Grammaticalization of word order
Evidence from Lithuanian*

Sergey Say
ILI RAN, St. Petersburg

1. Introductory remarks

The role of word order phenomena in the study of grammaticalisation is somewhat unclear. On the one hand, word order processes do not seem to fit into the narrow understanding of grammaticalisation as a development of once lexical units into grammatical ones. On the other hand, ever since Meillet’s path-breaking article on grammaticalisation (1912), it has been acknowledged that “the grammatical fixing of word order (…) is a phenomenon “of the same order” as the grammaticalization of individual words” (Hopper & Traugott 1993:23 and further reference to Meillet). Moreover, regardless of theoretical persuasions of individual researchers, ‘grammaticalisation of word order’ is a collocation that is repeatedly used in diachronic syntax referring to the process of emergence of a rigid ‘grammatical’ word order instead of loose ‘pragmatic’ one. And yet, apparent reversibility of word order changes as well as differences in the very character of developing linguistic forms led to viewing the fixing of word order as at best a rather peripheral case of grammaticalisation (see Hopper & Traugott 1993:50–56 for an in-depth discussion). In what follows I present a case study of a diachronic word order process in Lithuanian and try to build it into the theory of grammaticalisation, which is primarily based on the study of the more usual lexicon-to-grammar scenario of grammaticalisation.

Lithuanian is a so-called ‘free word order language’ (Ambrazas 1982:101; Ambrazas 1985; DLKG 1996); according to the now commonly accepted views, this means that word order, at least at the clausal level, reflects here not only the structure of grammatical relations (subject, object etc.), but also depends on a number of communicative and pragmatic factors, such as for instance the theme vs. rheme distinction (Girdienienė 1971; Valeika 1974; Ambrazas 1985:671–682),
emphasis, relative communicative weight and the like (DLKG 1996:645). As expected, there are, however, some structures in Lithuanian grammar, in which word order is fixed, or grammaticalised, that is, pragmatic factors are ruled out. One of these is the genitive construction, in which the GEN-N pattern is clearly unmarked in contemporary Lithuanian:

(1) tėv-o švarkas
father-GEN jacket
“father’s jacket”

(2) auks-o žiedas
gold-GEN ring
“golden ring”

(3) kelion-ės tikslas
journey-GEN purpose
“the purpose of the journey”

For these and further examples see (Ambrazas 1985:686, 1986:96–97; Ambrazas (Ed.) 1997:702; DLKG 1996:655–656). Postposition of the Genitive is often claimed to be an emphatic or poetical device (example quoted from Ambrazas (Ed.) 1997:702, see also Ambrazas 1985:687; Schmalstieg 1988:318):

(4) Kaip puik-as slėniai sraun-ios Dubys-os!
How magnificent-PL vales swift-GEN Dubysa-GEN
“How magnificent are the vales of the swift Dubysa!”

What is more relevant for the issues raised here is that the genitive is consistently postposed if the head noun conveys quantity (5), and inconsistently if the genitive has a partitive function (6):

(5) litras pien-o
liter milk-GEN
“(one) litre of milk”

(6) dal-yje tarm-ių or: tarm-ių dal-yje
part-LOC dialects-GEN dialects-GEN part-LOC
“in (one) part of the dialects”

In one subtype of the genitive construction the relative order of elements has distinctive value, namely, where the head noun functions as a ‘container’:

(7) a. stiklinė arbat-os
glass tea-GEN
“glass of tea”
Grammaticalization of word order

b. arbat-os stiklinė
tea-GEN glass
“tea-glass”

(8) a. lentyna knyg-ų
shelf books-GEN
“shelf of books”
b. knyg-ų lentyna
books-GEN shelf
“book-shelf”

If preposed, the genitive in such constructions does not refer to any particular physical entity in the world and merely denotes a general characteristic intrinsic to the entity referred to by head of the NP. Thus, arbat-os stiklinė may refer to a glass that is actually empty; it simply refers to a type of glass that is used for tea. This kind of preposed genitival modifier can scarcely have dependents of their own; typically they describe a characteristic of the head noun that holds a high position on the time-stability scale (that is, arbat-os stiklinė “tea glass” can not become alaus stiklinė “beer glass”). In other words, they show some signs of the loss of nominal properties, typical of non-referential genitives (Koptjevskaja-Tamm 2002:158).

