

BJÖRN HANSEN¹
ANA DROBNJAKOVIĆ²

¹Institut für Slavistik, Universität Regensburg, Regensburg

²Katholieke Universiteit Leuven

POLISH IN THE LIGHT OF GRAMMATICALIZATION THEORY¹

Abstract. The paper is concerned with *grammaticalization*, a type of language change whereby lexical items, in specific contexts, come to serve grammatical functions, and grammatical items acquire new grammatical functions. The aim is twofold: to shed light at the main properties of grammaticalization, and to demonstrate its applicability to Polish data. Some prominent examples in Polish are discussed: the grammaticalization of modals, imperative and avertive constructions. The paper closes with a non-exhaustive list of leads for further research into grammaticalization in Polish.

Keywords: grammaticalization, Polish, grammatical markers, constructions, contact induced grammaticalization.

1 Introducing ‘Grammaticalization theory’

The present article aims at giving an overview of recent developments of the theoretical frameworks subsumed under the heading ‘Grammaticalization Theory’ on the one hand, and at showing ways of possible applications of this framework to the analysis of both synchronic and diachronic data from Polish on the other. The term ‘grammaticalization’, sometimes also in the form ‘grammaticisation’ (henceforth gzn), was originally coined by Antoine Meillet in 1912, but has become popular in linguistics only since the seminal work by the German linguist Christian Lehmann ‘Thoughts on Grammaticalization’ first published in 1982, republished and expanded 1995 and 2002. Under the term gzn we understand a type of language change whereby lexical items and constructions, in specific contexts, come to be used as grammatical, or whereby grammatical items acquire new grammatical functions (Hopper and Traugott 2003, p. 1). It turns out that these unidirectional

¹ This article overlaps with parts of the previous work Björn Hansen & Ana Drobñjaković Grammaticalization theory as a basis for the panchronic study of the Serbian language: setting the agenda. In: Radovanović, Milorad / Grković-Major, Jasmina (Eds.) *The theory of diachronic linguistics and investigations into the Serbian language*. Beograd: Srpska Akademija Nauka i Umetnosti.

changes are not language specific, but are governed by cross-linguistically or even universally valid principles, which is to be explained by universals of human cognition. Gzn theory provides tools to discover how different grammatical elements are related to each other, how systematic polysemy can arise and why certain linguistic forms have simultaneous lexical and grammatical functions (Heine and Kuteva 2002, book cover). It is not an exaggeration to say that gzn theory belongs to one of the most thriving fields within European Diachronic Linguistics and has gained considerable influence on linguistic theorizing and the development of linguistic thought not only among typologically oriented scholars, but also to an increasing degree among scholars working on individual languages or language families. An important forum bringing together linguists working on different languages is the triennial conference “New Reflections on Grammaticalization” held in Potsdam (1999), Amsterdam (2002)², Santiago de Compostela (2005)³ and Leuven (2008). These conferences and their proceedings illustrate that gzn theory has become a viable international platform for the exchange of thought between linguists and has thus contributed to overcome the boundaries of the individual national philological traditions which used to hinder the exchange of thought between linguists from different countries.

An important characteristic of gzn theory is its holistic understanding of language, i.e. it rejects the idea that language should consist of closed boxes (modular view) and, instead, integrates structural aspects of phonology, morphology, and syntax with semantics. A second important facet of the holistic view is the abandonment of the structuralistic dichotomy between diachrony and synchrony in the sense of Ferdinand de Saussure: grammaticalization acknowledges the importance of diachrony as an explanatory factor in synchronic linguistics (see Hopper and Traugott 2003; Kuteva 2001). In other words, grammaticalization makes recourse to the panchronic approach under which language is viewed as a dynamic system, and diachrony is hypothesized as manifesting itself in synchrony.

