AUXILIARIES AND GRAMMATICALIZATION: A CASE STUDY OF GERMANIC AND SLAVONIC LANGUAGES

Ana Drobnjaković and Béatrice Lamiroy, Linguistics Department, KULeuven

1. INTRODUCTION¹

Strictly speaking, grammaticalization is referred to as a type of language change whereby grammatical items come into being: lexical words or constructions, in specific contexts, come to acquire grammatical functions, and once grammaticalized, can continue to develop new grammatical functions (Meillet 1912, Kurylowicz 1965, Hopper and Traugott 1993:18, Lehmann 1995, Heine & Kuteva 2002, Bybee 2003, Lamiroy 2003, Bybee et al. 1994). In a more general way, grammaticalization can be defined as both a diachronic and synchronic phenomenon whereby linguistic items are re-categorized, for instance from nouns into prepositions, from verbs into auxiliaries, from adverbs into discourse markers, etc.

A grammaticalization process involves several interrelated mechanisms (Hopper 1993; Lehmann 1995; Heine 2003:579; Heine & Kuteva 2002:2), some of which are in fact triggering factors of the process while others rather should be seen as its effects.² In this paper we will not address the

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² Note that the methodological status of the various mechanisms (trigger vs effect of the grammaticalisation process) is rarely discussed in the literature. While desemanticization can be viewed as a general triggering mechanism in language change, next to analogy and reanalysis, coalescence and

question which of these mechanisms functions as a sufficient vs. a necessary condition for the grammaticalization process to take place,³ but we will assume, following Lehmann (1995), that the following parameters play a role in the process:

- a) *desemanticization* - loss in meaning content
- b) *decategorialization* - loss in morphosyntactic properties characteristic of the source form
- c) *coalescence* - loss in morphological autonomy
- d) *erosion* – loss in phonetic substance

Let us recall, as was repeatedly pointed out in the literature (Traugott 1988, 1989, 1995), that *desemanticization* necessarily patterns with *resemanticization*, since grammaticalized items pick up new semantic values, most often by progressively integrating conversational inferences into their meaning. As for the morphological aspects of the process, note that *coalescence* is just one of them, *specialisation* (Hopper 1993) and/or *paradigmaticization* (Lehmann 1995) of the grammaticalized form being another symptom of the same process. And although the above mentioned mechanisms strongly suggest that all components of language (going from phonetics to pragmatics) are involved in the process, other factors still seem to play a crucial role: *frequency* (Bybee 2003) and *extension* of the grammaticalizing item (Heine 2003; Heine and Kuteva 2002) are indeed most likely to favour the grammaticalization process, as grammaticalizing elements by definition come to be used in new, i.e. more contexts (Campbell 2001).

Although the outcome of grammaticalization regards various parts of grammar (see Heine 2003:578 for an overview), we will focus here on auxiliaries, i.e. grammatical markers of tense, aspect, and modality (henceforth TAM verbs). The instance of grammaticalization whereby TAM verbs emerge is known as auxiliation (Heine 1993; Kuteva 2001). This paper deals with two cases taken from Dutch⁴ and Serbian respectively, which will be analyzed from the point of view of *decategorialization*, in particular what Bybee (2003) terms *loss of constituent structure*.

The data to account for suggest at first that there is no such loss, since some Dutch TAM verbs still seem to have a valency of their own (like full lexical verbs), while Serbian auxiliaries allow finite complement clauses as a complementation pattern (like regular control verbs).

We will argue that Dutch and Serbian TAM verbs display signs of grammaticalization, but that other factors have to be taken into account as well, diachronic factors, on the one hand, and typological factors on the other. In particular with respect to Serbian, we will address the question to what extent typological properties of a particular *Sprachbund* may affect grammaticalization processes, as the presence of the *da*-clause with TAM verbs is a regular property of other languages in the Balkan area. As is well known, languages from this area totally (Macedonia,

phonetic erosion are rather a result of the same process. See Drobnyakovic (in preparation) for a detailed discussion of this matter.