Postposed genitives in the constructions headed by a noun with the meaning of container are quite different. Actually, the role of stiklinė “glass” in stiklinė arbat-os “a glass of tea” is very similar to that of a quantifier whose prototypical function cross-linguistically is to make mass nouns referential. The question whether or not arbatos is itself referential here can hardly be unambiguously answered; however, there are some clear indications that these genitives hold a position nearer to the referential pole of the referentiality continuum (see Givón 1984:423ff.), than those discussed in the preceding paragraph. For instance, these genitives may have dependents of their own and in some of these cases the whole dependent NP is clearly referential:

(9) puodukas šit-os arbat-os
cup this-FEM-GEN tea-GEN
“a cup of this tea”

(10) puodukas mano mam-os išplikyt-os arbat-os
cup my mother-GEN made-FEM-GEN tea-GEN
“a cup of the tea prepared by my mother”

Of course, in many cases the dependent genitive in the constructions at issue does not have dependents of its own and refers to substance rather than to a subset of it, and, thus, is not semantically referential. Even in this cases, the genitive has a
property of what can be called potential referentiality, which can manifest itself in further discourse, cf.:

(11) Aš įsigeriau puoduk-ą arbat-os, ir ji, man pasirodė labai skani.
    I drank.1SG cup-ACC tea-GEN and she me.DAT seemed very tasty.
    "I have drunk a cup of tea and it seemed very tasty to me."

Here ji “it (feminine)” is coreferential with arbatos “tea” and refers to the portion of tea that has been drunk by the speaker; thus, referentiality of the noun denoting substance is created by its use in the genitive construction at issue.6 In other words, arbatos “tea-GEN” appears to be referential on the discourse level, although it may be not on the propositional level.

It is curious that in other constructions, unlike those discussed above, the genitive is found in preposition regardless of its referentiality or its non-referentiality, which gives rise to semantic ambiguity:

(12) vyr-o darbas
    man-GEN job
    a. “the job of the man (referential)”
    b. “a job that is appropriate for a man, a job of a real man (non-referential)”

The (relative) fixedness of word order in the genitive construction is a comparatively innovative feature of Lithuanian. In the following analysis of its emergence I intend to implement a scholarly precept by Olga Yokoyama proposed with respect to the study of word order in Russian: "(...) if there exists a kind of continuum between grammar and pragmatics (…), then there may be considerable theoretical interest in re-examining the interaction of word order and grammatical relations (…) in terms of grammaticalisation of anthropological attitudinal factors” (Yokoyama 1986:171). In other words, the ordering patterns of a particular language could be found to be motivated by the speaker’s construal of the non-linguistic reality, while the processes of word order change may be possibly viewed as conventionalisation of these pragmatically motivated patterns.
2. Genitive construction in Old Lithuanian

2.1 General facts and previous research

In the course of the rather short (beginning in the 16th century) written history of the Lithuanian language, its syntax, and word order in particular, have undergone few significant changes (Zinkevičius 1981:208). However, in Old Lithuanian genitives are found in postposition as often (and in some texts even more often) as in preposition. The position of adnominal genitives in the Old Lithuanian texts has been thoroughly studied by Vasiliauskienė (1994, 1997, 1998). She argues that the position of the genitive depends on a number of factors, and particularly, on whether any component of the NP is emphasised. In the latter case the genitive may be found in the marked position, that is, after the head noun (Vasiliauskienė 1997:108; cf. similar observations for the agreeing modifiers in Girdenienė 1981). No semantic differences between the two ordering patterns are reported in the literature (to my knowledge). There has been much speculation as to what the original word order pattern was in this domain; since no conclusive evidence has been put forward, the question will not be discussed in any detail below and the picture characteristic of the Old Lithuanian writings (16–17th centuries) will be taken as a starting point for further analysis.

2.2 Anchoring vs. non-anchoring relations in the genitive construction

In order to make further discussion profitable, an important distinction between anchoring and non-anchoring genitives must be drawn. This distinction is most clearly put by Maria Koptjevskaja-Tamm:

”In many cases GAs (genitive adnominals – S. S.) function as anchors (…) or reference point entities (…) for identification of head’s referents. In other words, in many instances we can identify the referent of a nominal via its relation to the referent of the GA. Thus, knowing who Peter is we can identify Peter’s bag, arm, brother; knowing what the table refers to we can identify the edge of the table etc.” (Koptjevskaja-Tamm 2000:126)

Obviously, an important precondition for GAs to function as reference point entities, or anchors, is that they themselves involve referential noun phrases. Particular good anchors are also those whose reference is firmly established in the preceding discourse and/or situation (…). (ibid.:128)

Non-anchoring genitives are different in that

(…) their primary function consists in qualifying or classifying the head nominals, rather than identifying their referents. (…) Non-anchoring genitives
provide a powerful tool for qualifying entities by focusing on various aspects – material they are made up of, age, size, purpose, temporal and locational characteristics and so on. (ibid.: 141)

Contemporary Lithuanian is among those languages that use basically the same means to express anchoring and non-anchoring relations. Thus for instance in (12) the genitive *vyro* may refer to a definite ‘man’ and function as anchor for the *darbas* “job”; however, it may also be used as a mere classifier of the head noun *darbas*, indicating that the job at issue refers to a particular kind of job.

