# Setting the Verb Raising Parameter in Lithuanian 

Julija Korostenskaja

crossref http://dx.doi.org/10.5755/j01.sal.0.25.8396


#### Abstract

The present article is concerned with the verb raising parameter in Lithuanian. As is known, Pollock (1989) postulates the verb raising parameter and examines the differences betweena verb raising language like French and a verb non-raising language like English. The verb raising parameter has become an essential part of analysis within the generative syntactic framework. However, due to its rich morphological system and free word order, Lithuanian has remained virtually unexplored. The present article explores the behaviour of the Lithuanian verb in light of the test environments proposed by Pollock: the position of the verb in negative sentences, yes/no questions, relative to the so-called low adverbs, and floating quantifiers. The preliminary conclusions are further verified in agrammaticality preferencetest, with a particular focus on the placement of manner adverbs, which are regarded to stand the closest to the verb. It is shown that the verb does not raise from its base position in the affirmative sentences and may optionally raise in yes/no questions.The adverb placement relative to the verb is further specified in light of the negative particle ne-.


Keywords: generative syntax, verbraising parameter, Lithuanian, adverb placement, negation.

## Introduction

Since the 1980s, free word-order languages have become a field of interest to many generative scholars and have been studied from a number of perspectives: e.g., in terms of what their characteristic property of being "free" comprises (Zwicky, 1986), the range and functions of the scrambling phenomenon (Sabel and Saito, 2005) and the treatment of free word-order languages as having an underlying fixed word order and being discourse-configurational in the sense that their word order is stipulated by the discourse, thereby postulating a special focus position in a sentence (Kiss, 1995). Since the 1980s, the generative syntactic framework has been successfully applied to a number of free word-order languages, such as Hungarian (e.g., Kiss, 1995, 1998, 2007, 2009; Puskás, 1997, 2000; Kenesei, 1984, 2006), Finnish (Vilkuna, 1989), and Russian (Bailyn, 1995, 2001; Sekerina, 1997; Svenonius, 2004; Dyakonova, 2009).

Meanwhile Lithuanian, a free word-order language, notable for its rich and archaic morphological and agreement systems, has received virtually no research attention and is understudied from the generative perspective. The few known works available are by Rutkowsky (2007) and Grinsel (2010) dealing with the Lithuanian genitival phrases and Lithuanian modal comparatives, respectively. Nevertheless, in Lithuania, research has also been exploring the possibilities for closer interaction with contemporary approaches to language study, e.g., by introducing terminology widely employed elsewhere to Lithuanian linguistics (Smetona and Usoniené, 2012)as well as codifying the range of the terms already in use (Ramoniene et al., 2012).
The present approach proceeds from Baker's idea that nonconfigurational languages may underlyingly have "a perfectly configurational structure" (Baker, 2001, p.418, see also Webelhuth, 1992). Assuming that Lithuanian is underlyingly an SVO language (Geniušienè, 2007), the present article aims to examine the verb raising parameter in

Lithuanian. Since the seminal work by Pollock (1989), the verb raising parameter has been reformulated in a variety of approaches, but remained an essential component of early language analysis within the generative syntactic framework used to account for consistent word order differencesin languages under analysis.

The article is structured as follows. First Pollock's procedure of setting the verb raising parameter is introduced and the tests are applied to Lithuanian. Second, the findings are further supported by data from The Corpus of the Contemporary Lithuanian Language. Then a diagnostics developed for testing the verb raising parameter among native Lithuanian speakers is presented and the collected data are analyzed. The conclusions summarize the results of the study.

## Pollock's Analysis for French and English

On the basis of earlier research by Emonds (1976) and Jackendoff (1972), Pollock postulated that the different behaviours languages may exhibit, manifest primarily in the appearance preceding or following a number of diagnostic adverbs, are due to the inherent relationship holding between the verb and the I node.
Pollock sets out by adopting a uniform D-structure for both French and English whereby the verb phrase is optionally modified by a preceding adverb (Pollock, 1989, p.366):
(1)
[IP NP I ([Neg not/pas]) [VP (Adv) V . . . ] ]
He argues that the verb-raising rule to I (InflP) fully applies to French and partly to English. Consequently he splits the I (InflP)into a number of functional nodes, the inventory of which has been a matter of discussion, but TP, the Tense Phrase, has since then been used to replace the I. Pollock shows that, while in French adverbs like often, always, etc. obligatorily follow the verb, in English the opposite holds: these adverbs precede the lexical verb, as in (ibid. p. 367 example (4), repeated below as (2)):
a) *John kisses often Mary.
b) Jean embrasse souvent Marie.
c) John often kisses Mary.

In questions, whereas French shows inversion, English fills in the C position with the auxiliary:
(3)
a) Embrasse Jean souvent Mary?
b) Does John often kiss Mary?

The notable exception to the rule are English verbs have and $b e$, which behave in the same way as their French counterparts, être and avoir respectively, and raise to C in questions and to T in negations, as in:
(4)
a) Has he money?
b) He hasn't any money.
c) He is ill.
d) He is not ill.

Pollock proceeds with examining the behaviour of nonfinite clauses and adjoins them to the same paradigm, the only difference of further specification being the introduction of the feature [ $\pm$ finite] to characterize the finite clauses and non-finite clauses as [+ finite] and [-finite] respectively (ibid., p.372) with the English infinitival marker to generated at I (ibid., p.376). Pollock also introduces a functional projection AgrP which he takes to be the destination for the movement of the verbs in the two languages: both French and English auxiliaries be/ être and have/ avoir can optionally move in infinitival clauses, but the so-called short verb movement, i.e. movement to the position between the negation and the VP- adverb is available for all French verbs and only for the aforementioned auxiliaries in English. The verbs, according to Pollock, move to the newly introduced functional projection AgrP, which stands below IP and the negation, but above VP, and serves as a transitory point of the verbal movement in both French and English. Thus French verbs possessing the [finite] feature can move to Tense while both finite and non-finite forms move to Tense (386). In subsequent research the agreement projection AgrP became a debated issuethe argument being that agreement features are realized in T (Iatridou, 1990; Chomsky, 1995).