Since the object of study of gzn researchers is the transition of lexical elements into grammatical markers it comes as no surprise that nearly all scholars agree that there cannot be a strict distinction between the two linguistic domains lexicon vs grammar. Linguistic categories are generally assumed to have fuzzy boundaries and to contain heterogeneous elements which is in line with Prague Functional School which propagated the idea that linguistic categories “should not be regarded as ‘boxes’ with clear-cut boundaries but as formations with a compact core (centre) and with gradual transition into a diffuse periphery which, again, gradually passes (infiltrates) into the peripheral domain of the next category.” (Daneš 1966, p. 11).⁴ Gzn theory also shows a certain affinity with Indo-European studies and etymological research, mainly in the field of the development of grammatical markers. Thus, works like the ‘Etymologický slovník slovanských jazyků. Slova gramatická

² <http://cf.hum.uva.nl/gramma/frameset.html>

³ <http://www.usc.es/ia303/Gramma3/index.html>

⁴ An overview of works on the gradience of logical and linguistic categories is given in Radovanović 2008.

a *zájmena*' (Havránek 1980) or the etymological dictionaries of Polish (Brückner 1927, Bańkowski 2000) offer rich sources of material for potential gzn research.

Turning now to the topic of the present article, one has to state that gzn theory has not yet made its way into Polish linguistics. The aim of the present paper, thus, is to show the advantages and strengths of this framework and to develop a kind of research agenda for the study of grammaticalization phenomena in Polish. We are not yet in a position to present wide ranging results of gzn research on Polish and, therefore have to restrict ourselves to a small number of case studies and a sketchy outline of phenomena usually treated as instances of gzn processes.

2 The state of the art

Defined as a gradual development of grammatical words from content words (Meillet 1912), gzn provides an account for how grammar comes into being (cf. Hopper 1991; see Bybee 2003a). It shows that grammatical items, albeit abstract, should not be viewed as arbitrary, or non-motivated elements: instead of emerging *ex nihilo*, grammatical items can actually often be traced back to words with concrete meanings. The well-known development of the English future marker from the English movement verb *to go* will serve here as an example. Thus, the progressive form of the verb *to go* once exhibited only *spatial directional* use, as in *They are going to Windsor* (see Bybee 2003a, p. 150). In constructions in which *going to* came to be used with a verb, as in *They are going to Windsor to see the King*, a strong notion of intention was present, along with the primarily spatial meaning (*Why are they going to Windsor? To see the King.*). When the intention meaning prevailed, it was possible to infer future actions as in *He is going to buy a house*, which can be understood either as an intention or a prediction about future actions. Gradually, over a span of several centuries, *going to* came to be used with unambiguously future readings, with no meaning of intention or movement implied (*That tree is going to lose its leaves.*), a use that did not exist in Shakespeare's time (Bybee 2003a, p. 150).

Today, gzn is seen as "arguably the most widely discussed type of linguistic change" (Fischer and Rosenbach 2000, p. 1), and this reputation is believed to be due to the following properties. First, cross-linguistically identified instances of gzn tend to show remarkable similarities (see e.g. Bybee et al. 1994; Lamiroy 2003). Thus, it is not only the case that future markers developed out of the volitive verbs in areally and genetically unrelated languages such as Swahili (Heine 2003), English (Bybee et al. 1994; Traugott 2003), Serbian/Croatian and Mandarin (see Bybee and Dahl 1989), but their semantic development appears to have gone through the same stages (Bybee et al. 1994):

volitional verb > intention > prediction > future

Second, gzn tends to proceed in one direction, viz. from concrete to abstract but not vice versa (e.g. Haspelmath 1999; Kortmann 1999). The question as to whether gzn is unidirectional ignited much debate (see Haspelmath 1999; Fischer et al. 2004). Although some instances of change in the opposite direction, viz. from abstract to

concrete have been identified (see Ramat 1992), such cases are far fewer than the numerous examples confirming the unidirectionality hypothesis (Newmeyer 1998, p. 275–6; Haspelmath 1999). Many instances of change from abstract to concrete, initially believed to be counterexamples to unidirectionality of grammaticalization, were later proved instances of lexicalization. For instance, the use of *if* and *but* in *ifs and buts* cannot be treated as an instance of reversed grammaticalization (from connector to noun) given that they are taken out of their construction and used metalinguistically (Haspelmath 1999, p. 1064). A similar example of lexicalization, that may be mistaken for an instance of degrammaticalization, can be found in Polish in the expression *Każde dłaczego ma swoje dlatego*. There are no studies available on cases of assumed degrammaticalization in Slavonic, but we would argue that such an example could be the Slovak modal verb *musieť* ‘must’ which in negated contexts in colloquial speech acquired the new lexical, i.e. non-modal meaning ‘to like’ as illustrated in the following example from Findra (2008, p. 10):