In the majority of languages, however, these two types of relations are coded differently. Most often the two patterns are kept distinct with the help of the determiner system, as in the following examples from Italian (as well as in their English translations):

(13) a. *la casa di un professore*
    
    ART.DEF house of ART.INDEF teacher
    
    “the house of a teacher”

b. *la casa di pietro*
    
    ART.DEF house of stone
    
    “the house of stone” (Koptjevskaja-Tamm 2002: 156)

This type of opposition is of course not attested in those languages which lack a determiner system, as is the case in Lithuanian. There are, however, other strategies that make it possible to distinguish between the two types of constructions and which do not involve the use of articles. Russian denominal adjectives as opposed to true genitives (14) or German compounds as opposed to true genitives (15) are typical examples of such strategies:

(14) a. *krest’janskaja* *loshad’*
    
    peasant.ADJ horse
    
    “(a) horse for work in the field”

b. *loshad’* *krest’janin-a*
    
    horse peasant-GEN
    
    “(the) peasant’s horse, horse of the peasant”

(15) a. *Kinder-krankheit*
    
    children-illness
    
    “(a) disease typical of children, (a) childhood disease”

b. *Krankheit der* *Kinder*
    
    illness DEF.GEN children.GEN
    
    “(the) illness of the (particular) children”

A preliminary typology of the means used to make the anchoring/non-anchoring distinction is proposed in (Koptjevskaja-Tamm 2002).
2.3 Referentiality and word order in the Old Lithuanian genitive construction

The main hypothesis proposed here with respect to the ordering patterns in the Old Lithuanian genitive construction is that genitives used referentially and having possession-like meaning tended to be postposed, while preposition was favoured by those genitives that did not have a particular referent and denoted an abstract quality of the object. In other words, in the Old Lithuanian texts (as well as in some dialects, where word order preserves many archaic features) relative order of GEN and N statistically reflected the anchoring vs. non-anchoring distinction.

This may be exemplified by a typical NP from the Mažvydas’ “Katekizmas”:

(16) žadis danga-\text{gen} \text{karalist-as} \\
word heaven-\text{gen} kingdom-\text{gen}' \\
“the word of the kingdom of heaven”

Here the relation between žadis and postposed karalistas is possession-like: karalistas indicates the source of the words. In contrast, preposed dangaus may be interpreted as an epithet of the kingdom.

This general hypothesis accounts well for the fact that the distribution of pre- and postposition is not the same for various types of genitival meanings. Thus, for instance, the meaning of material or abstract quality is usually expressed by the genitive in preposition (examples (17)–(24) are taken from Baranauskas’ dialectal texts quoted from Vasiliauskiene 1998:223–224):

(17) sidobr-o bļizguczai \\
silver-\text{gen} spangles \\
“silver spangles”

(18) a\text{pe} sanow-as \text{gadyni} \\
about old.times-\text{gen} days \\
“about (the) days of yore”

Highly referential genitives in the constructions with the meaning of inalienable possession (19)–(21), as well as objective (22) and subjective (23)–(24) genitives are usually found in postposition:

(19) isz akiu Aniut-es \\
from eyes Aniute-\text{gen} \\
“from Aniute’s eyes”

(20) unt balsa nabasznik-a Wyskup-a \\
on voice dead.person-\text{gen} bishop-\text{gen} \\
“in the voice of the late bishop”
appropriate statistical analysis of the data is complicated by the fact that in many
cases exact semantic interpretation is difficult to perform. This is, for instance, the
case with the word diewo god-GEN, which is one the most frequent attributes in
the Old Lithuanian writings. It is difficult to determine whether it must be inter-
preted as “god’s, of god” or “divine, godly” in each particular case. Position of this
modifier shows a good deal of variation. However, Vasiliauskiene notices that the
only NP in Sirvydas’ “Punktai sakymų” and Bretkūnas’ “Postilės” in which diewo
favours preposition is diewo žodis “god’s (or possibly divine) word” (Vasiliauskiene
1997:107). This observation fits well into the hypothesis proposed above: prefer-
ence for preposition is not observed in cases where the genitive has possessive-like
meaning and cannot be understood as qualifier, such as Diewo akim / akim Diewo
“to the god’s eye’, Diewo baymes / baymes Diewo “of the fear of god”.

In some cases word order in the Gen-N structure seems to reflect the referential
structure of the text, cf. the following passage from “Punktai sakymų”:

(25) Vnt galula pakrutina ir inartina marias
At end stirs and attracts seas-ACC
menuo, kuris kad auga ir wunduo MARIU
moon, which when grows and water seas-GEN
kiełasi ir kayp butu auga, kad mažin yet ir gaussta, ir
raises and as if were growing, when smaller goes and wanes, and
mariu wunduo nupuola žiemius
seas-GEN water goes down lower
“Finally the seas are stirred and attracted by the moon: when it grows the
water of the seas (lit.: “water – seas-GEN”) is also raising and, as it were,
grows; when it (= the moon) becomes smaller and wanes, the sea water
Grammaticalization of word order

(lit.: “seas-GEN water”) goes down, too."