Pollock demonstrates that in French the verb raises to TP to pick up its tense inflection in declarative sentences while in questions the head T moves to the head C of the complementiser phrase CP, whereas English is shown to be a nonraising language with T lowering to V to give it its inflectional endings, except for copula verbs $H A V E, B E$, as well as modal verbs with the narrow scope, such as need (Radford, 2006). Subsequently this phenomenon was reformulated at taking place either before or after spell-out. Thus French has a strong V-feature and undergoes raising before spell-out, while English has a weak V-feature and raises after spell-out (Chomsky, 1993, 1995).
A simplified syntactic tree illustrating the verb raising parameter in French declarative sentences is presented below:
(5)


The objective of the present article is define the verb raising parameter for Lithuanian. To achieve this objective, we examinethe behaviour of the Lithuanian verbin the environments set by Pollock (1989): the formation of yes/no questions, negation, floating quantifiers, finite and non-finite clauses, with particular focus ontests involving diagnostic adverbs, i.e. the so-called lower adverbs with a fixed place in the sentence, which thereby serve as anchors against which the distributional behaviour of other syntactic elements may be examined since the latter have been perceived as the most accurate indicators of the verb raising parameter in literature dealing with a rich morphology language (e.g., Kallestinova and Slabakova, 2007; Dyakonova, 2009). The preliminary findings will be supported by data fromthe Corpus of the Contemporary Lithuanian Language and further assessed in the native speakers’ grammaticality preference test. Finally, consideration of the behaviour of Lithuanian reflexive verbs will further specify the position of the verb relative to low adverbs.

## An Application of Pollock's Diagnostics

While characterized by a rich agreement system, Lithuanian is similar to English in that both languages have synthetic as well as analytic verb forms, the former formed by means of affixes and the latter by means of an auxiliary and one or more affixes. In this way it may be expected that at least in some respects the behaviour of the verb with respect to the tested environment in the two languages will be similar. However, taking into consideration the fact that Lithuanian word order is largely stipulated by the information structure, mention must be made of one more aspect: the sentences as presented below are assumed to be nonemotive, unless stated otherwise, and have neutral intonation. The information structure of Lithuanian from the generative perspective is yet to be examined and deserves a study of its own.

## Negation

The examples with the negation not/ne- presented below for English and Lithuanian finite and non-finite clauses demonstrate that, in both languages, the negation precedes the lexical verb:
(6) Lexical verbs:
a) He does not read books.
*He reads not books.
b) Jis neskaito knygu. $\mathrm{He} n e-r e a d-3 P . P R E S$ book-PL.GEN

He does not read books.
c) ${ }^{*}$ Jis skaito ne knygu. He read-3P.PRES ne book-PL.GEN

He does not read books.
(7) Infinitival clauses:
a) Not to go on a holiday is sad.

To not go on a holiday is sad.
*To go not on a holiday is sad.

| Nevykti kelionèn | liūdna. |
| :--- | :--- |
| Ne-go-INF journey-ADV | sad |

It is sad not to go on a journey.
b) *Vykti ne kelionèn liūdna.
go-INF ne journey-ADV sad
It is sad not to go on a journey.
Below is an example from the Corpus of the Contemporary Lithuanian Language (hereinafter CCL):
(8)

| I šiă | šalị | geriau | nevykti |
| :--- | :--- | :--- | :--- |
| In this-SG.ACC | country-SG.ACC | better | ne-go- |
| INF |  |  |  |
| neturint <br> dokumentū. | būtinų | darbui |  |
| ne-have-PART obligatory-PL.GEN | work- |  |  |
| DATdocuments-PL.GEN |  |  |  |

It is better not to go to this country without the documents necessary for employment.

However, unlike English, where the lexical verb always follows the negation and never precedes it (Haegeman, 1995), Lithuanian allows the negation beforeauxiliaries and modals, e.g.:
(9)
a) Jis ner
He ne-be-3P.PRES be-M.PERF.PART
LOC
He has not been in Argentina.
b) Gali neiti ì darbą ir
rytoj.
Can-2P.PRES ne-go-INF in work-SG.ACC and tomorrow
You do not have to go to work tomorrow either.

As can be seen, in Lithuanian the negation can appear at the highest possible pre-verbal position, whether it be preVP or pre-T. While the negation in Lithuanian needs a study of its own, some further remarks in favour of the high placement of the negation may be given at this stage, which is a phenomenon also attested in other languages (e.g., Ayoun 2005, for Spanish, Kallestinova and Slabakova, 2007 for Russian). Compare the following pair of sentences:
(10)

| a) | Jonas | nebuvo |
| :--- | :--- | :--- | Paryžiuje..

Both sentences are grammatical and differ semantically. While sentence (a) is a mere statement that John has not been to Paris, sentence (b) implies a somewhat more complex situation characterised by certain contextually defined circumstances, given which John was not present. As can be seen, the only difference between the sentences has to do with the scope the negation takes in each clause: over the predicate group without including the subject, as in (a), and over the entire sentence, hence including the subject, as in (b). Notably, sentences with the Genitive subject are widely used in Lithuanian alongside their counterparts with the Nominative subject even when there is no negation, the difference being that of definiteness (Laužikas, personal communication, September 9, 2014; see Kagan, 2013, for the typology of Genitive). Given the fact that in the pair above the subject of each sentence is definite by default, it is the placement of the negation on the syntactic tree that accounts for the Genitive case of the subject. Therefore, at this stage the working conclusion may be made: while in sentence ( 10 a ) the negation has to be placed quite low, somewhere within the vP range, in sentence ( 10 b ) the negation has to be placed higher up on the syntactic tree, no lower than TP, to ensure that the subject falls within its scope. At this point we will leave open the question of whether the External Projection Principle, according to which each clause needs a subject, can be satisfied by a subject in a non-Nominative case positioned in the specifier position (i.e. to the left) of the Tense Phrase ([Spec TP]) (cf. Slioussar, 2011).

## Yes/ No Questions

The next step is to see how yes/no questions are formed. For comparisons, examples from French, English and Lithuanian are provided in (11a, $b$, and $c$ ) respectively:
(11)
a) Embrasse John souvent Marie?
b) Does John often kiss Mary?
c) Ar Jonas dažnai bučiuoja Mariją? C [+Q] Jonas often kiss-3P.PRES MarijaF.SG.ACC

Does John often kiss Mary?
As can be seen, in yes/no questions, the French lexical verb is inverted and, due to the fact that it appears above the external argument, it takes the complementiser position(C) on the syntactic tree. In both English and Lithuanian, however, the lexical verb does not change its position, with English additionally demonstrating the Do-support transformation in place, which inserts the auxiliary at C level, exactly where French has its lexical verb and Lithuanian the question particle ar (cf. Carnie, 2013, p.217). The last pair of sentences suggests that, while in English
questions the auxiliary undergoes raising to C , in Lithuanian the lexical verb does not raise.

## Diagnostic Adverbs

Following Cinque's (1999) classification of adverbs into two main groups, high and low adverbs, frequency and manner adverbs are argued to stand the lowest on the adverb scale and hence the closest to the verb. A systematic appearance of a manner adverb followed by the verb in the sentence would be suggestive of the verb staying in situ and not raising to T. Adverbs often/ dažnai and visiškai/ completely are two examples of frequency and manner adverbs respectively and will be used in the diagnostics below.