³ Although the four mechanisms are obviously related with each other (erosion thus often follows from coalescence, decategorialisation is due to desemantisation, etc.), all of them are not necessarily involved in the process, and certainly not at the same time. Most scholars, however, agree on the fact that desemanticization plays a fundamental (*sine qua non*) role in the process (Heine 2003, Fischer & Rosenbach 2000).

Albania) or partially (Rumania, Serbia) lack the infinitive (Sandfeld 1930, Joseph 1983, Hansen 2004, Tomić 2004), which is the typical form one would expect after a TAM marker.

The structure of the paper is as follows. In Section 2, we deal with the phenomenon of decategorialization with regard to grammaticalization of TAM verbs in general and we show why Dutch and Serbian TAM verbs seem to contradict this mechanism. Section 3 and 4 focus on the complementation pattern of Dutch and Serbian TAM verbs, respectively. In Section 5 we present our conclusions and summarize our findings.

2. COMPLEMENTATION PATTERN OF TAM VERBS AND GRAMMATICALIZATION

2.1. Decategorialization

Stating that a linguistic item has undergone decategorialization in the course of grammaticalization amounts to saying that the item does no longer display morphosyntactic properties characteristic of the element wherefrom it developed. For instance, the French preposition *chez* ‘at’ which developed from the Latin noun *casa* ‘house’ does no longer belong to the open class of nouns, but to the closed class of prepositions instead, and consequently, displays morphosyntactic properties which are obviously different from the source form: unlike Latin *casa* ‘house’, French *chez* ‘at’ can no longer function as a nominal argument of a predicate, cannot be modified by an adjective, and so forth.

According to Heine & Kuteva (2002) and Heine (2003), decategorialization entails a number of other phenomena which Lehmann (1995) described as general parameters of grammaticalization, viz. paradigmaticization, obligatorification, coalescence and fixation, all of which have to do with the autonomy of the linguistic element which undergoes the grammaticalization process. In Lehmann’s (1995, 2002) approach, the degree of autonomy of a linguistic item has three aspects: its weight, its cohesion and its variability. Decrease in weight and variability and increase in cohesion is what characterizes grammaticalization. Each of the three aspects can be associated to the paradigmatic and syntagmatic axis, yielding, accordingly, a set of three paradigmatic and three syntagmatic parameters. The paradigmatic parameters are integrity (i.e. loss in semantic and phonological substance), paradigmaticity (i.e. reduction in size and increase in homogeneity of the paradigm to which a grammaticalized element belongs) and paradigmatic variability (i.e. increase in obligatorification and abandoning of selectional restrictions). The syntagmatic parameters comprise structural scope (i.e. reduction of the argument positions assigned by the grammaticalized form), bondedness (i.e. increase in coalescence) and syntagmatic variability (i.e. increase in fixation).

In this paper, following Bybee (2003), as well as Lamiroy (2003), we will focus on the loss of constituent structure as one of the major manifestations of decategorialization.

2.2. Loss of constituent structure

Dutch TAM markers first appeared in Old Dutch (8th to 12th century) as full lexical verbs followed by an object infinitive (Van der Horst, to appear, chap. I, § 9.5.).⁵ Thus *zullen* goes back to a lexical verb, Gothic *skulan* (cf. German *Schuld*, Dutch *schuld*), meaning ‘to have a debt’. In Old Dutch (1a) the verb most often means ‘must’ (cf. German *sollen*). However, it also appears with future meaning (1b) from the earliest texts (both examples are taken from the Dutch *Williram*,⁶ dated circa 1100):

- (1) a. *ande wisde mich, wie ich hina minnan sule* (*Williram* 30, 3 quoted Van der Horst, to appear)
‘and thought me how I should love him’
b. *wanda also thie bittera figon uorecudent, thaz thie riphon ande thie suozen nach sulen cuman* (*Williram* 41, 8 quoted Van der Horst, to appear)
‘since as the bitter figs forebode that the ripe and sweet ones will come afterwards’

Similarly, the verb *mogen* originally means ‘to be able to, to be capable’, a meaning which is still found in *Reinaert* (XIIIth century):

