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Combination of past participles functioning as adverbials with main verbs in Lithuanian: Aspect and transitivity¹

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> This paper is aimed at providing some observations about certain constraints which determine how past participles, functioning as adverbials (in semi-predicative usage), combine with main verbs in Lithuanian. In previous studies (Sakurai 2000; 2003) I presented some remarks on the semantic constraints, in particular those looked upon from the angle of aspect, under which past participles, functioning as adverbials, combine with main verbs. This issue has not yet been addressed to date either in traditional Lithuanian grammar (LKG, DLKG) or in other studies about Lithuanian. Here, by adding to this analysis the viewpoint on transitivity, I am going to emphasize the close linkage between aspect and transitivity in this problem: in < state > type predicate sentences, adjectival past participles and main verbs construct one predicate as a single entity where the combinatory possibilities are strictly constrained by the principle of

> semantic consistency in stativity and intransitivity.

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1. INTRODUCTION

Two types of past participles are distinguished in Lithuanian — adjectival participles (*dalyviai*) and adverbial participles, or gerunds (*padalyviai*):

(a) adjectival past participles are declinable according to gender, number, and case, and agree grammatically with the subject. They have active and passive voice. In the active voice, they are divided into past participles and past habitual participles.

(b) adverbial past participles are indeclinable. They have only active voice and no passive voice. The semantic subject is indicated by the dative case.

As a rule, all past participles in Lithuanian have the property of functioning as adverbials. However, as the frequency of usage of past habitual participles of type (a) in adverbial function is very low, they will be left out of consideration in this paper. Also, compared to their active forms, the passive forms of past participles are rarely used in this function.

Depending on the type of time relation they have with main verbs, or predicates, past participles functioning as adverbials have been distinguished so far in Lithuanian studies as possessing the following property: (i) past participles functioning as adverbials indicate relative < anteriority > in their relation to the predicate verb.

In this regard, Sakurai (2003) refers to the Russian language for a comparative analysis in an attempt to make the following affirmations:

(ii) past participles functioning as adverbials may indicate not only < anteriority > in relation to the predicate verb but also relative time < simultaneity >. The temporal meanings and functions of these past participles are built and determined by the whole of the sentence;

(iii) not only in their forms, but also in their meanings, Lithuanian adjectival past participles show a stronger dependence on the predicate verb as compared both to Russian adverbial past participles with similar properties and to Lithuanian adverbial past participles.

On the other hand, with regard to transitivity, Sakurai (2003) follows traditional grammar when giving definitions of 'transitive' and 'intransitive' verbs: a verb is defined as 'transitive' if it requires a direct object (typically in the accusative case) or 'intransitive' if it does not, with neutral verbs not being distinguished. Therefore, in order to give a proper explanation of the

constraints on the combination of past participles functioning as adverbials with main verbs, it is important (1) to approach transitivity not only as a structure of grammatical participants but as a semantic structure as well; (2) instead of drawing a clear-cut line between transitive and intransitive verbs, to aim at viewing them as presenting a matter of continuum/scale, which defines the degree of transitivity. In this regard, by following Hopper & Thompson's (1980) and Tsunoda's (1985) approach, I introduce the idea of the 'prototype' when dealing with the issue of transitivity. The semantic definition of prototypical transitive verbs is adopted from Tsunoda (1985: 387) as follows: 'those verbs which describe an action that not only impinges on the patient but necessarily creates a change in it' (e.g. užmušti, nužudyti 'kill', sulaužyti 'break', sušaldyti 'freeze'). Thus, prototypical transitive predicates are defined as 'those predicates which have 2 or more participants, agent and object, and describe an action that not only impinges on the object but necessarily creates a change in it'. Even if there is a grammatical structure of a verb requiring a transitive object, the verb (or verb phrase) will be considered as non-prototypical if the condition stated above has not been met (e.g. turėti 'have', mylėti 'love', žinoti 'know', žiūrėti 'look (at)', prarasti samonę 'loose consciousness').

2. ADVERBIAL FUNCTION OF PARTICIPLES

It is assumed in this study that the basic adverbial function of participles is 'to express the secondary situation that accompanies the main situation expressed by the main verb (or finite verb predicate)', i. e., to act in the func-

tion of secondary predicates in a sentence.

In the system of Lithuanian past participles, adjectival participles functioning as adverbials have the same subject (in the nominative case) as the main verb of the sentence (same subject use) and agree with that subject both in case and in number and gender (see ex. (1)). On the other hand, as has been stated above, adverbial participles are indeclinable. They do not have the same subject as the main verb (different-subject use). The semantic subject is used in the dative case² (see ex. (2)).

² The abbreviations in this paper are used in the following way: ACC accusative; ACT active; ADJ. adjectival; ADV. adverbial; DAT dative; F feminine; GEN genitive; (1) Perskaites knygą, having finished reading-ACT.ADJ.PP-M-SG-NOM the book-ACC pasivaikščioti. išėjo jis he-3M-SG-NOM went out-V-PAST-3 for a walk-INF 'Having finished reading the book, he went out for a walk.' (2) Man perskaičius knygą, jis I-DAT finished reading-ADV.PP the book-ACC he-3M-SG-NOM tuojau (pat) atėjo jos pasiskolinti. immediately came in-V-PAST-3 it-GEN to borrow-INF 'When I finished reading the book, he immediately came in to borrow it.'