In the first case mariu “seas-GEN” (these seas has already been mentioned at the beginning of the sentence!) has the function of anchor for the water and thus is found in postposition. In the second case, there is no need to identify the nominal once again and the genitive is preposed. The hypothesis at issue is also in agreement with Vasiliauskiene’s (1997:111) observation that the genitive is particularly often postposed at the beginning of a new paragraph or thought.

2.4 The problem of foreign influence

It is sometimes claimed that postposition of the genitive attribute was basically alien to Old Lithuanian (as it is alien to contemporary Lithuanian) and that it was due to the influence of other languages (Zinkevičius 1981:216, 1998:181). Indeed, the proportion of pre- and postposed genitives in Old Lithuanian texts differs drastically from one text to another even when they date from the same period. This fact is difficult to account for by the factors intrinsic to the Lithuanian language.

However, Vasiliauskiene (1997:121) argues that “(...) influence of other languages cannot be the only possible explanation for the so frequent postposition of Gen_n in Old Lithuanian. For such alternation of placement of Gen_n to be possible at all, the language must be, in a sense, prepared for it”. This way of thinking relies on a well-known claim proposed by Jakobson: “[l]a langue n’accepte des éléments de structure étrangers que quand ils correspondent à ses tendances de développement” (Jakobson 1938:54; cf. also Weinreich 1953:25).

The two opposite views on the role of foreign influence quoted above could in fact appear not to be as contradictory as they seem at the first glance. These two approaches are reconciled if one recognizes the idea of multiple causation, according to which the presence of system-internal factors which facilitate a particular pattern of change does not automatically preclude the possibility of foreign influence as a triggering force of that change, and vice versa (cf. for instance Thomason & Kaufman 1988:57ff.). The hypothesis on the distribution of Old Lithuanian geniti-val positions proposed above allows us to reinterpret the commonly accepted view on the role of contact phenomena in the development of Lithuanian ordering patterns. Indeed, it is well-known that the range of genitival uses in Lithuanian covers a very wide spectrum, which corresponds to both genitives and relational adjectives in a number of neighbouring languages, for instance in Polish, which was the basic source for the Lithuanian literary tradition. To put it somewhat crudely, those Lithuanian genitives that are used non-referentially and have the meaning of some abstract quality correspond to the Polish relational adjectives, rather than genitives. One may further note that, while Polish genitives are almost exclusively
found in postposition, the adjectives may appear on either side of the noun. In general, preposition of adjectives is slightly preferred, although not for relational ones. In other words, there is both semantic and structural contrast between genitive constructions and constructions with relational adjectives respectively, and this contrast is partially manifested in the ordering patterns. In this respect Polish influence could have indeed initiated (or at least strengthened) the tendency to express referential/non-referential distinction by the position of the genitive in Old Lithuanian. This distinction could be to some extent an epiphenomenon of the tendency to preserve original (post-nominal) position of genitives in the translated texts. What is more important, however, is that the Polish system of nominal modifiers could have triggered or strengthened the differentiation of the two types of genitives in Lithuanian. In other words, the source and target systems have been assimilated, even though the morphosyntactic patterns of the two languages were different.

3. The Lithuanian genitive construction from a diachronic point of view

3.1 Emergence of rigid word order as a process of grammaticalisation

There is no doubt that the ordering of elements within the Old Lithuanian genitive construction was a tricky matter, which reflected communicative, stylistic (as proposed in the relevant literature) and/or referential (as suggested here) factors. However, this pragmatically/referentially oriented system developed into a system that fixes word order regardless of any pragmatic or communicative nuances in the meaning of particular genitive phrases. A few contemporary cases of word order ‘doubling’9 may be interpreted as fossilised remnants of the older system: in contemporary genitive constructions whose head has the meaning of container, position of the genitive reflects its function in a rather regular fashion; as was typical of Old Lithuanian, attributive genitives are in preposition, while those genitives that are used in pseudo-partitive constructions and thus hold a higher position on the referentiality hierarchy are in postposition.

Although not in line with the most popular trend to view grammaticalisation as exclusively the process of “the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status” (Kuryłowicz 1965:52; cf. also Heine et al. 1991:2, and many others), this kind of development does present a case of grammaticalisation if the latter is “treated in a wider perspective of the life cycles of grammatical constructions” (Dahl 2001) and is understood as “the gradual drift in all parts of the grammar toward tighter structures, toward less freedom in the use of linguistic expressions at all levels” (Hapelmash 1998:318; cf. also Hapelmash 1999).
If one assumes that it is not necessarily lexical units, but rather grammatical constructions that grammaticalise, the development of the Lithuanian genitive construction has shown such constitutional features of grammaticalisation as loss in semantic complexity, pragmatic significance and syntactic freedom (cf. Heine & Reh 1984 for an elaboration of these parameters). If we treat word order as a kind of linguistic sign, we should acknowledge that this sign has acquired a new, more abstract signifié, its new function being primarily marking the very structure of grammatical relations, instead of indicating (though somewhat indirectly) the referential status of particular NPs. This kind of ascension from more concrete to more abstract meaning is typical of any grammaticalisation. In the case of container construction word order has not acquired a new, more abstract signifié, but syntactic freedom has also decreased in that a statistically preferred encoding strategy which could serve as a merely inferential cue for the listener grew to be an obligatory rule which has clearly semantically distinctive value.