- (2) a. *minon eygenen wingardon nemochte ich behoodan* (*Williram* 12, 3, quoted Van der Horst, to appear)
‘I was not able to keep my own vineyard’
b. *inne mach sitten no ghestaen* (*Reinaert* 560, quoted Van der Horst, to appear)
‘I can neither sit nor stand’

There is also evidence for most Serbian TAM markers that they evolved from full lexical verbs. Thus the actual future marker *hteti* is attested in Old Church Slavonic (approx. 1200) with a volitive meaning ‘to want’⁷ (Krause & Slokum 2003, Andersen 2006). The verb *moći* ‘can’ is, according to Hansen (2000), the oldest Serbian modal since it already has modal meaning in Old Church Slavonic texts dating from the 9th century. However, *moći* is supposedly a derived form from the lexical verb *mōgti* ‘to be strong’. *Morati* is a relatively recent (19th century) borrowing (calque) from German *müssen* (which originally meant both ‘must’ and ‘can’): the verb was first borrowed by Slovenian and Kajkavian Croatian, from where it was borrowed into Macedonian and Serbian (Hansen 2000).

TAM verbs originating from full lexical verbs do not emerge out of a verb taken in isolation, but rather out of constructions in which the verb is combined with some other linguistic item. More precisely, in the course of auxiliation, the lexical structure *main verb - complement* evolves into the grammatical structure *grammatical marker – main verb* (Heine 1993; Kuteva 2001). Hence, from a synchronic point of view, loss of constituent structure entails for a TAM verb that it does not display the same complementation pattern as a non-grammaticalized lexical verb. In other words, the more a linguistic item is grammaticalized, the more reduced its valency. Accordingly,

⁵ As each of the TAM markers would need a study of its own to reconstruct the evolution from full verb to auxiliary, we will limit ourselves to two examples, viz. *zullen* and *mogen*.

⁶ The *Leyden Williram* (named after the ms. kept at Leyden University) is the Dutch translation of a piece of text originally written in German.

⁷ The volitive meaning of *hteti* stayed alive in Serbian up till now. *Hteti* is thus a homonymous verb and nicely illustrates what Lehmann (1995) calls „divergence“, i.e. a split into an old and a new form/meaning.

complementation can be taken as a relevant criterion in determining the level of grammaticalization of an item (Bybee 1994; Heine 1993; Lamiroy 1994). For instance, as illustrated in (3), the French lexical verb *tenir à* ‘to be keen on’ or the English verb *to wish* allow three complementation patterns, viz. a NP, a finite subordinate clause and an infinitive, whereas fully grammaticalized modal auxiliaries such as Fr. *devoir* or Engl. *must* take the infinitive only:

- (3) a. Max tient à ce que tu partes/ à ton départ / à partir
 Max be keen. PRS.3SG on to leave / that you leave / your departure
 ‘Max wants you to leave/ your departure / to leave’
 b. I wish (that) you were here / you a safe journey / to make a complaint
 c. Max doit partir / * qu’il parte / * son départ
 d. Max must leave / * that he leaves / * his departure

However, the syntactic behaviour of Dutch and Serbian TAM verbs seems to contradict this particular aspect of decategorialization. Although Dutch modal auxiliaries obviously allow infinitives, just as French or English auxiliaries do, they also behave as transitive verbs, unlike their French or English counterparts:

- (4) a. Wat moet ik daar mee?
 What must.1SG I this with?
 ‘What should I do with this?’
 b. * Que dois-je avec cela ?
 c. * What must I with this?

And as (5) shows, Serbian TAM verbs, unlike French or English auxiliaries, can be followed by a finite subordinate clause introduced by the complementizer *da* ‘that’ (henceforth, *da*-clauses):

- (5) On će da završi projekat u maju
 he FUT.3SG COMP finish.PRS.3SG project in may
 ‘He will finish the project in May.’