3. VERBAL ASPECT³ IN LITHUANIAN

Before making further observations, we first need to briefly touch upon the aspectual properties of Lithuanian verbs. It is assumed that a system of verbal aspect that employs prefixes and suffixes to serve as markers of aspect has developed in Lithuanian in a similar way as in Russian and in other Slavic languages. However, despite the similarities in the forms of verbs, there are marked differences between Lithuanian and Russian that can be formulated as follows⁴.

INF infinitive; IPFV. imperfective; M masculine; NOM nominative; O object; PASS passive; PFV. perfective; PL plural; PP past participle; PRES present; PRES.P present participle; S subject; SG singular; V verb. The example sentences have been checked by native informants. The symbols (?), (??), (*) indicate the evaluation of the sentences by the informants as being "unnatural", "very unnatural", or "grammatically incorrect".

³ I use the term 'aspect' in a wider sense, which covers not only grammatical but also lexical semantic-notional categories. I hold on to the most general definition of 'perfective' as a reference to a situation without regard to internal temporal structure, viewing a situation in its entirety, as a single whole and 'imperfective' – as a reference to the internal temporal structure of a situation, viewing a situation as part of its entirety (see Comrie 1976). In this paper I use the abbreviations < PFV. > and <IPFV. > to refer to the semantic definition of perfective and imperfective, whereas I use the terms 'perfective verb' and 'imperfective verb' to refer to the aspectual pair of verbs in Russian (or other Slavic languages). This is largely in order to avoid confusion about the semantic and the grammatical-morphological categories.

⁴ For more detailed observations see in particular Dambriūnas (1960), Galnaitytė

In Russian, verbs basically form aspectual pairs of perfective and imperfective, which are regarded as sufficiently matching the definition of the <PFV./IPFV.> opposition found in the general theory of aspect (general aspectology). In this regard it should be said of Lithuanian that when prefixes and suffixes, which carry the feature of aspect, are attached to a verb, in many cases its lexical meaning is changed and a group of derivative verbs with a fixed semantic feature is formed. Without forming a complete <PFV./ IPFV.> opposition, like in Russian, verbal aspect in Lithuanian takes position in between a lexical-semantic category and a grammatical category⁵.

In my opinion, as I have already pointed out (Sakurai 1997, 1999, 2002), in many cases in Lithuanian, the aspectual pairs which are traditionally interpreted as 'perfective/imperfective', should rather be defined as pairs of 'telic/atelic', or 'bounded/nonbounded'⁶. That is the reason why the <PFV./

(1963), Safarewicz (1967), Musteikis (1972), Paulauskienė (1979), Geniušiene (1990), Wiemer (2001) and Holvoet & Čižik (2004).

⁵ I regard that aspect is also a matter of continuum rather than a clear-cut dichotomy, and that aspectual pairs of verbs can be ranked on the aspectual scale. From this point of view, verbal aspect in Lithuanian cannot be classified as typical Aktionsart, as it includes both pairs that have more high-aspectual features and pairs that have fewer high-aspectual features. I will discuss this problem in other papers, as it is beyond the scope of the present paper.

6 Dahl (1981) provided an important contribution on the theory of aspect by introducing the definition of 'telic (bounded) verb' as a verb conveying in itself the notion of boundaries and revealing the situation as moving towards those boundaries; while defining the 'atelic (nonbounded) verb' as a verb not conveying such notion and revealing the situation that doesn't have any boundaries. In our terminology, the terms of 'telic/atelic' are used in a wider sense: telic verbs may denote a situation which is bounded at the start (ingressive, i.e. inchoative), at the end (terminative), or both at the start and at the end (deliminative or punctual); atelic verbs denote a situation which is open at both sides (See Lehman 1994). The terms telic/atelic are used similarly as Russian terms predel'nyj/nepredel'nyj here. Note that according to this terminology non-prefixed Lithuanian verbs such as skattyti (knygq) 'read (a book)', rašyti (laišką) 'write (a letter)' are regarded as atelic, because they do not mean either a terminative process or an event, which should be expressed by prefixed telic verbs such as per-skaityti 'read through, finish reading', pa-rašyti 'write, finish writing'. Thus, I consider that Lithuanian verbs which are traditionally interpreted as 'neutral' or 'biaspectual' and which express both perfective and imperfective aspect should be regarded as telic verbs. Among them, prefixed verbs such as at-eiti 'come', iš-važiuoti 'leave (by transport)', už-mesti 'throw over' are formally marked members, i.e. their telic meaning is added by prefixes, while non-prefixed (simple) verbs such

IPFV.> meanings and functions are more obvious in the tense-aspect system in Lithuanian, where the tense forms have a larger functional load. That is, the semantic distinction of < PFV./IPFV.> usually becomes evident just through the combination of aspectual meanings of verbs and their tense forms⁷.