One specific aspect of the process at issue, which puts it somewhat apart from the more common grammaticalisation pathways, is that it did not lead to the fixing of constraints on interpretation; rather, correct understanding of the majority of contemporary Lithuanian genitive constructions requires more inferential effort on the part of the hearer in determining the implicatures that are necessary for successful communication. In particular, more implicit inferences are needed to choose between the referential and non-referential reading of contemporary genitive constructions – a development that goes against the general pattern found in grammaticalisation processes, which, as argued by LaPolla, usually create new built-in constraints on interpretation, thus decreasing the inferential aspect of understanding (LaPolla 1997). Thus, instead of grammaticalising the anchoring/non-anchoring distinction Lithuanian collapsed the two subtypes of the genitive construction altogether; unlike many other patterns of grammaticalisation, the development discussed above was not based on the conventionalisation of a once pragmatically motivated contrast.

3.2 Direction of extension of ordering patterns

The very fact that word order in the Lithuanian genitive phrase was grammaticalised is not surprising: it is well known that word order in the genitive phrase shows a low degree of intra-language variation (Rijkhoff 1998). The mechanism that has led to the fixation of word order was the extension of the pattern typical of non-anchoring genitives onto anchoring genitives. The question, however, arises why did grammaticalisation of word order happen the way it did? In other words, why did Lithuanian grammaticalise preposition of the genitives, and not postposi-
tion? Although questions of this kind can never be answered conclusively, there are some speculations that may be germane.

First, it may be noticed that while expressing possessive relations is a primary function of adnominal genitives in various languages, it is the richness of the various non-anchoring genitival uses that results in the notable frequency of genitives in Lithuanian and Baltic generally (Pritzwald 1936; Fraenkel 1950:102; Zinkevičius 1981:210 passim; Berg-Olsen 1999). Thus the proportion of non-referential genitives in Lithuanian is much higher than in languages with more typical genitival functions. This fact may have resulted in the shift of the quantitative, if not functional, core of the genitive construction from the domain of possession into the domain of more abstract qualification of the head noun; the latter was typically expressed by the preposed genitive in Old Lithuanian (as argued above).

Second, the functions of relational adjectives and genitives overlap in Lithuanian even more than in other languages (see also below). Translational practice in the Old Lithuanian period (see 2.4) corroborates the view that Lithuanian genitives were easily identified with the adjectives of other languages. Thus, the preposition of agreeing modifiers could have played an analogical role in the levelling of the position of other adnominal dependents with respect to the noun; that is, the versatility of the Lithuanian genitives could have led to their expansion into the adjectival domain triggering subsequent alignment of word order according to the model provided by attributive phrases. Thus, the uniform pre-head position of nominal modifiers in Lithuanian was achieved by harmony-by-extension development in terms of Harris and Campbell (1995:212).

In any case the Lithuanian scenario of development could be relevant for the on-going debate on the nature of the tendency towards harmonic (that is, either consistently head-initial or consistently head-final) word order patterns in the languages of the world (see for instance Hawkins 1983). On the one hand, it may be true that the reasons for this tendency may be historical, as is argued by many scholars (Aristar 1991; Bybee 1988). On the other hand, it is not likely that the well-attested correlations between ordering patterns in the constituents of various types is only due to the preservation of the older word order in the process of reanalysis of a particular construction (harmony-through-reanalysis), as is argued for instance by DeLancey (1993), who rules out any possibility of synchronic forces leading to the harmony of word order. In fact, the process of analogical elimination of word order doubling, such as the one attested in Lithuanian, may reflect such a synchronic force, which is in this case simply a tendency towards uniformity based on the comparison of structurally different but functionally similar constructions.
4. On functional convergence between genitives and adjectives

The word 'genitive' primarily refers to a particular member of the Indo-European case system attested in older IE languages and preserved in some contemporary IE branches, Baltic among them. However, in the typological literature 'genitive' (Givón 1990; Croft 1995:99) or more often 'possessive' (Nichols 1992) constructions are identified on syntactic (or semantic) grounds as typical constructions used in a certain language to link two nominals thus modifying one of them. Preferably these constructions must have a possessive core. That is why phrases like English '(the) daughter of my friend', German Frauenbild "portrait of a woman" or Russian Петяна книжка "Petya's book" are often counted as genitive constructions in cross-linguistic studies, regardless of the fact that from a morphological point of view their 'possessors' are expressed by prepositional phrases, adjectives or even parts of compound nouns.