The Lithuanian examples provide the counterparts for sentences ( $2 \mathrm{a}-\mathrm{c}$ ) for convenience repeated below. They contain a diagnostic VP-adverb often/ dažnai and are used to test the strength of the V-feature of I (Infl), or, applying the split-I categories, T (or the more controversial Agr). The idea was first expressed in Lasnik (1995) and then reformulated by Arikawa (2008) as follows: "If a tensed main verb precedes a VP-adverb, the V-features [V] of T and AGR are strong. If a VP adverb precedes V , they are weak" (Arikawa, 2008, p.55).
(12)

French:
a) John embrasse souvent Marie.
b) *John souvent embrasse Marie.

English:
a) John often kisses Mary.
b) *John kisses often Mary.

## Lithuanian:

| a) Jonas | dažnai bučiuoja | Mariją. |
| :--- | :--- | :--- |
| Jonas | often | kiss-3P.PRES | Marija-F.SG.ACC

$\begin{array}{llll}\text { b) ? Jonas } & \text { bučiuoja } & \text { dažnai Marija (non-emotive). } \\ \text { Jonas } & \text { kiss-3P.PRES } & \text { often } & \text { Marija-F.SG.ACC }\end{array}$ Jonas kiss-3P.PRES often Marija-F.SG.ACC

As can be seen, in the affirmative one-verb predicate sentence, the placement of the diagnostic adverb often/ dažnai is the same in English and Lithuanian: between the external argument and the verb; however, in French the verb obligatorily precedes the diagnostic adverb.
Interestingly, dažnai often precedes the auxiliary in Lithuanian. The examples below are from the CCL:
(13)
a) iš pokalbio dažnai galime spèti, kad From conversation often can-1P.PL.PRES. guess-INF that ryšys svarbus. connection important

From the conversation we can often understand that the connection is important.
b) Atsitiktinis darbas, kurị dažnai būna
random work which often be-3P.PRES.FREQ priverstas dirbti paprastas padienis $<\ldots$... forced-PASS.PART work simple dayman
A random job, which a common dayman is often forced to work.
d) <...>
trumpas pašnekesys dažnai yra vienintelè
short conversation often be-3P.PRES onlyF.SG.NOM
galimybė išlikti mandagiam.
possibility-F.SG.NOM stay-INF polite-M.SG.DAT.
A short conversation is often the only possibility to stay polite.
Another frequently used diagnostic VP-adverb is completely/ visiškai. The results produced are the same as above. The English and French examples below are from Pollock (1989, p.370):
(14)

French:
a) *Jean completement perdit la tete.
b) Jean perdit completement la tete.

English:
a) John completely lost his mind.
b) *John lost completely his mind.

Lithuanian:
a) Jonas visiškai prarado protą.

Jonas completely lost-3P.PAST mind
Jonas completely lost his mind.
b) ?? Jonas prarado visiškai protą (non-emotive). Jonas lost completely mind Jonas completely lost his mind.

As can be seen, Lithuanian examples follow the matrix English sentences with the diagnostic adverb visiškai preceding the lexical verb. Therefore, the conclusion summarizing data from the three languages can be made: while the V -features [V] of T (or Agr) are strong in French, which is why the French verb moves to TP, they are weak in English and Lithuanian, hence the TP cannot attract the verb, which consequently stays within the vP. This fact may serve as additional evidence supporting the idea that, as English, the Lithuanian verb does not raise to T. If so, the respective Lithuanian sentence structure with low manner adverbs can be presented as in (15):

## (15)

$$
\left[\mathrm{TrP}^{\mathrm{DP}} \mathrm{~T}[\mathrm{vp} \mathrm{Adv}[\mathrm{vp} \text { V DP]]. }\right.
$$

Nevertheless, the manner adverb visiškai is worth a special mention in Lithuanian. Compare the sentences 16 (a) and (b) from the CCL below:
(16)

| a)<...> |  |  |
| :--- | :--- | :--- |
| žmoniu | gyvenimo būde | visiškai |
| People-GEN.PL | life-SG.GEN way-SG.LOC | completely |
| neturi | atsispindèti ju | pačiu |
| nuomoné |  |  |
| ne-have-3P.PRES | reflect-INF they-PL.GEN | self- |
| PL.GENopinion-SG.NOM |  |  |

In people's way of life, their own opinion does not have to be reflected at all.

| b) Dalis ju | turėjo | būti |
| :--- | :--- | :--- |
| Part | they-PL.GEN |  |
| vave-3P.PAST | be-INF |  |

Some of them were to be completely armed the following year only.

As can be seen from the examples above, the adverb visiškai/completely can appear in both pre-Aux (pre-modal) and pre-verb position, but with a difference in the meaning conveyed, evoked by scope relations. Thus when the adverb appears before the lexical verb, it has the meaning of "completely", but when it appears before the modal, which is regarded to occupy the same place as the auxiliary on the syntactic tree, it conveys the meaning of "at all". While closer analysis of this fact goes beyond the scope of the present paper, on the basis of these examples, it may be suggested that, at least in some cases, the adverb visiškai behaves like a polarity item, with the environment stipulated not only by the presence or absence of the negation, but also the placement of the adverb relative to the verb and ultimatetely, the issue of V- and TP- adjunction.

The ability of lower adverbs to appear at higher positions has been noted by Pollock (1989) himself, e.g., with always able to adjoin at TP. This position is far more restricted in English and is absent in French due to, as Pollock suggests, scope considerations. The idea that, at least in some languages, adverbs may be allowed at TP, has also been expressed in Holmberg and Platzack (1995) for Scandinavian. In Spanish, this also is a widely attested phenomenon (Ayoun, 2005; Zagona, 2002), and so it is in Russian (Slioussar, 2011; Dyakonova, 2009), where sentences with adverbs producing narrow focus scope, i.e. scope over the object, are argued to have non-neutral reading, which brings one to the issue of Information Structure (Slioussar, 2011). While the latter question will be left open for further study, the fact that in Lithuanian the negation may have scope over the subject, and lower adverbs are regularly found before the auxiliary/modal verb, also speak in favour of Lithuanain being able to adjoin negation and adverbs somewhat higher than regular adjunction in English.

## Floating Quantifiers

Following analysis proposed by Kayne (1975), Pollock states that subject quantifiersfloat to the same position as (diagnostic) adverbs. Therefore, the fact that the quantifier follows the verb suggests that the verb has raised to TP; the quantifier preceding verb suggests that the verb does not move to TP. English and Luthuanian are similar in the ways they allow floating quantifiers:

## (17)

## English:

a) All my friends love cinema.
b) My friends all love cinema.
c) *My friends love all cinema.

The Lithuanian examples (a) and (b) below are from CCL: (18)
visi mes čia esame vienas su kitu susije.
all we here be-1P.PL.PRES one with other connected

We all are related to each other here.
Mes visi randame laiko tam, kas yra We all find-1P.PL.PRES time that-M.DAT what is svarbiausia mūsų prigimčiai. important-SUPERL we-GEN.PL nature-F.DAT

We all find time for what is most significant to our nature.
While other positions in a sentence for quantifier placement may be possible for Lithuanain, they are stipulated by the movement due to information structure and will not be examined in the present study. Summarising this section, floating quantifiers as appearing in non-emotive sentences suggest that the Lithuanian verb remains in situ.