4. CLASSIFICATION OF BASIC TYPES OF PREDICATES ACCORDING TO THEIR ASPECTUAL MEANING

On the premise that was stated above, in this study the classification of predicates is based on their aspectual meaning, with three basic types of predicates, i.e. <PFV. action>, <IPFV. action> and <state> being distinguished. The example sentences to illustrate the observations stated here are mostly used in the past tense because it best reveals the differences that exist in the aspectual meaning of verbs.

<PFV. action > type predicate

(3)	Tėvas	tuojau (pat)	{atsigulė /			
	father-M-SG-NOM	immediately	lay down /			
	atsisėdo ant sofos /	perska	aitė knygą /			
	sat down on the sof	a / finishe	ed reading the book /			
	atidarė duris}.					
	opened the door-V-PAST-3 (telic verb)					
	'Father immediately reading the book/o	45 - 66	oor}'.			
(4)	Knyga	tuojau (pe	oat) buvo			
20 M	the book-F-SG-NOM	1 immedia	ately was-be-PAST-3			

the book-F-SG-NOM immediately was-be-PAST-3 perskaityta Algio. read until the end-PASS.ADJ.PP-F-SG-NOM (telic verb) by Algis--GEN 'The book was immediately read until the end by Algis.'

as baigti 'finish', rasti 'find', gauti 'get', mirti 'die' are unmarked members, i.e. they are inherently telic verbs.

⁷ Main tense forms in Lithuanian are basic simple forms of present, past, past frequentative, i. e. past habitual, and future. Also, there are traditionally called compound forms of each tense in Lithuanian, i.e. analytic forms, *be*-verb *būti* + adjectival participle in nominative case.

<IPFV. action > type predicate

- (5) Ji lėtai {bėgo / skaitė knygą / she-3F-SG-NOM slowly was running / was reading a book / rovė žolę}.
 was pulling the grass-V-PAST-3 (atelic verb)
 'She {was slowly running / was slowly reading a book / was slowly pulling the grass}.'
- (6) Knyga lėtai buvo the book-F-SG-NOM slowly was-be-PAST-3 skaitoma (being) read-PASS.ADJ.PRES.P-F-SG-NOM (atelic verb) by Algis--GEN

'The book was slowly being read by Algis.'

<State> type predicate

- (7) Berniukas visą laiką {gulėjo / the boy-M-SG-NOM all the time lay (was lying) / sėdėjo ant sofos / turėjo laivelį} was sitting on the sofa / had the toy ship-V-PAST-3 (atelic verb) 'The boy {lay (was lying) / was sitting on the sofa / had the toy ship} all the time.'
- (8) Durys visą laiką buvo
 the door-F-PL-NOM all the time was-be-PAST-3
 atidarytos.

opened-PASS.ADJ.PP-F-PL-NOM (telic verb) 'The door **was opened** (**left open**) all the time.'

In my view, this kind of classification of basic types of predicates and the transitivity of verbs are related in the following way. As is shown in ex. (3) and (5), in the active voice, a verb that represents an < action > type predicate can be either intransitive, non-prototypical transitive, or prototypical transitive. Yet, as can be seen in ex. (7), a verb that represents a < state > type predicate can be either intransitive or non-prototypical transitive with a low degree of transitivity (behaving more like intransitive), yet it cannot be prototypical transitive. Now, in the passive voice, a verb that represents an < action > type predicate can also be non-prototypical transitive as in ex.

(4) and (6), yet it can only be prototypical transitive with a < state > type predicate, as shown in ex. (8).

5. WORD ORDER BETWEEN ADVERBIAL PAST PARTICIPLES AND MAIN VERBS⁸

When the connection between past participles and main verbs is brought into the focus of consideration, it becomes clear that the pattern of the predominant word order changes depending on the type of predicate used. In the following paragraphs (a) and (b) the patterns of word order will be summed up in connection with the relative time reference of past participles. (a) Adjectival past participles:

(a-i) in <PFV. action > type predicate sentences, these participles refer to <anteriority> of the secondary situation. As is shown in examples (9a, b), the past participle usually stands before the main verb (PP-V), while the reverse order (V-PP) is unnatural in a minimal context, unless used in a particular context.

(a-ii) in <IPFV. action > type predicate sentences, these participles can refer both to <anteriority> of the preceding secondary situation and to <simultaneity > of the resultative state. As in examples (10a, a', b, b'), both PP-V and V-PP are natural.

(a-iii) in < state > type predicate sentences, these participles refer to < simultaneity > of the resultative state of the preceding secondary situation. As in examples (11a, b), the past participle usually comes after the main verb (V-PP)9. The reverse order (PP-V) is unnatural in a minimal context, unless used in a particular context.

⁸ Basic word order in Lithuanian is SVO, modifier-modified. Usually, participle functioning as an attributive goes before the noun in the same way as adjective does, whereas participle functioning as a predicate follows the subject. Now, the participles under consideration here, 1. e., past participles functioning as adverbials, can either precede or follow the main verb. Moreover, when used together with subordinate words or when preceding the main verb, these participles are often separated by intonation or a pause (by a comma in a written text) and become more independent. Now, according to the orthography, in single occurrence cases when past participles do not have any subordinate words, a comma is not used.