3. COMPLEMENTATION PATTERN OF DUTCH TAM VERBS

The aim of this section is to account for the above noted fact that Dutch modal auxiliaries *mogen* ‘may’, *moeten* ‘must’, *kunnen* ‘can’ and *hoeven* ‘must’ seem to contradict decategorialization, in that they are not necessarily or exclusively followed by an infinitive. In fact, they not only take direct object NPs (3.1.), they also allow prepositional objects (3.2), and subject clauses without being followed by an infinitival complement (3.3.)

3.1. Direct object NPs

As illustrated in (4a) and in the following examples, Dutch modals, as opposed to their English equivalents, can be followed by direct object NPs:

- (6) a. Mogen/ kunnen wij een copie van uw artikel ?
 can.PRS.3SG we a copy of your article?
 b. * May/can we a copy of your article

- ‘Can we have a copy of your article?’
- (7) a. Ik *hoef* geen suiker in de koffie
 I must .PRS.1SG NEG sugar in the coffee
 b. * I must no sugar in the coffee
 ‘I don’t need any sugar in my coffee’
- (8) a. Moest⁸ je dat beslist kwijt?
 Must. PRS.2SG you this really astray?
 b. * Must you this astray?
 ‘Did you really need tell this?’

Several remarks are in order here. First, the future marker *zullen* differs from the other TAM markers in that it does not allow a direct object NP, except in fixed idioms, e.g. *Ze moet/moest en zal/zou [een snoepje]* (lit. she must and will a candy ‘She absolutely wants/wanted a candy’). In other words, except for this fossilized use, *zullen* behaves as a full-fledged auxiliary since it can only be construed with the infinitive. Not surprisingly, *zullen* is also the oldest of the TAM markers (Van der Horst, p.c.); accordingly, it is also further paradigmized than the others: whereas the past participles of *moeten*, *mogen*, *kunnen*, viz. *gemoeten*, *gemogen*, *gekund* are still available, the form * *gezuld* does not exist.

Second, the transitivity which Dutch TAM verbs display does not really equal the one found in lexical verbs, as the above sentences do not have passive counterparts. Hence, the kind of transitivity that we are dealing with here is not full-fledged transitivity.

And finally, note, furthermore, that *moeten*, *kunnen* and *hoeven* take NPs only when they have deontic use; interestingly, they do not display transitivity when used epistemically:

- (9) a. Hij moet dat [de boete betalen]
 he must.PRS.3SG that [pay a fine]
 ‘He must do that [pay a fine]’
 b. *Hij moet dat [ziek zijn]
 he must.PRS.3SG that [sick be]
 ‘He must be sick’
- (10) a. Hij mag dat [naar de bioscoop gaan]
 he can.PRS.3SG [to the cinema go]
 ‘He may go to the cinema’
 b. * Hij mag dat [moe zijn]
 he may.PRS.3SG that [tired be]
 ‘He may be tired’
- (11) a. Hij kan dat [in woede uitbarsten]
 he can.PRS.3SG that [burst out]
 ‘He can burst out’
 b. * Hij kan dat [ziek zijn]

⁸ Note that the modal *moeten* which is exemplified here differs from a homonymous lexical verb which means *to like* (cf. Dutch *mogen*, German *mögen*) and which can also be followed by an object NP, like in (i) *Jan moet geen bier* (John does not like beer) or (ii) *Ik moet/mag haar niet* (I don’t like her).

he can.PRS.3SG that [sick be]
 ‘He can be sick’

In sum, if examples (6-8) suggest that Dutch modals are less grammaticalized than their English counterparts, the facts that we have just pointed out and the examples given in (9-11) show that Dutch TAM markers nevertheless do not behave as regular transitive verbs: they are rather pseudo-transitive. One has therefore to conclude that Dutch represents a case of *layering* (Hopper (1993), i.e. an intermediate stage in the grammaticalization process, whereby new (grammaticalized) layers of language use co-exist with previous layers. Interestingly, diachronic evidence regarding English auxiliaries (Bybee 2003) parallels the actual Dutch situation: *will* and *can* obviously only allow infinitives nowadays, but used to allow NPs in Middle English. That only deontic use testifies to the transitive stage of these verbs comes as no surprise, since epistemic modality is known to be further down on the grammaticalization cline than deontic modality (Traugott 1989).