## Experiment: Grammaticality PreferenceTest

In order to examine how native speakers of Lithuanian react to the different positioning of higher and lower adverbs relative to the verb and additionally verify the preliminary conclusions for the verb raising parameter in Lithuanian, a grammaticality preference test was conducted. The grammaticality preference test was compiled, stored and distributed via www.kwiksurveys.com, an online survey creation website. The test was comprised of 24 situations of two main types: 18 stimuli in each of which an aspect related to the verb movement parameter was tested, and 6 filter sentences designed in order to make sure that automatic or careless answers do not interfere with the quality reponses to the stimuli. The filter sentences were a priori ungrammatical sentences which combined a verb in the perfective aspect with the frequency adverb, as in:

| (19) |  |  |
| :--- | :--- | :--- |
| Kaimynai | retai | atšventė |
| Neighbours-PL.NOM | seldom | PERF.ASP-celebrate- |
| 3P.PAST |  |  |
| gimtadienius | ramiai. |  |
| birthday-PL.ACC | quietly |  |

The neighbours rarely celebrated birthdays quietly.
As a result, 85 responses were received. The participants were aged from 18 to 66 and over and were L-1 Lithuanian speakers located at the time of taking the test in Lithuania, Norway, Sweden, Germany, Belgium, Romania, and the USA. From the 85 responses returned, 24 responses turned out to be incomplete and 3 responses failed to block the a priori ungrammatical sentences which had been distributed throughout the survey as a filter. These responses were eliminated from further analysis with the remaining 58 responses passing the two filters and consequently, admitted to the data examination stage. The reactions to the stimuli were formulated along a 4-point Likert scale and had ratings "sounds good", "sounds somewhat strange, but I can say so", "sounds strange" and "sounds bad", which were later given numeric values, with 4 being grammatical and 1 ungrammatical.

As mentioned above, the main component of the grammaticality preference test was constructed through 18 stimuli situations. These consisted of a description of a situation and a question to which two to four test sentences were provided. The diagnostics is based on previous analyses conducted for other languages, Spanishand Russian in particular (Ayoun, 2005, Ionin and Wexler, 2002, Kallestinova and Slabakova, 2007). The diagnostic situations were all concluded with a question to ensure that the tested answer provided has an unfocused predicate group. The test answers were examining the following: adverb placement relative to the type of the verb, adverb placement relative to the focus scope it conveyed, the relative orde-
ring of higher and lower adverbs (epistemic vs frequency and manner adverbs),word order in yes/ no questions, and adverb placement relative to the verb form (perfective or imperfective).

To illustrate, the stimulus situation below contains the manner adverb letai 'slowly', which has the narrow focus scope in the sentence. The stimulus is provided with two answers differing in the adverb placement.
(20)

Visi susirinkom žaisti futbola ir laukiam tik Jono. O jis sédi prie lango ir kažka lètai valgo. Ka gi jis ten taip lètai valgo?
We all gathered to play football and are only waiting for John. But he is sitting by the window and is eating something slowly. What is he eating so slowly?
a) Jonas lètai valgo sriubą. Jonas slowly eat-3P.PRES soup-SG.ACC
Jonas is slowly eating soup.
$\begin{array}{llll}\text { b) } & \text { Jonas } & \text { valgo } & \text { lètai }\end{array}$ sriubą. $\quad$ eat-3P.PRES $\quad$ slowly $\begin{array}{ll}\text { soup-SG.ACC }\end{array}$
Jonas is eating slowly soup.

## Results and Discussion

The results of the survey have been grouped according to a specified parameter and are accompanied by figures. In all figures presented below, the highest possible mean is 4.The results of items examining the position of verbs relative to low adverbs are summarized in Figure 1.


Figure 1. Placement of Manner and Frequency Adverbs Relative to the Verb.

All in all, there were four situations with manner adverbs and four situations with frequency adverbs provided. The example (20) above illustrates the stimulus situation and possible answers for the manner adverb letai 'slowly'. An analysis of the responses suggests that generally, the adverb>verb order is the preferred position in Lithuanian, scoring the highest possible mean value on the diagram. Interestingly, the verb>adverb position in non-emotive contexts is not completely ruled out, while the respondents seem to react a little more favourably when the verb is followed by the manner adverb rather than by the frequency adverb.

Figure 2 summarizes the results for the position of manner, frequency and epistemic adverbs relative to the verb. Of
the three groups, the epistemic adverbs are placed the highest on the adverb scale, hence it was of interest to see whether this group of adverbs would show any differences in word order preferences. It also has to be pointed out that English epistemic adverbs often do not seem to have one-to-one correspondence in Lithuanian. Thus one way of rendering English epistemic adverbs in Lithuanian is through modal words (Lith. modaliniai žodiai), such as turbūt, galbūt, tikriausiai, etc. (Usonienė, 2006; Dabartinės lietuvių kalbos žodynas).


Figure 2. Adverb Placement Relative to The Verb in Sentences with SVO Order.
Analysis of this methodological issue goes beyond the limits of this study and will not be explored here. In the present study English terminology and classification were followed and, when necessary, Lithuanian translation using modal words as the closest correlates of the relevant epistemic adverbs was provided. An example of a test item with an epistemic adverb is provided in (21) below:
(21)

Rytoj nėra paskaitos, o tavo bičiulè Marija apie tai nežino. Ar galètum jai pranešti?
There is no class tomorrow, but your friend Mary does not know about it. Could you let her know?
a) Aš būtinai paskambinsiu Marijai. I necessarily PREF-call-1P.FUT Marija-F.DAT I will necessarily call Mary.
$\begin{array}{lllll}\text { b) } & \text { Aš } & \text { paskambinsiu } & \text { būtinai } & \text { Marijai. } \\ \text { I } & \text { PREF-call-1P.FUT } & \text { necessarily } & \text { Marija-F.DAT }\end{array}$
I will necessarily call Mary.
Analysis of responses demonstrates that in all cases, the adverb>verb order figures as the preferred order in nonemotive sentences. Interestingly, the verb>adverb order in non-emotive contexts is not completely ruled out and has the mean value of about 2 for all types of adverbs. This is indicative of the fact that, while the adverb>verb order is the preferred one, the alternative verb>adverb order is still acceptable to native speakers and consequently may be said to have a deviant status in Lithuanian.

Figure 3 summarizes the results of manner and frequency adverbs used with auxiliaries and lexical verbs.


Figure 3. Adverb Placement Relative to the Auxiliary/Modal and Lexical Verb.

An example of a stimulus situation and test items is provided below:
(22)

Šiandien posèdžio metu direktorius pristatè apklausos apie pasitikèjima darbo vietoje rezultatus. Ka gi galima pasakyti apie marketingo skyriu?