⁹ The combination of an adjectival past participle functioning as an adverbial with a < state > type predicate is similar in structure to the analytic form (be-verb + ad(b) Adverbial past participles:

(b-i) in <PFV. action > type predicate sentences, these participles refer to <anteriority > of the secondary situation, as is the case with adjectival past participles. As in examples (12a, b), normally they precede the main verb (PP-V). The reverse word order (V-PP) is unnatural in a minimal context, unless used in a particular context.

(b-ii) in <IPFV. action > type predicate sentences, these participles refer to both < anteriority > of the preceding secondary situation and < simultaneity > of the resultative state, as is the case with adjectival past participles. As is shown in examples (13a, b), normally they stand before the main verb (PP-V). The reverse word order (V-PP) is unnatural in a minimal context, unless used in a particular context.

(b-iii) in <state> type predicate sentences, these participles refer to <simultaneity> of the secondary situation. Contrary to the case with adjectival past participles, this type of secondary situation usually coincides with the stative main situation and does not imply any <anteriority>. As is seen in examples (14a, a', b, b') they always stand before the main verb (PP-V). The reverse word order (V-PP) is grammatically incorrect.

(9) a. *Tévas* grįžęs father-M-SG-NOM having come back-ACT.ADJ.PP-M-SG-NOM iškart atsigulė. (PP-V) at once lay down-V-PAST-3 'Having come back, father lay down at once.'
b. Užgesinęs lempą, having switched off-ACT.ADJ.PP-M-SG-NOM the lamp-ACC

jis užmigo. (PP-V)

jectival past participle in nominative case) which has a meaning of so-called stative perfect, or resultative (see Geniušienė & Nedjalkov 1988).

cf.) a. Ji ilgai buvo praradusi she-3F-SG-NOM for a long time had lost-be-PAST-3+ACT.ADJ.PP-F-SG-NOM sąmonę.

consciousness-ACC

'She was unconscious (lit. had lost consciousness) for a long time.'

b. Motina nuo ryto [yra] šiltai apsirengusi. mother-F-SG-NOM since morning has warmly dressed-herself-be-PRES-3 + + ACT.ADJ.PP-F-SG-NOM

'Mother has been dressed in warm clothes (lit. has warmly dressed-herself) since morning.'

he-3M-SG-NOM fell asleep-V-PAST-3 'Having switched off the lamp, he fell asleep'. (10) a. *Ji* nusigręžusi she-3F-SG-NOM having turned away-ACT.ADJ.PP-F-SG-NOM rovė žolę. (PP-V) was pulling-V-PAST-3 the grass-ACC a'. Ji rovė žolę she-3F-SG-NOM was pulling-V-PAST-3 the grass-ACC nusigręžusi. (V-PP) having turned away-ACT.ADJ.PP-F-SG-NOM 'With her back turned (lit. Having turned away), she was pulling the grass.' b. Sūnus, prisileides the son-M-SG-NOM having filled-ACT.ADJ.PP-M-SG-NOM dubeni vandens, žaidė the bowl-ACC with water-GEN was playing-V-PAST-3 su laiveliais. (PP-V) with toy ships b'. Sūnus žaidė su laiveliais the son-M-SG-NOM was playing-V-PAST-3 with toy ships prisileides vandens. (V-PP) dubeni having filled-ACT.ADJ.PP- the bowl-ACC with water-GEN -M-SG-NOM 'Having filled the bowl with water, the son was playing with toy ships.'

(11) a. Berniukas sėdėjo the boy-M-SG-NOM was sitting-V-PAST-3 susigūžęs. (V-PP) having crouched-ACT.ADJ.PP-M-SG-NOM 'The boy was sitting crouching (lit. having crouched).' b. Motina gulėjo lovoje mother-F-SG-NOM was lying-V-PAST-3 in bed šiltai apsirengusi. (V-PP) having dressed-herself-ACT.ADJ.PP-F-SG-NOM warmly 'Mother was lying in bed dressed in warm clothes (lit. having warmly dressed-herself).'

(12) a.	Broliui	grįžus,	jis	iškart
	his brother-DAT atsigulė. (PP-V)	returned-ADV.P	P he-3M-SG-NOM	at once
	lay down-V-PAS	T-3		
	'When his broth	er returned , he a	t once lay down.'	
b.	Balsui	pasigirdus,	ji	
	the voice-DAT stabtelėjo. (PP-V stopped-V-PAST)	V.PP she-3F-SG-NG	DM
	'When the voice	was heard, she	stopped.'	
(13) a.	Jonui d	ntėjus, r	nes	
	Jonas-DAT d	ame-ADV.PP	ve-1PL-NOM	
	visi džiaugėmės.	(PP-V)		
	all rejoiced-V-P	AST-1PL		
	'When Jonas ca	me, we all rejoice	ed.'	
b.	Žinioms	pasibaigus,	vaikai	
	the news-DAT	ended-ADV.PP	the children-M-PL-N	NOM
	ėjo	miegoti. (P	P-V)	
	were going-V-P.	AST-3 to sleep-IN	VF.'	
	'When the news	ended, the child	ren were going to slo	eep.'
(14) a.	Žinioms	pasibaigus,	motina	
	the news-DAT	ended-ADV.PP	mother-F-SG-NOM	
	gulėjo	lovoje. (PP	-V)	
	was lains V DAG			