3.2. Prepositional objects

The sentences exemplified in (12-16) contain prepositional objects. Once more, the English counterparts are ungrammatical. Whether these structures should be analysed as elliptic structures is not clear.⁹ In each of the examples a main verb can be inferred, as the translations show.¹⁰

- (12) a. Charlotte moet vandaag naar Brussel
 Charlotte must.PRS.3SG today to Brussels
 ‘Charlotte must go to Brussels today’
 b. * Charlotte must to Brussels today
- (13) a. Zij mag terug naar school
 she can.PRS.3SG back to school
 ‘She can go back to school’
 b. * She can back to school
- (14) a. [Ik ben nu niet vrij maar] ik kan morgen
 [I am not free today but] I can.PRS.3SG tomorrow
 ‘I am not free today but I am tomorrow’
 b. ?* I am not free today but I can tomorrow
- (15) a. Wat moet je in mijn kantoor?
 what must.PRS.2SG you in my office?
 ‘What are you doing in my office?’
 b. * What must you in my office?

⁹ We thank Muriel Norde (p.c.) for suggesting this analysis to us.

¹⁰ This is also the case in structures in which the modal verb is used as a copular verb, i.e. it is followed by an adjectival phrase (cf. Lamiroy & Melis 2005), e.g. (i) *De muziek hoeft toch niet zo luid [te staan]* (lit. the music must.PRS.3SG still not so loud ‘The music does not have to be this loud’ or (ii) *De tuin kan nog groter [gemaakt worden]* (lit. the garden.PRS.3SG can still bigger ‘The garden can be made bigger’.

- (16) a. Ze mag/moet van haar ouders
 she can/ must.PRS.3SG of her parents
 ‘Her parents let/make her (do something)’
 b. * She may/must from her parents

Even if the above sentences are analyzed by ellipsis of the second verb, it should be noted that for gapping of the infinitive to be possible, the inflected verb needs a certain autonomy. Auxiliaries generally behave as clitic verbs, i.e. as opposed to lexical verbs, they need their infinitival complement to be present, as is the case in English. That Dutch TAM verbs still display the possibility of appearing with oblique complements and without the infinitive strongly suggests that they have not yet reached the final stage of the grammaticalization chain.

3.3. Finite clauses in subject position

Sentences as the one illustrated in (17) show that extraposition of a finite clause in subject position is possible with a modal such as *kunnen* ‘can’:

- (17) De Franstaligen vinden het niet kunnen dat de huidige toestand verlengd wordt
 omdat dat op een legitimatie van het door hen verguisde plan-Anciaux neerkomt
 (*De Standaard*, 06.04.06)

The francophones find it not can that the present situation goes on because this to a legitimization of the by them criticized Anciaux plan corresponds

‘The francophones consider that the present situation cannot go on because this would mean that the Anciaux proposal which they strongly criticize becomes legitimate’

Once more, for the modal verb to allow a finite clause in subject position should be interpreted as a remnant of a syntactic property characteristic of lexical verbs rather than of full-fledged auxiliaries. Dutch auxiliaries therefore can be said to be less grammaticalized than, for example, their English or French counterparts.

4. COMPLEMENTATION PATTERN OF SERBIAN TAM VERBS

4.1. Introduction

Serbian TAM verbs seem to be at odds with the decategorialization principle: not only can they be complemented either by an infinitive or a *da*-clause, they even show a strong preference for the latter.

- (18) a. Počinje da me nervira
 begin-PRS.3SG COMP me.ACC annoy.PRS.3SG
 b. Počinje me nervirati
 begin.PRS.3SG me.ACC annoy.INF
 ‘He begins to annoy me’
- (19) a. Može da dođe ranije
 can.PRS.3SG COMP com.PRS.3SG earlier
 b. Može doći ranije

- can.PRS.3SG come.INF earlier
 ‘He can come earlier’
- (20) a. Ja ću da idem na prijem
 I FUT.PRS.1SG COMP go.PRS.1G to reception
 b. Ja ću ići na prijem
 I FUT. PRS.1SG go.INF to reception
 ‘I will go to the reception’

In what follows, we will first show that the *da*-clause complementing Serbian TAM verbs displays reduced syntactic properties in comparison with the regular *da*-clause and can therefore be analysed as a *pseudo da*-clause, in a similar way transitivity of Dutch modals was analysed as *pseudo-transitivity* in section 2. Second, we will present results from a corpus-based study (Drobnjaković and Lamiroy 2005) which deals with the distribution of the infinitive and *da*-clause, and its correlation with the degree of grammaticalization of Serbian TAM verbs.