This is a typical example of a somewhat opportunistic solution to a well-known problem of non-universality of syntactic constructions. Given that the morphosyntactic systems of individual languages are sometimes wildly deviant, there is no other way to identify constructions cross-linguistically than by basing them primarily on their functions. Thus, for instance English of -phrases are often (for instance, in typological studies on word order) compared to other languages' true genitives precisely because they have similar functions. Lithuanian is a kind of opposite extreme in this respect: morphological genitives are somewhat abundant and have many functions that are typical of adjectives, rather than genitives in other languages. Thus, there are some logical reasons to identify at least some of Lithuanian morphological genitives with adjectives in cross-linguistic studies.

It seems that such an approach is not only logically plausible, but would also capture some facts intrinsic to the grammar of Lithuanian, such as the ability of the Lithuanian genitive to be coordinated with adjectives:

(26) rank-u̯ ir protinis darbas
    hands-GEN and intellectual work
    "hand (physical) and intellectual work"

(27) vidur-i̯o ir lyviškoji tarmės
    middle-GEN and Livonian dialects
    "central (-Latvian) and Livonian dialects"

An oblique argument for the functional convergence between adjectival and genitival modifiers in Lithuanian comes from Latvian, where the system of modifiers is generally similar to the Lithuanian one. However, there is a large group of the so-called genitivini, i.e., indeclinable adjectives that have the morphological form of genitives of non-existing (or extinct) nouns: bezbernu gimenė "childless (Gen.Plur.)"
family”, pretgripas lidzeklis “anti-flu (Gen.Sg.) medicin”, trisistabu dzivoklis “three-
room (Gen.Plur.) flat”. The rise of genitįvinį is nothing less than the process of lexicalisation of genitives, which is a well attested source of adjectives in the languages of the world.

The possibility for two phrases to be co-ordinated is often viewed as a manifestation of the fact that they belong to the same syntactic category. Thus, judging from the combinatory abilities of Lithuanian morphological adjectives and genitives, three major classes must be distinguished: (1) anchoring genitives, (2) non-anchoring genitives and relational adjectives, (3) qualitative adjectives.

5. The Lithuanian NP as a counterexample to typological word order tendencies

There is a strong universal tendency to place genitives in the periphery of the NP. Lithuanian is the only language in Rijkhoff’s (1998) European languages’ sample in which the Adj-Gen-Noun pattern is nevertheless unmarked, although Gen-Adj-Noun pattern is sometimes possible, too (actually Latvian, which is very near to Lithuanian in this respect, was not included in the sample, see also below). However, an explanation for this unexpected finding may be offered in the light of the above suggestions.

Attributes are often classified on the basis of the degree to which their meanings are integrated into the meaning of the head noun; it is assumed that word order in the NP must iconically reflect these layers of intimacy (Rijkhoff 1992). Relational adjectives, especially terminological ones typically hold a very high position on this hierarchy (cf. the tendency to place relational adjectives nearer to the noun than qualitative ones, which is attested in various languages). Contrariwise, possessors and other meanings typically expressed by the genitives are usually in the most peripheral layer of adnominal dependents, which is reflected in the cross-linguistic word order pattern discussed by Rijkhoff. In the light of the interpretation proposed in Section 4 Lithuanian genitives are split: some of them (non-referential ones) must be adjacent to the head noun in the cognitive structure of the NP, and others (referential ones, ‘true’ possessive genitives) must hold a peripheral position.

It is curious that Latvian, which is otherwise very close to Lithuanian, conforms to the essence of Rijkhoff’s principles in that the split between referential and non-referential genitives (specifier and descriptive genitives in Christen’s terms) is reflected in its word order patterns. Thus Latvian speakers prefer the structure in (28a) to the one in (28b) in case of specifier genitives and under some further conditions (Christen 2001:505):
Grammaticalization of word order

(28) a. maz-¯as meiten-es jaunais kr¯esls
   little-gen girl-gen new chair
b. jaunais maz-¯as meiten-es kr¯esls
   new little-gen girl-gen chair
   “the little girl’s new chair”

Thus the Adj-Gen-Noun pattern is persistent for the descriptive non-referential genitives only (for example, a non-referential meaning “the new little girl’s chair” is likelier to be conveyed by the word order pattern in (28b)). Contrariwise, in Lithuanian the two types of genitives are conflated and do not differ in their word order behaviour. Both types of genitives tend to behave as Latvian descriptive genitives, cf. preference for (29a) over (29b) (ibid.:505):

(29) a. nauja maž-os mergait-˙es k˙ed˙e
   new little-gen girl-gen chair
b. maž-os mergait-˙es nauja k˙ed˙e
   little-gen girl-gen new chair
   “the little girl’s new chair”

This observation corroborates the above hypothesis that in the history of Lithuanian the ordering discrepancies between the two types of genitives have been analogically levelled and that the pattern typical of descriptive (non-referential) genitives extended onto other genitives.12

6. Concluding remarks

Linguistic notions such as grammaticalisation are supposed to capture some regularities in the real functioning of language rather than to be artificial concepts imposed upon it. In this respect one must agree with Östen Dahl in that the traditional understanding of grammaticalisation à-la Meillet may seem too narrow.