Slovak

- (1) *Pôjdeš na Gottov koncert? Ja Gotta nemusím.*
 ‘Are you going to the Karel Gott concert? I can’t stand Gott.’

Examples of this kind have initiated a discussion on the differences between gzn and lexicalization. As a result many interesting studies appeared, such as Brinton and Traugott (2005), and Himmelmann (2004). More importantly, however, no instances of complete reversals of gzn have been identified so far (Newmeyer 1998, p. 263).

Third, gzn is the cross-componential change *par excellence*: it may, but does not have to, affect all levels of language structure, viz. phonology, morphology, syntax, semantics and pragmatics (cf. McMahon 1994, p. 161). This can be illustrated by the Old Polish verb *niechać* which originally functioned as a lexical verb ‘to leave’ as in (2) and later developed into an imperative marker as in (3) and (4).

- (2) *Wiele mówił bezpiecznie przeciw Cezarzowi / Gdy mu drudzy rádzili / by niechał tey mowy.* (M. Rej Zwierciadło 1568)
 (3) *A niechay narodowie wždy postronni znáią / Iż POLACY nie Gęsi / iż swoy ięzyk máią.* (M. Rej Figliki 1562)
 (4) *Niech ięzyk moy du vsť moich przyśchnie / ieśli cię kiedy zápomnię.* (Skarga Kazania na niedziele i święta 1595)

Apart from semantic change (what used to be only a lexical verb is now an imperative gram), the gzn of the imperative/optative marker involves changes in morphosyntax — a word in predicate position became an uninflected expression with a more less fixed position (first or second position in the clause) — as well as phonology (*niechaj* eroded into *niech*).

Although the effects of gzn may be visible at different levels of language structure, many scholars consider gzn to be first and foremost semantic in nature (cf. Bybee and Pagliuca 1985; Hopper and Traugott 2003, p. 76). In other words, semantic change from concrete to abstract (or abstract to even more abstract) is believed

to be the precursor of structural change and is, as such, considered to be essential to any instance of gzn (see Bybee et al. 1994, p. 37). The changes in form that take place in gzn come as a result of the process of automatization of frequently occurring strings of linguistic elements (Bybee 2003a, p. 153). Grammatical meaning is, thus, established, long before the form becomes affected, which implies that formal changes (e.g. erosion, fusion) are reserved for later stages of grammaticalization (cf. Heine 2003; Hopper and Traugott 2003, p. 157–158).