During today's meeting, the director presented the results of the survey on the trust level in the workplace. What can be said about the marketing department?
a) Marketingo skyriaus vadovas visiškai Marketing-GEN department-GEN head-NOM completely Gali pasitikèti savo pavaldiniais can-3P.PRES PREF-SI-believe-INF his subordinatesPL.INSTR

Head of Marketing Department can completely rely on his subordinates.
b) Marketingo skyriaus vadovas gali Marketing-GEN department-GEN head-NOM can3P.PRES $\begin{array}{lll}\text { Visiškai } & \text { pasitikėti } & \text { savo pavaldiniais } \\ \text { Completely } & \text { PREF-SI-believe-INF } & \text { his subordinates- }\end{array}$ PL.INSTR

Head of Marketing Department can completely rely on his subordinates.
c) Marketingo skyriaus vadovas gali Marketing-GEN department-GEN head-NOM can3P.PRES Pasitikèti visiškai savo pavaldiniais. PREF-SI-believe-INF completely his subordinatesPL.INSTR

Head of Marketing Department can completely rely on his subordinates.

Since auxiliaries and modal verbs are regarded to take the same position on the syntactic tree, Aux in the figure has been chosen to represent both the auxiliary būti 'be' and the modal galėti 'can'. As can be seen, the order with the adverb placed between the auxiliary and the lexical verb is nearly unanimously the most natural order for the manner adverbs, which is in line with the relevant research for English. The scores are slightly lower for frequency adverbs, which stand a little higher on the adverb hierarchy and therefore the speakers apparently allow them greater
freedom in a sentence. Interestingly, the respondents were fairly lenient to adverb position either preceding or following the verb group: the means for the adverb-initial position are at about 2.6 (out of the maximum 4) for the manner adverbs and even more for frequency adverbs. A greater contrast can be observed in the position with the adverb following the verb group: here the means for manner and frequency adverbsare 1.7 and 2.3 respectively. Thus while the frequency adverb, due to its higher position in adverb hierarchy and supposedly greater mobility in the sentence, is allowed in all positions, albeit with somewhat greater reluctance for initial and final positions relative to the verb group, manner adverbs are expected to stay in the maximum proximity preceding the lexical verb or at least the verb group. Therefore, the results of this figure suggest that the lexical verb does not raise out of its position and stays in vP , the auxiliary and modals do raise to T , while adverb positions on the edges of the verb group have a deviant status.

Speaking about the modal verb gali in particular, the respondents expect the epistemic adverb to precede the modal ( $100 \%$ ), while $93 \%$ place the manner adverb completely following the modal and before the lexical verb. This fact suggests that, as in English or Russian, there may be a preTP position available for adverb placement in Lithuanian.


Figure 4. Adverb Placement Relative to the Scope Conveyed.
Figure 4 demonstrates the results of the perception of the grammaticality of the placement of adverbs preceding or following the verb relative to the focus scope conveyed. It is believed that adverbs with the narrow scope can interfere in the order of the constituents and move to the marked position of the structural focus, associated with the edge of the verb phrase (Gőbbel, 2007; Erteschik-Shir and Strahov, 2004). In order to see whether the respondents associate either of the positions with the particular focus, the grammaticality preference test under analysis contained three situations with the narrow focus and three situations with the wide focus. The Lithuanian adverb lettai (En slowly) in example (20) above is used in the narrow scope. The following example illustrates the use of adverb in the wide scope (and is also a reinterpretation of one of Pollock's original tests):
(23)

Kas pasidarè Jonui Negi taip ilsimylèjęs? Atrodo, dèl Eglès viska padarys.

What happened to John? Is he really so much in love? It seems that he will do anything for Egle.
a) Jis visiškai prarado prota.

He completely PREF-lose-3P.PAST mind He completely lost his mind.
b) Jis prarado visiškai protą. He PREF-lose-3P.PAST completely mind He lost completely his mind.
The data demonstrate that, in non-emotive sentences, the adverb>verb order is the order unanimously preferred by the respondents regardless of the adverb scope. As can be seen from the figure, the acceptability mean value for the verb>adverb is 2 , which points to the fact that the respondents do not rule out the reverse order as ungrammatical and rather perceive it as deviant.


Figure 5.Word Order in Yes/ No Questions.
Figure 5 illustrates the respondents' preferences for the verb-subject inversion in general questions. The acceptance of their inverted word order would be suggestive of the verb moving out of its position and raising on the syntactic tree in interrogative sentences. An example is presented below:
(24)

Mūsu laikais daug kas sako, kad yra matęs vaiduoklì. O kaip Tomas?
A lot of people nowadays say they have seen a ghost. And how about Tom?
a) Ar yra Tomas matęs vaiduoklị? C [ + Q]be-3P.PRES Tomas-NOM see-M.SG.PART.ghost-
SG.ACC
Has Tom seen a ghost?
b) Ar Tomas yra matęs vaiduoklị? C $[+\mathrm{Q}]$ Tomas-NOM be-3P.PRES see-
M.SG.PART.ghost-SG.ACC

Has Tom seen a ghost?
As can be seen, virtually all respondents reacted positively to the SVO word order in yes/no questions, regardless of whether the verb was lexical or modal/ auxiliary. However, the inverted order with its mean value just above 3 for both auxiliaries and lexical verbs suggests that the respondents are fairly lenient to the change of order. This is somewhat unexpected in light of the classical generative treatment of general questions, according to which in a language, the
presence of the complementiser in yes/no questions stands in complementary distribution with the subject-verb inversion (Carnie, 2013). In the present analysis, a conclusion can be made that, although the direct word order and hence the unmoved verb is the preferred pattern in Lithuanian in yes/ no questions, the verb can never-theless undergo optional movement to C . The lower acceptability values may be suggestive of the fact that the respondents do realize the fact that the inverted verb and the interrogative complementiser ar compete for the same position on the syntactic tree.


Figure 6. Adverb Placement Relative to the Verb Form (Perfective or Imperfective).

Figure 6 summarizes the reactions to adverb order relative to the perfective or imperfective form of the verb. As can be seen, the respondents do not relate the type of the verb form to the position of the adverb and the maximum acceptability score (mean value $=4$ ) is given to the adverb $>$ verb order ir-respective of whether it is perfective or imperfective. Again, the order with the adverb following the verb is perceived as more deviant by the respondents.

Although the results of this figure support the idea that the verb does not raise to $T$, it needs to be recognized that the figure leaves open the question as to the position of the verb relative to other nodes on the syntactic tree. Thus, for example, following the idea expressed in Katz (2000), adverbs adjoin to verbs on the semantic grounds and therefore, time-related adverbs will "adjoin either to Aspect P or to stative VPs" (2000, p.144). This idea was also further developed by Svenonius (2004) and Dyakonova (2009) with reference to the Russian verb with Dyakonova postulating that manner adverbs are generated at AspP. Given the findings of the grammaticality preference test presented above, it is believed that Katz's approach merits special attention when considering the layout of constituents on the syntactic tree for Lithuanian as well.