4.2. Types of *da*-clauses

According to Grković-Major (2004), two chief mechanisms of language change, viz. reanalysis and generalization, originally caused a shift from paratactic *da* to hypotactic *da*, i.e. a change from a particle with optative meaning to a conjunction with purposive meaning. Due to generalization, *da* came to be used in new contexts and gradually became a general marker of object clauses. Being used at first as a conjunction in subjunctive complement clauses, it later on spread to indicative complement clauses.

Two types of *da*-clauses, viz. *da*₁- and *da*₂-clauses, have been distinguished in the literature. *Da*₁-clauses, which function as reported statements, can take any tense. *Da*₂-clauses, which typically appear after verbs of volition, can contain the present tense only and are referred to as the “infinitive substitute”¹¹ (Browne 1980, 1986; Browne & Alt 2004). However, Besters-Dilger, Drobnjaković and Hansen (forthcoming) argue that *da*-clauses complementing TAM verbs crucially differ from both *da*₁- and *da*₂-clauses, and refer to the TAM complementation pattern as *da*₃-clauses. Although they only allow present tense, a characteristic they share with *da*₂ type, *da*₃-clauses display two additional restrictions. Whereas the *da*₂ type allows the subject of the verb in the subordinate clause to be overtly expressed, *da*₃ does not: pro-drop is obligatory. Thus, the subject of the modal must be correferential with the subject of the main verb in *da*₃, while this is not obligatory in *da*₂. The two restrictions are illustrated in (21) and (22), respectively.

- (21) a. Hoću da ja idem sa tobom (a ne Petar)
 want-PRS.1G COMP I go-PRS.1SG with you (and not Peter)
 ‘I want to go with you (instead of Peter)’
 b. *Moram da ja idem sa tobom
 must-PRS.3SG COMP I go with you
- (22) a. Hoću da ideš sa njima

¹¹ Some scholars refer to *da*₂-clauses as “subjunctive clauses” (see, for example, Joseph 1983; Tomić 2004). Other prefer to term it as the “*da* + present tag” (Belić 2005).

- Want-PRS.1SG COMP go-PRS.2SG with them
 ‘I want you to go with them’
 b. *Moram da ideš sa njima
 must COMP go-PRS.3SG with them

Hence, although the *da*₃-clause has the appearance of a finite clause, it is not a finite clause in the proper sense of the word. Compared to *da*₁ and *da*₂, it displays considerably reduced syntactic properties, which in fact come close to these of the infinitive. As an infinitive, the clause lacks a lexical subject, and while the infinitive is a non-tensed form, the *da*₃-clause shows no temporal paradigm, the present tense being the only possibility. Therefore, the “infinitive substitute” label is even more relevant for the *da*₃-clause than for the *da*₂-clause.

4.3. Distribution of TAM complementation patterns: a corpus-based study

Drobnjaković and Lamiroy’s (2005) findings are based on the investigation of a sample taken from the Corpus of the Serbian Language (henceforth CSL), which gathers Serbian literary texts from the 1945-1957 time span.¹²

The study focuses on two important features of Serbian TAM verbs. First, as shown in section 4.1., Serbian auxiliaries, just like Serbian verbs in general, can be complemented by two types of complement constructions, viz. the infinitive and the *da*-clause. Second, we assume that within the category of TAM verbs, tense auxiliaries are the most grammaticalized category, the aspectuals the least, whereas modals show a medium degree of grammaticalization (Drobnjaković 2004; Hansen 2004, Lamiroy 1987). The aim of Drobnjaković and Lamiroy (2005) was to verify whether these two features are correlated.