The emergence of fixed word order, for instance, would only be subsumable under grammaticalization when the position of morphemes which are on their way to becoming grammaticalized is concerned. Yet, we would want to see such processes as a unitary phenomenon. A more general definition of grammaticalization would generalize it to all processes by which grammatical phenomena develop. (Dahl 2000:8)

Grammaticalisation of word order as the shift from so-called free word order to fixed word order in a particular syntactic domain is basically a development of a new syntactic means or, rather, an up-grading of such a means on a well-known grammaticalisation scale proposed by Givón (1979:83):
It is a typical grammaticalisation process in that it produces more regular linguistic signs with more abstract semantics out of less regular and more concrete signs.

Supposedly, extension is the basic mechanism of this type of development. If a distribution between the two competing ordering patterns is reshaped in such a way that the complicated pragmatics- or discourse-oriented rule yields to a more transparent syntactic rule, it means that one of the patterns has been extended over time. As was shown above, the very possibility as well as the direction of the extension is conditioned by the identification of syntactic constructions and/or categories.

The major deviation from the more usual patterns of grammaticalisation is that grammaticalisation of word order is clearly a reversible process. Syntactically conditioned (rigid) and pragmatically conditioned (loose) word order patterns interchange diachronically in the history of various languages. Moreover, the two tendencies may run simultaneously in different structures of one language. Thus, in contemporary Lithuanian there is a tendency to place pronominal (especially topical) objects before the verb, while nominal objects are usually found in post-verbal position. If the development of this split is innovative, and there are some grounds to think so, then it clearly undermines the more or less consistent SVO pattern of Lithuanian, thus making it less grammaticalised. Do these facts mean that we should abolish altogether the unidirectionality principle with respect to the grammaticalisation of word order?

Yes and no. If the patterns of word order change are taken in isolation, there is no ground for viewing these processes as unidirectional. However, word order change is often involved in longer grammaticalisation chains, or channels, such as for instance a pronoun > clitic > affix channel, cf. (Lehmann 1995). Word order adjustment of a certain kind is a necessary, though not sufficient, condition for many of these developments. And it is only a particular type of word order change that can provide grist for the grammaticalisation mill. Thus, for instance, Lithuanian would have to grammaticalise the emerging ordering contrast between nominal and pronominal objects of the verb in order to develop pronominal clitics, as has happened in Romance and some Slavic languages. Pragmaticisation of word order never leads to further processes of grammaticalisation, while syntactisation of word order may do so; moreover, emergence of contrastive ordering patterns with respect to a once single syntactic construction is a good starting point for the splitting of a syntactic category, which opens up the way for further grammaticalisation chains. It is in that sense that grammaticalisation of word order is unidirectional: once a novel syntactic unit goes one step further in the grammaticalisation channel, the word order re-patterning becomes irreversible.
**Notes**

* The research reported here was partially supported by the president of the Russian Federation’s programme for the support of major academic schools (grant No. NSh-2325.2003.6). ILI RAN stands for Institut lingvisticheskix issledovanij Rossiijskoj akademii nauk – Institute of linguistic research of the Russian Academy of Sciences.

1. This study owes its existence to a number of persons. Vanda Kazanskienė was my main informant, and a co-operative linguist at the same time. Many thanks go to Emma Geniušienė, an anonymous referee and especially Olga Fischer for their valuable comments on earlier versions of the paper. Finally, I would like to express my deep gratitude to Maria Koptjevskaja-Tamm, for both general inspiration that I found in her research and very specific help in recommending some relevant references and providing access to the then unpublished material. None of these kind people bears any responsibility for the possible mistakes and shortcomings in the present article.

2. The situation is further complicated by the fact that ‘word order change’ usually refers to the shift in basic word order patterns (such as, for instance, SOV to SVO or Adj-Noun to Noun-Adj development). This kind of language change, too, has some features in common with the prototypical cases of grammaticalisation, but it is of course usually viewed as a distinct process (for the comparison of the two types of phenomena see McMahon 1994:139–170). Evidently, fixing of word order is much nearer to the core of grammaticalisation than the shift of basic word order.

3. As argued by Bhat (1991) it means that semantic and pragmatic relations within the sentence, especially between the major constituents, are encoded by basically the same means and are not kept apart as is typical of languages with fixed word order.

4. It has been repeatedly pointed out in the literature that languages with highly flexible clause structures may have inflexible NPs; among the European languages this combination of properties is found (besides Lithuanian, see below) in e.g. Udmurt and Armenian (Bakker 1998:392). The opposite combination is possible as well; however, the relative order of V and O is cross-linguistically much more liable to flexibility than the order of the elements within the NP (for some figures see Bakker 1998:388).

5. It has been noticed in the literature that the position of a modifier relative to its head noun may depend on whether or not this modifier refers to an inbuilt characteristic of the entity or rather to a characteristic that is asserted by the use of the NP. A lengthy discussion of such phenomena in Old English and some other languages can be found in Fischer (2001). It is convincingly shown in this article that pre-existing, thematic properties of the noun tend to be iconically expressed by pre-head modifiers (adjectives in those cases), while possibly temporary and rhematic properties are expressed by postposed modifiers.