This brings us to the subject of parameters of gzn, i.e. changes, either semantic or formal, that an element may undergo while grammaticalizing.⁵ Grammaticalisation comes in degrees and is understood as a complex macroprocess which is grasped in terms of different aspects located at the paradigmatic and the syntagmatic level. Closely related to the semantic-categorial shift is decategorialization, which is an effect of, and in that sense concomittants of, the semantic-categorial shift, and thus co-constitute an item's decategorialization (see Hopper 1991; Heine 2003; Drobniakovic 2009). The Polish imperative marker *niech* can again serve as an example: it is indicative of the semantic shift 'to leave' > imperative and the categorial shift lexical verb > analytical imperative marker. The decategorialization mechanisms of imperative *niech* are actually the effects that this semantic-categorial shift has on the linguistic behaviour of the gram: for instance, *niech* can no longer be complemented by noun phrases. Decategorialization, thus, means that a grammaticalized item has lost syntactic properties of the category it belonged to before it embarked upon gzn. The decategorialization of *niech* is reflected in i) paradigmaticization (the integration into the imperative paradigm, see Lehmann 2002), ii) a change regarding complementation pattern (change from noun phrase to whole clause, see e.g. Bybee 2003a), iii) obligatorification (after an item starts grammaticalizing and becomes a part of a new, grammatical category, its interchangeability decreases; consequently, a language user has much less choice in replacing a grammatical than a lexical item with a synonym), and iv) fixation (the position in the clause becomes fixed). Lastly, apart from the main mechanisms, there are a number of gzn components which occur only at a later stage can be considered as secondary. The secondary parameters are such that they may well be present, but their absence would not jeopardize an item's gzn status: they rather proceed from an increase in frequency and the phenomenon of automatization (see e.g. Bybee 2003a). This group of gzn mechanisms consists of *cliticization* and *affixation* (both instances of coalescence) and phonological *erosion* on the one hand, and the change related to the semantics of the elements filling the subject and complement slots within the argument structure of a gram on the other. Cliticization, affixation and erosion are different outcomes of the process of automatization and repackaging (see Haiman 1994; Bybee 2003b). With repetition, sequences of elements that were previously independent start being used as a single unit or a chunk (Bybee 2003a, p. 153). As a result, the elements involved are no longer perceived individually and the whole chunk starts to undergo a reduction in form. This change can be illustrated by the

⁵ Different terms used to refer to changes under grammaticalization, viz. *parameters* (Lehmann 2002), *mechanisms* (Heine and Kuteva 2002), *principles* (Hopper 1991) etc., are hallmarks of different approaches to the study of gzn.

development of the Polish past tense which goes back to an analytical construction consisting of the copular *być* plus the l-participle as attested in documents of the 14th and 15th centuries: *przysiągł jeśm* > *przysiągł-em*. Here the auxiliary eroded and developed into a clitic occupying a fixed position in the clause.

As far as the changes affecting the semantics of the elements filling subject and complement slots of a gram are concerned the range of items that can occupy subject and complement positions of a grammaticalized item becomes broader. Thus, whereas in Old Polish the modal *powinien* in its modal meaning was restricted to human subjects, in later periods it became compatible with inanimate subjects as illustrated in the utterance by Mickiewicz (see Hansen 2001, p. 331 f):

(5) *Epopeia powinna mieć akcyę ważną.* (Uwagi nad Jagellonidą 1818)

The main reasoning behind a division of the gzn mechanisms presented above comes from what has been repeatedly mentioned in research on gzn, viz. that not all mechanisms have to be involved for a grammaticalized element to be acknowledged as such (see Hopper and Traugott 2003). Gzn proceeds in stages and each of the stages is associated with specific mechanisms (see e.g. Heine 1993; Hopper and Traugott 2003). Given that gzn does not have to proceed all the way, i.e. the development may be ‘frozen’ at some point (see e.g. Hopper and Traugott 2003; Hansen 2004a), some mechanisms may not at all be involved.

3 Recent trends in gzn research

3.1 Gzn of constructions (cxn)

In the last couple of years we witness a shift away from a so-called ‘morpheme-centric’ view of gzn phenomena towards a more constructional view. Therefore we see attempts to integrate more formal syntactic aspects of linguistic structures like dependencies, phrase structure, word order, control etc. into research on gzn phenomena. This has led to a considerable convergence with the syntactic theory of ‘Construction Grammar’ (see Fried and Östmann 2004; Traugott 2003; Noël 2007). The point of departure is the observation that one and the same lexical item can develop in different directions and can give rise to different grammatical markers depending on the syntactic surrounding. According to Lehmann (1992, p. 406, quoted in Traugott 2008, 221) ‘[G]rammaticalization does not merely seize a word or morpheme [...] but the whole construction formed by the syntagmatic relations of the elements in question’. One case in point would be the different gzn paths of the Polish possession verb *mieć* which originally formed a transitive cxn with the possessor encoded in a nominal phrase in the nominative case and the possessee expressed by a noun phrase in an oblique case:

Possessive cxn: [NP]_{Nom}[*ma* [NP]_{Acc}]

(6) *Przecież to nie on dzwoni, on ma klucze* (IPI PAN)⁶

⁶ The examples marked with IPI PAN are taken from the corpus developed by the Instytut Podstaw Informatyki PAN (=IPI PAN corpus; <http://korpus.pl/>). The other examples are from the Polish Internet or taken from the research literature.