a'.	was lying-V-PAST *Motina	gulėjo	lovoje
	mother-F-SG-NON žinioms	4 was lying-V-PAS pasibaigus. (V-PP)	
	the news-DAT	ended-ADV.PP nded, mother was ly	
	Balsui I	oasigirdus,	ji
	the voice-DAT v stovėjo	was heard-ADV.PP gatvėje. (PP-	
	was standing-V-PA	AST-3 on the stree	t
b'.	* <i>Ji</i> she-3F-SG-NOM	stovėjo was standing-V-PA	<i>gatvėje</i> ST-3 on the stree

balsui pasigirdus. (V-PP) the voice-DAT was heard-ADV.PP 'When the voice **was heard**, she was standing on the street.'

6. LEXICAL-SEMANTIC CONSTRAINTS ON PAST PARTICIPLES FUNCTIONING AS ADVERBIALS

6.1. Adjectival past participles

The combination of adjectival past participles with main verbs is subject to lexical-semantic constraints, which differ depending on the type of a predicate. As is shown in examples (15, 16, 17), those constraints are loosest in $\langle PFV. action \rangle$ type predicate sentences and tightest in $\langle state \rangle$ type predicate sentences¹⁰.

(15) a. Užgesinęs lempą, jis {užmigo / atsigulė ant sofos / *klausėsi muzikos}. (PP-V)

> 'Having switched off the lamp, he {fell asleep / lay down on the sofa < PFV. action > / *was listening to music < IPFV. ac tion > }.'-

- b. Jis {*miegojo / *gulėjo ant sofos} užgesinęs lempą. (V-PP) 'Having switched off the lamp, he {*was sleeping / *was lying on the sofa < state > }.'
- (16) a. Motina, uždariusi langą, {atsisėdo / ??sėdosi} ant sofos. (PP-V)
 'Mother, having closed the window, {sat down < PFV. action > / ??was about to sit down < IPFV. action > } on the sofa.'
 b. Motina {*miegojo / *sėdėjo ant sofos} uždariusi langą. (PP-V)

¹⁰ This may be not only an intra-linguistic phenomenon in Lithuanian, but also a cross-linguistic tendency. For example, the English, Russian, or Japanese correspondents of ex. (15a) are considered to be more natural than ex. (15b).

- cf) (15a) English. Having switched off the lamp, he fell asleep. Russian. Potušiv lampu, on zasnul. Japanese. Rampu o keshite, kare wa nemurikonda.
 - (15b) English. Having switched off the lamp, he was sleeping. Russian. On spal, potušiv lampu. Japanese. Rampu o keshite, kare wa nemutteita.

'Mother {*was sleeping / *was sitting on the sofa <state>}, having closed the window.'

(17) a. {Užsimerkęs / sunėręs rankas ant krūtinės / praradęs sąmonę / viską suvalgęs / perskaitęs knygą / atsivertęs knygą}, jis atsigulė ant lovos. (PP-V)

> '{Having closed his eyes / having folded his arms on his chest / having lost consciousness / having eaten up everything / having finished reading the book / having opened the book}, he lay down on the sofa < PFV. action >.'

b. Jis gulėjo lovoje {užsimerkęs / sunėręs rankas ant krūtinės / prarades samone / ??viska suvalges / *perskaites knyga / *atsivertes knyga}. (V-PP)

'He was lying in bed < state > {with his eyes closed (lit. having closed his eyes) / with his arms folded on his chest (lit. having folded his arms on his chest) / unconscious (lit. having lost consciousness) / ??having eaten up everything / *having finished reading the book / *having opened the book}.

Following below is an analysis of lexical-semantic constraints that adjectival past participles are subject to. It will be done in the following order: section 6.1.1 deals with < state > predicate sentences, section 6.1.2 with < IPFV. action > predicate sentences, and section 6.1.3 with < PFV. action > predicate sentences.

6.1.1. <State> predicate sentences

In <state> predicate sentences, co-occurring adjectival participles functioning as adverbials can be formed only from telic verbs. As a rule, adjectival past participles in the active voice cannot be formed from prototypical transitive verbs. They can be formed only from intransitive or non-prototypical transitive verbs and are restricted only to those that have lexical-semantic meanings as illustrated in the following examples I and II:

I. formed from intransitive verbs: some kind of change in the subject (agent), e.g. changes in the condition of the human body or a person's psychological state, the emergence or disappearance of things, changes in outward appearance or in position or placement, etc. (ex. (18 a, b)).