## A Note on Lithuanian Negation

While a closer examination of Lithuanian prefixes and their potential hierarchy in light of Svenonius (2004) deserves a study of its own, one phenomenon, viz. verbal negation, will be briefly discussed below as it complements the discussion regarding the relative area for low adverb adjunction.

As is known, Lithuanian prefixes may express either lexical, or aspectual meaning, or both. Therefore, for the current purposes we can mark the node for the prefix as XP in order to avoid further specification as to which meaning exactly is conveyed. For the current purposes we assume lexical-aspectual prefixes to reside within the vP . Contrarily, the negative clitic ne-, by virtue of its independent status as a constituent, is to be placed above the vP. This produces an interesting dilemma regarding the placement of the clitic on the syntactic tree relative to other constituents.

Let us now consider the following sentences: sentence (25a) illustrates the separability of the negative clitic from the verb, and ( 25 b ) shows what part exactly is deleted. (25)

| a) Tomas stat-o-si | nam-ą, ores- |  |
| :--- | :--- | :--- | :--- |
| ne. | o | Jonas- |
| Tomas build-3P.PRES-si | house-SG.ACC, and Jonas |  |
| $n e$. |  |  |
| 'Tomas is building a house and Jonas is not.' |  |  |


| b) Tomas | stat-o-si | namą, | o |
| :---: | :--- | :--- | :--- |
| Jonas |  |  |  |
| Tomas | build-3P.PRES-si | house-SG.ACC, and |  |
|  | Jonas |  |  |
| ne-[si-stat-o | nam-o]. |  |  |
| ne-[SI-build-3P.PRES | house-SG.GEN]. |  |  |

'Tomas is building a house, and Jonas is not building a house.'

Consider also sentence 26 with the verb form having both the negative and the aspectual prefix:
(26)
$\begin{array}{lll}\text { Jonas } \begin{array}{ll}\text { ne-pa-si-stat-è } & \text { nam-o. } \\ \text { Jonas } & \text { ne-PREF-SI-build-3P.PAST }\end{array} & \text { house-SG.GEN } \\ \text { 'John did not build the house.' } & \end{array}$
According to the ellipsis test, the elided part in (25b) as compared to (26) forms a constituent (Carnie, 2013). The fact that in (25b) ne may appear on its own with the component [sistato namo] deleted, suggests that each of the relevant elements is a constituent, i.e., they each have their own branches on a syntactic tree. However, the element -sistato is only possible when preceded by a prefix and cannot form an independent constituent. Following the VP-internal subject hypothesis and assuming for the current purposes that $-s i$ - as a physically manifest trace of the moved VP-internally generated subject, we can state that the element-sistato is an intermediate projection of the vP . It cannot be a maximal projection by virtue of the fact that it can never appear as an independent constituent. From this we can make the conclusion that, if the verb does not have a lexical/aspectual prefix, the negative clitic neundergoes lowering and gets incorporated into the verbal material below vP. This is evidenced by the orthography: while $n e$ in Lithuanian is spelled together with the verb, it can appear on its own in coordination tests, which points to its independence as a constituent. Consequently, the lowering and incorporation of the negative clitic results in the preservation of the VP-internal subject order since the lexical root cannot raise to the $v$ position of the vP , contrary to prefixless cases.
Below two simplified trees for the behaviour of the negative marker are provided: in tree a) ne- does not lower due
to the presence of the lexical-aspectual prefix in the verb; in tree b) ne- undergoes lowering due to the absence of a lexical/ aspectual prefix and is thereby incorporated into the verb structure:
(27)
a. Ne does not lower because of the presence of a prefix

b. Ne lowers because of the absence of a prefix


Therefore, for the current purposes the following conclusion can be made: the negative clitic gets incorporated, following Baker's terminology (Baker, 1988), into the vP structure when the lexical verb is a prefixless reflexive verb; it remains stacked above the vP in other cases, which is ultimately reflected in the orthography whereby the negative clitic is spelled together with the verb. Therefore, in sentences containing the manner adverb and a prefixed lexical verb in the negative, the negative phrase is placed above the vP , hence the adverb would have to merge above it. In combinations with the prefixless reflexive verb, the negative prefix is generated above the vP , but undergoes lowering and subsequent incorporation, with the adverb stacking above. This order would produce sentences like (28) with the simplified sentence structure presented in (29):
(28)

Jonas visiškai nesitvarko kambario.
Jonas completely ne-SI-manage-3P.PRES roomSG.GEN
John does not clean his room at all.
(29)
a)

b) [TP DP Jonas T [AdvP [Adv visiškai [NegP t [vP [XPne [VP si [V tvarko [DP kambario ]]]]]נ]]]

## Conclusions

The present article presented the theoretical methodology for establishing the verb raising parameter in a language, first developed by Pollock (1989), and examined the verb raising parameter in Lithuanian, a free word-order language, virtually unexplored from the generative syntactic perspective. In the generative syntactic framework, defining the verb raising parameter at early stages of analysis is essential since it allows one to account for the fundamental and consistent word order differences in languages under analysis assuming that all languages share a number of innate properties collectively referred to as the Universal Grammar. First, Pollock's core tests examining the relation between the lexical verb and the I node were applied to Lithuanian. These included the formation of yes/no questions, negation in finite and non-finite clauses, the position of the verb relative to floating quantifiers, and most importantly, diagnostic adverbs. The analysis of the results demonstrated that, while in Lithuanian, adverbs have greater freedom in the sentence than English adverbs, generally the adverb-verb order is the one preferred, which suggests that the verb does not undergo raising or, using more recent terminology, raises after spell-out. Word order preferences were further supported with data from the Corpus of the Contemporary Lithuanian Language. In addition, to get further substantiation and native speakers‘ commentary on the patterns preferred, a grammaticality preference test was designed and posted in the internet. The test comprised 18 stimuli situations, each of which was followed by two to four tested sentences. As a result, 85 responses were collected, of which 58 passed two filters and were admitted to the results analysis stage. The results suggest that the Lithuanian verb does not move out of its position in vPat spell-out and can optionally raise to C in yes/no questions. These findings may further be verified with a more exhaustive analysis of corpus data. Finally, on the basis of the analysis of the negative prefix ne- and Lithuanian reflexive verbs, it was also shown that, in defining the precise site of adverb adjunction on the syntactic tree, the left periphery of the verbal phrase deserves attention of its own. Currently, it is proposed that the manner adverb, which is regarded to be the lowest in the adverb hierarchy, may attach to the negative phrase NegP in negative sentences, which was shown to be able to lower down and get incorporated into the structure of the vP .