On the one hand, *mieć* showed up in new syntactic contexts in which it developed into a marker of modality (strong necessity) and further into a marker of hypothetical assumption (for details see Hansen 2009); cf.:

Modal cxn [NP]_{Nom}[*ma* [InfP]]

Necessity marker:

- (7) *Wokulski zawahał się, co **ma zrobić** w tej chwili.* (IPI PAN)

Mood marker:

- (8) *Cele zjazdu są zbyt ważne, **żeby coś takiego miało zakłócić** jego przebieg.* (IPI PAN)

On the other hand, the same verb gave rise to a different grammatical marker when used with a prepositional phrase containing a deverbal noun as in:

[NP]_{Nom}[*ma coś do* [NP]_{Gen}]

- (9) *Być może McDonald's **ma coś do ukrycia** przed klientami?* (IPI PAN)

A further context is the copula cxn denoting the non-existence of the entity encoded in a genitive phrase. This change took place in contexts where the verb *mieć* was negated:

[*nie ma* [NP]_{Gen}]

- (10) *Czy **nie ma** ani jednego porządnego lekarza w Krakowie, który mógłby ją wyleczyć?* (IPI PAN)

We see that a single lexical verb served as the source for four different grammatical cxns. This points to the phenomenon of *polygrammaticalization* (cf. Lai 2001). An important aspect of the constructional view of gzn is the fact that meaning often cannot be attributed to single morphemes. It is, thus, evident that it is not the verb *mieć* which carries the modal, hypothetical or existential meaning, but the cxn as a whole. In section 4 we are going to illustrate this constructional approach on the basis of Polish data.

3.2 Contact induced gzn

A further aspect that has recently spawned a series of studies concerns language contact as an important factor triggering gzn processes. A seminal work is Heine and Kuteva (2003), later expanded in Heine and Kuteva (2005), where the authors elaborate a theory of contact induced grammaticalization. They distinguish between two types of contact-induced gzn: 'replica contact induced gzn' and 'ordinary contact induced gzn'. As the authors present only scarce data from Polish we will try to put forward some hypotheses about how this model could be applied to the question of the influence of German influence on Polish. As there is a striking

structural convergence, we can assume that the gzn of the *do*+deverbal noun was triggered by the German model (see Weiss 1987, 1988); compare:

Polish

- (11) *Ta przeszkod-a jest nie do przeby-ci-a.*
 this obstacle-NOM.SG be.3SG not to break.through-VN-GEN.SG

German

- (11') *Dieses Hindernis ist nicht zu überwind-en.*
 this obstacle.NOM.SG be.3SG not to break.through-INF
 'One cannot break through the obstacle.'

Polish

- (12) *Mam referat do napisa-ni-a.*
 have.1SG presentation to write-VN-GEN.SG

German

- (12') *Ich habe ein Referat zu schreib-en.*
 I have.1SG a presentation to write-INF

Applying the model of Heine and Kuteva (2005, p.81) we can call this change a 'replica contact induced grammaticalization' involving the following steps:

1. Speakers of Polish notice that speakers of German use the possessive verb and the copula with a deverbal noun introduced by the preposition with a directional meaning.
2. They develop an equivalent cxn using material available in their own language.
3. The speakers replicate the grammaticalization process they assume to have taken place in German, using an analogical formula; i.e. they use the directional preposition *do* and the deverbal noun in order to develop the new cxn.