II. formed from transitive verbs: some kind of action that creates a change in the things that accompany or are adjunct to the subject (agent), e.g. the acquirement or loss of (real or abstract) things, some action involving the agent's body parts or other inalienable possessions which cannot be separated or handed over, some kind of action like putting on or taking off clothes, etc. (ex. (19a, b)).

Even if formed from prototypical transitive verbs, they express an action directed toward the subject (agent) itself. That means there is only one participant, thus, the level of transitivity is low. Both with intransitive and transitive verbs, examples of participles formed from reflexive verbs with the reflexive suffix *-si-* are very noticeable¹¹. On the other hand, adjectival past participles in the passive voice are made only from prototypical transitive verbs (ex. (20a, b)). That is, in *<* state *>* predicate sentences, adjectival past participles functioning as adverbials have to express some result or effect that comes from a bounded action leading to some kind of change and that has to last as a resultant condition in the domain of the subject.

(18) a.	Berniukas	stovėjo		
	the boy-M-SG-NOM	was standing-V-PAST-3		
	suglumęs. (V-PP)			
	having become confused-ACT.ADJ.PP-M-SG-NOM			
	'The boy was standing confused).'	g bewildered (lit. having become		

¹¹ For example, in examples (15) and (16), where past participles are derived from certain types of reflexive verbs, their combination with <state> type predicates may become possible. This type of transitive verbs are reflexive verbs with the reflexive suffix -si(s)- that denotes the meaning 'for oneself' proper to the dative case and are referred to by the term 'reflexive-benefactive verbs' by Geniušienė (1987), Geniušiene & Nedjalkov (1988). In this case too, the order of V-PP is maintained. cf.) a. Jis gulėjo ant sofos he-3M-SG-NOM was lying-V-PAST-3 on the sofa už-si-gesinęs lempq. (V-PP) having switched off-for himself-ACT.ADJ.PP-M-SG-NOM the lamp-ACC 'Having switched off the lamp for himself, he was lying on the sofa.' b. Motina sėdėjo ant sofos mother-F-SG-NOM was sitting-V-PAST-3 on the sofa už-si-dariusi langą. (V-PP)

having closed-for herself-ACT.ADJ.PP-F-SG-NOM the window-ACC 'Having closed the window for herself, mother was sitting on the sofa.'

b.	Jis	stovėjo			
	he-3M-SG-NOM <i>nutolęs</i>	was standing-V-PAS	ST-3		
	having moved a nuo kranto. (V-PF	way-ACT.ADJ.PP-M- P)	SG-NOM		
	from the shore				
	'He was standing from the shore.'	further away (lit. h	aving moved away)		
(19) a.	Berniukas	stovėjo			
	the boy-M-SG-NC		V-PAST-3		
	apsirenges		paltą. (V-PP)		
		I-SG-NOM a coat-ACC			
			having dressed-himself		
b.	Jis	sėdi	tvoros viršuje		
	<i>nuleidęs</i> having hung-ACT 'He is sitting on t	is sitting-V-PAST-3 .ADJ.PP-M-SG-NOM op of a fence with hi	on top of a fence <i>kojas.</i> (V-PP) legs-ACC s legs dangling (lit. hav-		
(20) a	ing hung legs).'				
(20) a.	Dvi mergaitės two girls-F-PL-NC	sėdėjo DM were sitting-V-	PAST-3		
	išpuoštos,		kaip lėlės. (V-PP)		
	and the second se	ADJ.PP-F-PL-NOM	like dolls		
		itting dressed up like			
121	0	o ar cooca up mixe	dono.		

b. Jis stovėjo he-3M-SG-NOM was standing-V-PAST-3 apimtas siaubo. (V-PP) gripped-PASS.ADJ.PP-M-SG-NOM by fear-GEN 'He was standing gripped by fear.'

The examples below show the types of co-occurring aspectual adverbials of duration, or continuity:

(21) a. *Ji ILGAI gulėjo* she-3F-SG-NOM for a long time was lying-V-PAST-3 *praradusi sąmonę*. (V-PP) having lost-ACT.ADJ.PP-F-SG-NOM consciousness-ACC 'She was lying FOR A LONG TIME **unconscious** (lit. **having lost consciousness**).'

b. *Motina NUO RYTO* guli lovoje mother-F-SG-NOM since morning is lying-V-PAST-3 in bed *šiltai apsirengusi.* (V-PP) warmly having dressed-herself-ACT.ADJ.PP-F-SG-NOM 'Mother is lying in bed SINCE MORNING dressed in warm clothes (lit. having warmly dressed-herself).'

6.1.2. <IPFV. action> predicate sentences

In case of <IPFV. action > type predicate sentences, co-occurring adjectival past participles functioning as adverbials are formed only from telic verbs. Even though their lexical-semantic constraints are somewhat looser than in <state > type predicate sentences, in general they have in many cases similar meanings as described in paragraphs I and II of section 6.1.1 in connection with <state > predicate sentences. Following below in (22a, b) are example sentences with adjectival past participles in the active voice formed from intransitive verbs, and in (23a, b) from transitive verbs. (24a, b) are example sentences with adjectival past participles in the passive voice.