## Abbreviations

ACC - Accusative
AdvP - adverb phrase
ASP - aspect
AUX - auxiliary
C-complementiser
DAT - Dative
DP - determiner phrase
F-feminine
GEN - Genitive
INF - infinitive
INFL - Inflection
INSTR - Instrumental
LOC - Locative
M-masculine

## N -noun

NegP - negative phrase
Nom - nominative
P-person
PART - partitive
PASS - passive
PERF - perfective
PL - plural
PREF - prefix
PRES - present
Q -question
REFL - reflexive
SG- singular
Spec - specifier
SUPERL - superlative
TP - tense phrase
V - verb
v - light verb
VP - verb phrase
vP - light verb phrase
SI - Lithuanian reflexive particle $s i$
XP - a phrase with an unknown head

## References

1. Arikawa, K., 2008. A Reference Guide of Diagnostics for the Generative Syntax. Data from English, Hindi, and Japanese. Sankeisha Co. Ltd.
2. Ayoun, D., 2005. Verb Movement Phenomena in Spanish: "Mixed Languages" and Bilingualism. In: Cohen, J., McAlister, K. T., Rolstad, K.\& MacSwan, J. (eds), Proceedings of the 4th International Bilingualism Symposium, Somerville, MA: Cascadilla Press, pp.143-162. [Online] Available at: http://www.lingref.com/isb/4/ 010ISB4.PDF [Accessed June 2014].
3. Bailyn, J. F., 1995. A Configurational Approach to Russian 'Free' Word Order (doctoral dissertation). Cornell University.
4. Bailyn, J. F., 2001. On Scrambling: A Reply to Bos ${ }^{\circ}$ kovic' \& Takahashi. Linguistic Inquiry, Fall 2001, vol. 32, no. 4, pp.635-658. http://dx.doi.org/10.1162/002438901753373023
5. Baker, M.,1988. Incorporation. Chicago, IL: University of Chicago Press.
6. Baker, M., 2001. The Natures of Non-Configurationality. In: Mark Baltin and Chris Collins (eds.), Handbook of Syntax. Blackwell, Oxford, pp.407438.
7. Carnie, A., 2013. Syntax: A Generative Introduction (3 $3^{\text {rd }}$ ed.). WileyBlackwell.
8. Chomsky, N., 1993. A Minimalist Program for Linguistic Theory. In: The view from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger, Hale, K.and Keyser, S. J. (ed.), Cambridge, MA: MIT Press, pp.1-52.
9. Chomsky, N., 1995. The Minimalist Program. Cambridge, Mass: MIT Press.
10. Cinque, G., 1999. Adverbs and Functional Heads: A Cross-linguistic Perspective. New York: Oxford University Press.
11. Emonds, J.,1976. A Transformational Approachto English Syntax. Academic Press, New York.
12. Erteschik-Shir, N. and Strahov, N., 2004. Focus Structure Architecture and P-syntax.In:Lingua114, pp.301-323. http://dx.doi.org/10.1016/S0024-3841(03)00024-X
13. Dyakonova, M., 2009.A Phase-based Approach to Russian Free Word Order. Published by LOT. [Online] Available at:http://dare. uva.nl/record/315578 [Accessed June 2013].
14. Geniušiené, E., 2007. Reciprocal and Reflexive Constructions in Lithuanian. In: Nedjalkov,V.P. (ed.) Reciprocal Constructions. John Benjamins Publishing Company: Amsterdam/ Philadelphia, pp.633-673. http://dx.doi.org/10.1075/tsl.71.21gen
15. Gőbbel, E., 2007. Focus and Marked Positions for VP Adverbs. In:Schwabe, K., and Winkler, S. (eds). On Information Structure, Meaning and Form: Generalizations Across Languages. John Benjamins Publishing Company, pp.275-300. http://dx.doi.org/10.1075/la.100.16gob
16. Grinsel, T. W., 2010.Lithuanian Modal Comparatives: Implications for the Syntax and Semantics of Comparison in Slavic. In:Proceedings of Formal Approaches to Slavic Linguistics, 19. [Online] Available
at:http://ling.umd.edu//fasl19/abstracts/Grinsell_ lithuanian.pdf [Accessed July 2014].
17. Holmberg, A. and Platzack, Ch, 1995. The Role of I in Scandinavian Syntax. New York, Oxford: Oxford University Press.
18. Iatridou, S., 1990.About Agr(P).In Linguistic Inquiry, vol. 21, No. 4 (Autumn, 1990), published by MIT press, pp.551-577.
19. Ionin, T. and Wexler, K., 2002.Optional Verb Raising in L2 Acquisition: Evidence from L1-Russian Learners of English. In: Costa, J. and Freitas, M. J. (eds.), Proceedings of the GALA 2001 Conference, Associação Portuguese de Linguistica, pp.134-141.
20. Jackendoff, R., 1972.Semantic Interpretation in Generative Grammar. MIT Press, Cambridge, Massachusetts.
21. Kagan, O., 2013. Semantics of Genitive Objects in Russian.A Study of Genitive of Negation and Intensional Genitive Case. Series: Studies in Natural Language and Linguistic Theory, vol. 89, 2013, XVIII, Springer Science+Business Media Dordrecht.
22. Kallestinova, E. and Slabakova, R.,2007 Does the Verb Move in Russian? In: Formal Approaches to Slavic Linguistics 16, Stony Brook, US, 37 (Michigan Slavic Publications, FASL Proceedings, 53). [Online] Available at: http://eprints.soton.ac.uk/357356/ [Accessed June 2014].
23. Katz, G., 2000.A Semantic Account of the Stative Adverb Gap. In: Lang, E. (ed.). ZAS papers in linguistics: ZASPiL,vol. 17. [Online] Available at: www.zas.gwz-berlin.de/fileadmin/material/ZASPiL.../ zaspil17-katz.pdf [Accessed August 2014].
24. Kenesei, I., 1984. On What Really Figures in a Non-configurational Language, In:Groninger Arbeiten zur germanistischen Linguistik, 24, pp.28-54.
25. Kenesei, I., 2006. Quantifiers, Negation, and Focus on the Left Periphery in Hungarian, Lingua1 19, pp.564-591. http://dx.doi.org/10.1016/j.lingua.2007.11.004.
26. Kiss, K. É. (ed.), 1995. Discourse Configurational Languages. New York, Oxford: OUP.
27. Kiss, K. É., 1998. Identificational Focus VersusInformation Focus. In: Language, volume 74, no 2, pp.245-273. http://dx.doi.org/10.1353/lan.1998.0211
28. Kiss, K. É., 2007. Topic and Focus: Two Structural Positions Associated with Logical Functions in the Left Periphery of the Hungarian Sentence. In: Féry, C., Fanselow, G., and Krifka, M. (eds.) TheNotions of Information Structure. Interdisciplinary Studies on Information Structure. Working Papers of the SFB 632, 6.Universitätsverlag Potsdam, pp.69-81.
29. Kiss, K. É., 2009.Deriving Properties of Structural Focus. In: Arndt Riester \& Edgar Onea (eds.) Focus at the Syntax-semantics Interface. Working Papers of the SFB 732, vol. 3, University of Stuttgart, pp.19-33.
30. Lasnik, H., 1995. Verbal Morphology: Syntactic Structures Meets the Minimalist Program. In: Campos, H. and Kempchinsky, P. (eds.) Evolution and Revolution in Linguistic Theory: Essays in Honor of Carlos Otero. Georgetown University Press, pp.251-275.
31. Pollock, J. Y., 1989. Verb Movement, Universal Grammar, and the Structure of IP. In: Linguistic Inquiry, 20, pp.365-424.