6. The picture is further blurred by the fact that it is not quite clear which noun is a semantic head in *puodukas arbatos* ‘a cup of tea’. Along with the contexts similar to (11) where one speaks about tea rather than about the glass (cf. the use of the verb ‘to drink’) this NP can be also found in examples like:
(11) a. Ant stato stovėjo puodukas arbatos.
On table stood cup tea-gen
“There was a cup of tea on the table.”

Here the whole NP refers to the glass itself rather than to a particular portion of tea. Finally, somewhat embarrassingly, some contexts are registered in which the whole NP has a kind of split reference:

(11) b. Aš išgeriau puoduką arbatos ir išmečiau ji pro langą.
I drank.1sg cup-acc tea-gen and threw.1sg it-acc through window
“I have drunk a cup of tea and threw it out through the window.”

Here puoduką arbatos seems to refer to a portion of tea in the first clause, although in the second clause, ji that is syntactically coreferential to it, clearly refers to the glass itself.

7. The first written Lithuanian texts appeared in the 16th century. As in many European countries literacy was brought by Christianity. Lithuanian literary tradition developed more or less simultaneously in two countries, the Grand Duchy of Lithuania and the Duchy of Prussia. The study of Old Lithuanian syntax is complicated by the fact that Old Lithuanian writings were for the most part compilations of almost word-by-word (eventually even morpheme-by-morpheme) translations of religious texts from Polish or Latin. One of the most important sources is the first Lithuanian book, Martynas Mažvičas’ catechism (“Katekizmas”) published in 1547 in Königsberg, Prussia. The other literary sources that are directly referred to in this article include a book of sermons (“Postilė”) published by Jonas Brekūnas in 1591 and Konstantinas Sivrydas’ “Gospel Points” (“Punktai Sakymu”), a collection of original sermons published in 1629. Due to historical circumstances, the language of various Old Lithuanian writings shows a good deal of dialectal variation and orthographic inconsistency, although some efforts have been made to normalize the language during the 16–17th centuries and the first grammars and dictionaries were published in this period. For a detailed description of the early written history of the Lithuanian language, see (Zinkevičius 1998:227–255; Zinkevičius 1988).

8. It may be noticed that in many languages the two types of constructions used for the expression of anchoring and non-anchoring relations respectively differ with respect to word order patterns found in them (see for instance examples from German and Russian above). However, word order alone does not signal the distinction in any of the European languages from Koptjevskaja-Tamm’s sample (2002).

9. To use Rijkhoff’s term, who applies it to those cases, when “some or all modifiers of a certain category (…) may appear on either side of the noun” (Rijkhoff 1998:343).

10. The argument of LaPolla is based on the widely attested mechanism of grammaticalisation, namely, conventionalisation of a once expressive and more explicit linguistic coding. Thus, for instance, grammaticalisation of you guys into a 2Pl. pronoun as opposed to you as a 2Sg. pronoun in some varieties of English is indeed a case of such a development. The use of you guys is more explicit with respect to the number of addressees and thus constrains the hearer’s interpretation of the utterance more heavily than Standard English you does.

11. Anette Rosenbach (this volume) argues that the scenario of development of the English NP-structures was due to the analogy between referential/non-referential types of adnom-
inal dependents, cf.: “There is both structural variation (absence of presence of POSS ’s) as well as semantic variation ([± referential] possessor), which leads to a mismatch between form and meaning. (...) I assume that such form/meaning mismatches have given rise to some kind of analogy, with hearers having two possible interpretations ([± referential] possessor/first noun) for one surface construction (…). Likewise, speakers have two constructions (with or without POSS ’s) at their disposal to convey the same meaning (either a referential or a non-referential possessor/first noun). For the scenario I am suggesting it is (…) crucial (…) that (…) the distinction between the constructions becomes blurred, which makes it possible for the properties of one construction to ‘jump’ to another one. Given such an analogy, it is plausible that the constructions have mutually affected each other in the rise of phrasal first elements in the s-genitive and N+N constructions” (Rosenbach, this volume).

12. It may be added, that the unusual Gen-Adj-Noun pattern in Lithuanian can be iconically motivated, but this motivation reflects the properties of the adjective, rather than of the genitive, cf.: “The adjective attribute goes directly before the modified word if it makes a closer or terminological unit with the modified word” (Schmalstieg 1988:319) and an example from the same source:

(11) a. motin-os vestuvinė suknelė
  mother-GEN wedding.NOM dress
  “mother’s wedding dress”

References

Ambrazas, Vytautas (1982). “Žodžių tvarka ir baltų kalbų sakinių tipo rekonstrukcija” [“Word order and reconstruction of Baltic sentence type”]. Baltistica, 18, 100–118.