(22) a. Padavėja	pasistiebusi
the waitress-F-SG-NOM	having stood on tiptoe-ACT.ADJ.PP-F-
	-SG-NOM
servetėle čluostė	is wide (DD 10)

suusie jo velaą. (PP-V) with a napkin was wiping-V-PAST-3 his face-ACC 'Standing (lit. Having stood) on tiptoe, the waitress was wiping his face with a napkin.' b. Susimastes, jis having become lost in thoughthe-3M-SG-NOM ACT.ADJ.PP-M-SG-NOM glostė vaikui galvą. (PP-V) was stroking-V-PAST-3 child-DAT head-ACC 'Thoughtfully (lit. Having become lost in thought), he was

stroking the child's head.'

bėgo (23) a. Jis was running-V-PAST-3 he-3M-SG-NOM uodegą. (V-PP) iškėlęs having raised up-ACT.ADJ.PP-M-SG-NOM his tail-ACC 'He was running with his tail raised up (lit. having raised up his tail).' gatve b. Ji ėjo she-3F-SG-NOM was walking down-V-PAST-3 the street kumštyje sugniaužusi in her fist having clenched-ACT.ADJ.PP-F-SG-NOM popierėlį. (V-PP) a small piece of paper-ACC 'She was walking down the street clenching (lit. having clenched) in her fist a small piece of paper.' nuo pat ryto (24) a. Ijungtas having been turned on-PASS.ADJ.PP-M-SG-NOM since morning skleidė radijas was emitting-V-PAST-3 the radio-M-SG-NOM keistus garsus. (PP-V) strange sounds 'Having been turned on since morning, the radio was emitting strange sounds.' drebėjo b. Jos burna was quivering-V-PAST-3 her mouth-F-SG-NOM io kita ranka. (V-PP)

užspausta pressed tightly-PASS.ADJ.PP-M-SG-NOM under his hand 'Her mouth was quivering **pressed tightly** under his hand.'

The examples below show the types of co-occurring aspectual adverbials of duration, or continuity:

(25) a. Mergina ILGAI Žiūrėjo the young woman-F-SG-NOM for a long time was staring-V--PAST-3

> *į ją išsigandusi*. (V-PP) at her having frightened-herself-ACT.ADJ.PP-F-SG-NOM

'The young woman was staring at her FOR A LONG TIME frightened (lit. having_frightened-herself).'

b. Nuo ryto	užsiglaudęs	šešėlyje
since morning	having hidden-himself-	in the shadow
	-ACT.ADJ.PP-M-SG-NOM	
jis	laukė	traukinio. (PP-V)
he-3M-SG-NOM	was waiting for-V-PAST-3	the train-GEN
'Hiding (lit. Hay	ving hidden-himself) in the	e shadow since morn-
ING, he was waiti	ng for the train.'	

6.1.3. < PFV. action > predicate sentences

In case of <PFV. action > type predicate sentences lexical-semantic constraints are looser than in all other cases. To begin with, the fact that adjectival past participles functioning as adverbials can be formed from atelic verbs makes these sentences very different from <state > type predicate sentences. Further, while they can be formed from prototypical transitive verbs in the active voice, they can also be formed from non-prototypical transitive verbs in the passive voice. However, the condition should be met that the contents expressed by past participles and main verbs have some kind of logical link and have no split, or gap, in time. Following below are example sentences with adjectival past participles in the active voice formed from intransitive verbs (26a, b) and transitive verbs (27a, b). Examples (28a, b) are sentences with adjectival past participles in passive voice.

(26) a. Zmogus, staiga įsibėgėjęs, the man-M-SG-NOM unexpectedly having dashed--ACT.ADJ.PP-M-SG-NOM trenkė galvą į sieną. (PP-V) slammed-V-PAST-3 head-ACC against the wall 'Dashing off (lit. Having dashed) unexpectedly, the man slammed his head against the wall.' b. Ejęs per beržynėlį having walked-ACT.ADJ.PP-M-SG-NOM in the grove of birch trees

	dvi valandas, jis		staiga	nusimetė
	for two hours he-3	M-SG-NOM	suddenly	tore off-V-PAST-3
	kaukę. (PP-V)			
	the mask-ACC			
	'Having walked in suddenly tore off th		of birch tre	es for two hours, he
(27) a.	Geografas,	at	tsivertęs	
	the geographer-M-S		aving opene G-NOM	d-ACT.ADJ.PP-M-
	užrašų knygą,	pasidrožė		pieštuką. (PP-V)
	the notebook-ACC	sharpened	-V-PAST-3	the pencil-ACC
	'The geographer, h pencil.'	aving open	ed the notel	book, sharpened the
b.	Pamatęs		S	enutę,
	having seen-ACT.A	DJ.PP-M-SG	-NOM t	he old lady-ACC
	jis nubėgo			jai padėti. (PP-V)
	he-3M-SG-NOM	dashed out	-V-PAST-3	to help her
	'When he saw (lit. to help her.'			lady, he dashed out
(28) a.	Šuo,	stipriai n	nuštas	
		l strongly b utraukęs	eaten-PASS	ADJ.PP-M-SG-NOM virvę,
		naving broke M-SG-NOM	en-ACT.ADJ.	PP- the string-ACC
	Terrorises Torrises			

pabėgo. (PP-V) ran away-V-PAST-3

lit. 'The dog, strongly **beaten** by the child, having broken the string, ran away.'

b. *Apgautas* pardavėjos, cheated-PASS.ADJ.PP-M-SG-NOM by a saleswoman-GEN *jis parašė skundą*. (PP-V) he-3M-SG-NOM wrote-V-PAST-3 a complaint-ACC '**Cheated** by a saleswoman, he wrote a complaint.'