Julija Korostenskaja

## Veiksmažodžio iškėlimo parametro nustatymas lietuviụ kalboje

Santrauka
Straipsnyje analizuojamas lietuvių veiksmažodžio pozicijos keitimo sakinio sintaksiniame medyje kriterijus taikant generatyvinès sintaksės metodologiją. Kaip žinia, vienas pamatinių kalbų skirtumų yra tai, ar veiksmažodis keičia poziciją ị vadinama̧ją laiko frazę (TP), arba, pasitelkiant N. Chomskio minimalistinės sintaksės interpretaciją, veiksmažodis juda prieš ištarimą ar po jo. Veiksmažodžio pozicijos keitimo klausimas prancūzų ir anglų kalbose pirmą kartą buvo nuodugniai išanalizuotas I. Pollocko (1989). Šiame straipnsyje pagrindiniai I. Pollocko testai taikomi lietuvių kalbai nustatant veiksmažodžio poziciją neigiamuosiuose sakiniuose, tikrinamojo klausimo sakiniuose, teigiamuosiuose sakiniuose su kvantifikatoriais bei būdo ir dažnumo prieveiksmiais. Toliau pirminiai rezultatai buvo sutikrinami su Dabartiniu lietuvių kalbos tekstynu, o ju pagrindu parengtas testas buvo teikiamas gimtakalbiams, norint sužinoti jų vertinimą apie vieksmažodžio pozicijos sakinyje tinkamumą. Analizės metu paaiškėjo, kad veiksmažodis lietuvių kalboje nejuda iš savo pozicijos teigiamuosiuose sakiniuose ir gali pakilti ị complementiser (C) poziciją (t.y. ị aukštesnę sakinio sintaksinio medžio poziciją) bendruosiuose klausimuose. Neemociniame teigiamajame sakinyje veiksmažodis paprastai eina po būdo prieveiksmių. Tačiau gimtakalbiai visiškai neatmeta tvarkos „veiksmažodis-prieveiksmis", kuri, kaip rodo gimtakalbių vertinimų analizė, turi iš dalies pripažintą statusą. Papildomai paanalizavus neigiamos dalelytės jungimąsi prie sangrąžinių veiksmažodžių, straipsnyje teigiama, jog žemiausią poziciją prieveiksmių skalèje užimantys būdo prieveiksmiai taip pat turėtų galimybę jungtis prie neigiamos frazės ( $N e g P$ ), kuri, kaip rodoma pasitelkiant sangrąžinių veiksmažodžių pavyzdị, gali tam tikromis sąlygomis ịsiterpti ị sangrąžinio veiksmažodžio struktūrą.
32. Puskás, G., 1997. Focus and the CP Domain. In: Haegeman, L.(ed.), The New Comparative Syntax. London: Longman.
33. Puskás, G., 2000. Word Order in Hungarian: the Syntax of A'-Positions. Amsterdam and Philadelphia: John Benjamin. http://dx.doi.org/10.1075/la. 33
34. Radford, A., 2006. Minimalist Syntax Revisited. [Online] Available at: http://courses.essex.ac.uk/lg/lg514 [Accessed 06 2013].
35. Ramonienė, M., Brazauskienė, J., Burneikaitè, N., et al., 2012. Lingvodidaktikos terminų žodynas. Vilnius: Vilniaus universiteto leidykla.
36. Rutkowski, P., 2007. Some Remarks on the Syntax of Genitival Phrases in Lithuanian. In: Proceedings of the 22nd Annual NorthwestLinguistics Conference, Working Papers, vol. 1, SFU Linguistics Graduate Student Association, pp.221-231. [Online] Available at: http://www.sfu.ca/gradlings/working-papers/ wp_1.html [Accessed 06 2014].
37. Sabel, J. and Saito, M. (eds.), 2005.The Free Word Order Phenomenon. Mouton de Gruyter. Berlin: New York.
38. Sekerina, I., 1997. The Syntax and Processing of Scrambling Constructions in Russian (PhD thesis). City University of New York: NY.
39. Slioussar, N., 2011. Russian and the EPP Requirement in the Tense Domain. In:Lingua, vol. 121, issue 14, November 2011, pp.2048-2068. [Online] Available at: http://csivc.csi.cuny.edu/Irina.Sekerina/ files/publications/SEKERINA\%20dissertation\%201997.pdf [Accessed 06 2013]. http://dx.doi.org/10.1016/j.lingua.2011.07.009.
40. Smetona, A. and Usoniene., A.,2012. Autoriaus pozicijos adverbialai ir adverbializacija lietuvių mokslo kalboje. In: Kalbotyra, 64(3), pp.124-139.
41. Svenonius, P., 2004. Slavic Prefixes Inside and Outside VP. In: Nordlyd vol. 32, No 2, pp.205-251.
42. Usoniené, A., 2006. Ar viskas išverčiama? In: Darbai ir dienos, 2006,45, pp.97-108. [Online] Available at: http://donelaitis.vdu.lt/ publikacijos/dd45_usoniene.pdf [Accessed 07 2014].
43. Vilkuna, M., 1989. Free Word Order in Finnish: Its Syntax and Discourse Functions. Suomalaisen Kirjallisuuden Seura.
44. Webelhuth, G., 1992. Principles and Parameters of Syntactic Saturation. OUP: New York.
45. Zagona, K., 2002. The Syntax of Spanish. CUP.
46. Zwicky, A., 1986.Free Word Order in GPSG. In: OSU Working Papers in Linguistics, 32, pp.125-132.

## DataSources and Software

1. The Corpus of the Contemporary Lithuanian Language [Dabartinès lietuvių kalbos tekstynas]. [Online] Available at: http://tekstynas.vdu.lt tekstynas/
2. Dabartinės lietuvių kalbos žodynas. [Online] Available at: http://dz. lki.lt/
3. KwikSurveys: Free online survey \& questionnaire tool. [Online] Available at: www.kwiksurveys.com

## About the author

Julija Korostenskaja, PhD, Vilnius University, Institute of Foreign Languages.
Academic interests: generative syntax, syntax-morphology interface.
Address: Vilnius University, Institute of Foreign Languages, Universiteto str. 5, LT-01513 Vilnius, Lithuania
Email: julija.korostenskaja@uki.vu.lt