The sample consists of 6169 tokens of *hteti* ‘future’ and its lexical counterpart *hteti* ‘to want’, 3895 tokens of *moći* ‘can’, 1123 instances of *morati* ‘must’, and 882 of *početi* ‘begin’. The number of occurrences in which each of Serbian TAM verbs appears complemented by the infinitive was compared to those cases where the complementation pattern is a *da*-clause. The results are summarized in Figure 1.

Figure 1 – *Da*-clause vs infinitival complement with Serbian TAM verbs

	<i>da</i> –clause	Infinitive
<i>hteti</i> ‘want’	88,76 %	11,24 %
<i>početi</i> ‘begin’	72, 45%	27, 55%
<i>morati</i> ‘must’	61, 41%	38, 59%
<i>moći</i> ‘can’	58, 47%	41,53%
<i>hteti</i> ‘future’	19,48 %	80,52 %

¹² The Corpus of the Serbian Language is the result of cooperation between the Institute for Experimental Phonetics and Speech Pathology of Belgrade and the Laboratory for Experimental Psychology of the University of Belgrade. We thank Prof. A. Kostić, as well as Petar Djurićin for making it available to us.

As the figures overwhelmingly show, Serbian TAM verbs are indicative of a very strong correlation between the degree of grammaticalization and the distribution of the two complement constructions. In other words, the prediction made in section 2 about structural scope reduction of TAM verbs is borne out by the facts. The more a Serbian TAM verb is grammaticalized, the more frequently it is followed by the infinitive. Accordingly, the lexical verb *hteti* ‘to want’, which has not undergone any grammaticalization, is most frequently complemented by *da*-clause: in 88, 76 % of the occurrences. In contrast to that, the fully grammaticalized *hteti* ‘future’ is complemented by *da*-clauses in only 19, 48% of the cases.

5. CONCLUSIONS

In this paper we have focused on a particular manifestation of the grammaticalization process, viz. decategorialization, and in particular the progressive loss of complementation patterns, which parallels an increasing degree of grammaticalization. Both the Dutch and the Serbian data provide evidence for a crucial characteristic of grammaticalization: gradualness. On the one hand, they display complementation patterns that remind those of full lexical verbs, but on the other, they also show several restrictions which lexical verbs lack. They therefore testify, from a diachronic point of view, to former stages of the language, and illustrate from a synchronic vantage point the notions of layering and divergence. In the Serbian case, another factor comes into play, since decategorialization of TAM markers intertwines with typological properties due to language contact: that Serbian TAM markers are followed by a *da*-clause is no doubt related to the Balkan *Sprachbund*. However, provided that enough empirical facts are submitted to an in-depth study of the relevant properties, one reaches the conclusion that even Dutch and Serbian TAM markers are clearly involved in a grammaticalization process, in spite of their first appearances.

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Abstract

Grammaticalized elements tend to display symptoms of decategorialization, that is, loss in morphosyntactic properties characteristic of the source form (Hopper and Traugott 1993; Heine 1993, 2003; Heine and Kuteva 2002; Lamiroy 1994, 2003; Lehmann 1995, 1982). The paper focuses on one particular aspect of decategorialization in the context of Dutch and Serbian auxiliary verbs, viz. loss of constituent structure; the latter implies that an auxiliary typically allows only non-finite complements (Heine 1993; Lamiroy 1994; Bybee 2003). Dutch and Serbian auxiliaries, however, seem to contradict decategorialization, for the former remain often transitive, whereas the latter continue selecting finite complement clauses. We account for these properties by treating them as the result of several factors, such as divergence and layering (Dutch auxiliaries), and typological processes due to language contact (Serbian auxiliaries).

Auxiliaries are analyzed as a result of subjectification, i.e. a gradient phenomenon where by forms and constructions that at first express primarily concrete, lexical and objective meanings come through repeated use in local syntactic contexts to serve increasingly abstract, pragmatic, interpersonal and speaker-based functions (Traugott 1995: 32)

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