatives*. Düsseldorf: Heinrich Heine Universität, 1–45.
19. Legendre, Géraldine. 1997. Secondary predication and functional projections in French. *Natural Language and Linguistic Theory* 15: 1, 43–87.
20. Levin, Beth, Rappaport Hovav, Malka. 1995. *Unaccusativity: At the Syntax–Lexical Semantics Interface*. Cambridge, Massachusetts, London: The MIT Press.
21. Levinson, Lisa. 2010. Arguments for pseudo-resultative predicates. *Natural Language and Linguistic Theory* 28: 1, 135–182.
22. Loeb-Diehl, Floor. 2005. *The typology of manner expressions*. PhD dissertation. Radboud University Nijmegen.
23. Logina, Santa. 2014. *Sekundārā predikativitāte latviešu un lietuviešu valodā* [Semipredicativity in Latvian and Lithuanian]. Maģistra darbs. Latvijas Universitāte, Rīga.
24. Lokmane, Ilze. 2000. Sekundārā predikativitāte teikumā un tekstā [Secondary predicates in the sentence and text]. *Vārds un tā pētīšanas aspekti*, 4. Liepāja: LiePa, 143–149.
25. Nichols, Joanna. 1978. Secondary predicates. *Berkeley Linguistic Society* 4, 114–127.
26. Nītiņa, Daina, Grigorjevs, Juris (red.). 2013. *Latviešu valodas gramatika* [The Grammar of Latvian Language]. Rīga: LU Latviešu valodas institūts.
27. Rappaport Hovav, Malka, Levin, Beth. 2001. An event structure account on English resultatives. *Language* 77: 4, 766–797.
28. Riaubienė, Benita. 2014. Pozīcijas konstrukcijas: tarp depiktyvų ir rezultatyvų [Posture constructions: between depictives and resultatives]. *Kalbotyra* 66, 99–119.
29. Riaubienė, Benita. 2015. *Resultative secondary predication in European languages*. PhD dissertation. Vilnius University.
30. Riaubienė, Benita. 2016. Resultative secondary predicates in the Baltic languages. *Argument Realization in Baltic*. Holvoet, Axel, Nau, Nicole (eds.). Amsterdam, Philadelphia: John Benjamins Publishing Company, 403–426.

31. Rothstein, Susan. 2003. Secondary predication and aspectual structure. *Modifying Adjuncts*. Lang, Ewald, Maienborn, Claudia, Fabricius-Hansen, Cathrine (eds.). Berlin, New York: Mouton de Gruyter, 553–590.
32. Rothstein, Susan. 2004. *Structuring events: A Study in the Semantics of Lexical Aspect*. Oxford: Blackwell.
33. Schultze-Berndt, Eva, Himmelmann, P. Nikolaus. 2004. Depictive secondary predicates in crosslinguistic perspective. *Linguistic Typology* 8, 59–131.
34. Ulvydas, Kazys (red.). 1976. *Lietuvių kalbos gramatika* [The Grammar of Lithuanian Language], 3 t. Vilnius: Mokslas.
35. Vaičiulytė-Semėnienė, Loreta. 2007. Daiktavardinės *kaip* konstrukcijos kaip analitinis predikatyvų žymėjimo rodiklis [Nominal *kaip* constructions as an analytic marker of predicatives]. *Acta Linguistica Lithuanica* 53, 73–101.
36. Vaičiulytė-Semėnienė, Loreta. 2014. Laisvųjų rezultatyvų raiška lietuvių kalboje [The encoding of secondary resultative predicates in Lithuanian]. *Baltu Filologija* 23: 1, 105–123.
37. Valeckienė, Adelė. 1967. Predikatyvinis pažymynys kaip atskira sakinio dalis [Predicative attribute as a discrete grammatical function]. *Lietuvių kalbotyros klausimai* 9, 97–116.
38. Van der Auwera, Johan, Malchukov, Andrej. 2005. A semantic map for depictive adjectivals. Himmelmann, Nikolaus P., Schultze-Berndt, Eva (eds.). 393–421.
39. Verkerk, Annemarie. 2009a. A Semantic Map of Secondary Predication. *Linguistics in the Netherlands*. Botma, Bert, van Kampen, Jacqueline (eds.). Amsterdam, Philadelphia: John Benjamins Publishing Company, 115–126.
40. Verkerk, Annemarie. 2009b. *Secondary predication in a typological context: The encoding of resultatives, depictives and manner predications and their placement within a conceptual space*. MA thesis, Radboud University Nijmegen.
41. Washio, Ryuichi. 1997. Resultatives, compositionality and language variation. *Journal of East Asian Linguistics* 6, 1–49.
42. Wechsler, Stephen. 1997. Resultative predicates and control. *Proceedings of the 1997 Texas Linguistics Society Conference*. Austin: University of Texas, 307–321.

Kopsavilkums

Rakstā aplūkotas semantiskās un morfosintaktiskās sekundārās predikācijas pazīmes lietuviešu un latviešu valodā. Sekundārās predikācijas tipi, t. i., depiktīvi, rezultatīvi un apstākļi, tiek šķirti pēc to semantikas. Apstākļi ir orientēti uz notikumu, kurš ir vienlaicīgs ar teikuma galveno notikumu. Savukārt depiktīvi un rezultatīvi ir orientēti uz dalībnieku – tie apzīmē notikumu, kurš saistās ar teikuma galveno notikumu caur cēlonisko sakarību. Tomēr ir jāsaprot, ka stingri norobežot šos trīs tipus nav iespējams, jo ir konstrukcijas, kuras pēc to semantikas un morfosintaksēs nav saistāmas tikai ar vienu tipu. Tāpēc tiek piedāvāti jaukti sekundārās predikācijas tipi, kas apvieno depiktīvu, rezultatīvu un apstākļu robežzonas. Rakstā analizētie jauktie tipi ietver pozas konstrukcijas, *augšanas* konstrukcijas un *sagriešanas* konstrukcijas. Lai vizualizētu sakarus starp sekundārās predikācijas pamattipiem un jauktajiem tiem, pētījums balstīts uz semantiskās kartes metodes principiem, sniedzot paplašinātu baltu valodu sekundārās predikācijas semantisko karti tās sākotnējā versijā.