When these participles are formed from telic verbs, the co-occurring aspectual adverbials usually express punctual time (ex. (29)). When they are formed from atelic verbs, the co-occurring aspectual adverbials are those of the duration or continuity type, whereas the main verbs can be used with co-occurring adverbial words expressing punctual time (ex. (30)).

(29)	Pamąstęs		AKIMIRKĄ,			
	having though	-ACT.ADJ.PP-M-SG-NOM	for a split second			
	jis	atsakė. (PP-V)				
	he-3M-SG-NOM	I answered-V-PAST-3				
	'After thinking the answer.'	g (lit. Having thought) FOR	A SPLIT SECOND, he gave			
(30) a.		žygiavę	per smėlį,			
	for a long time	having walked-ACT.ADJ.P -M-PL-NOM	*			
	jie PAGALIAU PO PENKIŲ VALANDŲ					
	they-3M-PL-NOM finally after five hours atrado kelia. (PP-V)					
	found-V-PAST-3 the way-ACC					
		ed FOR A LONG TIME ON the sa	and, they FINALLY AFTER			
b.	Νυο κγτο	ėjęs,	jis			
		having walked-ACT.ADJ.I -M-SG-NOM				
	priėjo trobelę	TREČIA VALANDA. (PP-V)				
	reached-V-PAST-3 a wooden cabin-ACC at three					
		d since morning , he reach				

6.2. Adverbial past participles

Both from the standpoint of aspect and transitivity, the combination of adverbial past participles with main verbs is not subject to the constraints observed with adjectival past participles (refer to examples (2), (12a, b), (13a, b), (14a, a', b, b')). Moreover, in contrast to adjectival past participles, adverbial past participles can have co-occurring adverbials expressing punctual time even in cases of < state > predicate.

(31) a.	Jam	atskridus	LYGIAI TREČIĄ VALANDĄ,
	he-DAT	arrived by plane-ADV.PP	at three o'clock sharp

jo tėvas buvo oro uoste. (PP-V) his father-M-SG-NOM was-V-PAST-3 at the airport. 'When he **arrived** by plane AT THREE O'CLOCK SHARP, his father was at the airport.'

b. *PO PENKIŲ VALANDŲ STAIGA* **sutemus**, after five hours suddenly the twilight fell-ADV.PP *mes dar buvome miške*. (PP-V) we-1PL-NOM still were-V-PAST-1PL in the forest 'When **the twilight fell** suddenly AFTER FIVE HOURS, we were still in the forest.'

7. SUMMARY AND CONCLUSIONS

In the present paper I have attempted to prove that:

(i) the combination of past participles functioning as adverbials with main verbs is subject to certain constraints which depend on various conditions contained in the semantic structure of the sentence, where aspect and transitivity play a central role.

(ii) in <state> type predicate sentences, adjectival past participles and main verbs construct one predicate as a single entity where the combinatory possibilities are most strictly constrained by the principle of semantic consistency in stativity and intransitivity. Meanwhile, in <PFV. action> type predicate sentences, the adjectival past participles form another, more independent predicate in addition to that of the main verb, and the semantic constraints are most loose. <IPFV. action> type predicate sentences take the position in between the other two types of predicate sentences summarized above.

(iii) in the case of adverbial past participles, the constraints that are observed with adjectival past participles do not apply in their combination with main verbs, neither from the perspective of aspect nor from that of transitivity.

The observations in this paper are summarized in Table 1 below. ('+' means that the formation is possible; '–' means that the formation is impossible).

Table 1: The semantic dependency of past participles functioning as adverbials on main verbs in Lithuanian

dependency:				
	Adjec (act	Adverbial past participles		
	(s	ame-subject use)	(different-subject use)
Types of predicates	<state></state>	<ipfv. action></ipfv. 	< PFV. action >	
(a) relative time reference	< simultaneity >	<>	< anteriority >	(same as adjectival past participles)
(b) predominant word order	V-PP	V-PP / PP-V	PP-V	PP-V
(c) atelic (nonbounded) verbs	-	-	+	+
(d) active voice:				
prototypical transitive verbs	-	(-)	+	+
(e) passive voice.				
non-prototyp- ical transitive verbs	-	(-)	+	(no passive voice)

The close link between aspect and transitivity is already suggested in Hopper & Thompson's transitivity hypothesis (1980). However, the problem of participles functioning as adverbials has not yet been discussed from that point of view to date. So it is predicted that my interpretation can give a new perspective on the issue of correlation between aspect and transitivity.

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