This type of contact induced gzn has to be distinguished from what Heine and Kuteva call 'ordinary contact induced gzn'. They differ in the framing of part 3: in the latter case, the speakers do not try to copy the gzn process they assume to have taken place in the source language, but draw on universal strategies of gzn (Heine and Kuteva 2005, p. 92). We would like to claim that the development of the distinction between strong and weak necessity in the field of modality as expressed by the dedicated Polish modals *mieć/powinien* vs *musieć* could be analysed in terms of 'ordinary contact induced gzn'. As Hansen (2005) in his areal linguistic study on the distribution of modal cxns among the languages of Eastern Europe shows there is a cline in the spread of the distinction expressed by the German modals *müssen* 'must/have to' vs *sollen* 'should, to be supposed to'. Both are polyfunctional modals (see Section 4.1) which differ in the expression of the strength of the necessity or obligation. As *müssen* expresses a strong and *sollen* a weakened necessity, the negation of the former is compatible with the positive form of the latter; cf.:

- (13) *Diese Kartierung soll, muss aber nicht thematisch mit der Diplomarbeit verknüpft sein.* 'This field mapping should, but need not necessarily be linked to the diploma dissertation.' (<http://geostudium.uni-goettingen.de/>)

On the basis of the situation in Old Church Slavonic as described in Pallasová (1991), Večerka (1996) and Hansen (2001) we can assume the distinction between strong vs weak necessity to be the result of a later development in the individual Slavonic languages. According to Hansen (2000, 2005) this distinction which is quite typical of Germanic is attested in dedicated modals in Upper Sorbian, Czech, Slovak, Polish, Slovenian, Polish/Croatian, but not in Bulgarian or Russian.⁷ The following example from modern Polish shows that *mieć* (also *powinien*) and *musieć* can be used in a similar way as their German counterparts:

- (14) *Ocena stopnia opanowania sprawności czytania ze zrozumieniem ma (ale nie musi mieć) zazwyczaj formę testu pisemnego i daje się łatwo wymierzyć punktami. (www.euro-edukacja.pl)*
- (15) *List motywacyjny w odpowiedzi na ogłoszenie powinien (ale nie musi) w nagłówku zawierać informacje o naszej osobie [...] (http://cv.wzory.biz/)*

Rewording the passage from above we can assume the following scenario of an ordinary contact induced gzn:

1. Speakers of Polish notice that speakers of German distinguish strong and weak necessity by using dedicated modals for each notion.
2. They develop equivalent cxns using material available in their own language.
3. The speakers draw on universal strategies of grammaticalization by mapping this distinction onto the modals *mieć* vs *musieć* which is not an analogical formula because *sollen* etymologically goes back to the meaning ‘to owe’ and *mieć* to ‘to have’.

4 Gzn phenomena in Polish: two case studies

4.1 The gzn of modal cxns

In Polish grammaticography modals are usually treated as lexical verbs. In Germanic, but also Czech, Slovak and Serbian linguistics, however, there is a tradition to treat modal verbs as a category distinct from lexical verbs.⁸ Correspondingly, Czech and Slovak grammarians use the term *vlastní modální (způsobová) slovesa / modální čiže způsobové slovesa* ‘proper modal (auxiliary) verbs / modal or auxiliary verbs’ and describe the expressions of necessity, possibility and volition as part of the grammar (see for Czech Karlík et al. 1995, for Slovak Mistrík 1983, for Serbian Stanojčić/Popović 1998). This is perfectly in line with the view that modals are elements which have undergone a gzn process. They express the basic notions of ‘necessity’ and ‘possibility’⁹ and show syntactic properties of auxiliaries. From a typological point of view modals can be grasped in the following way:

⁷ These languages preferably resort to the conditional form of a modal of necessity as in Russian: *dolžen* (must.M.SG) vs *dolžen byl by* (must.M.SG. be.PAST.M.SG COND)

⁸ Studies on Modality in Slavonic based on gzn theory are: Hansen (1998 ff), Besters-Dilger et al. (2009), Ivanová (2009) and Roeder and Hansen (2006).

⁹ The question whether modality comprises volition or not is still open.

A fully-fledged modal is a polyfunctional, syntactically autonomous expression of modality which shows a certain degree of grammaticalisation. ‘Polyfunctional’ is understood as covering a domain within the semantic space of modality. A fully-fledged modal functions as an operator on the predicational and/or the propositional level of the clause. (Hansen and de Haan 2009, p. 512)

Typical modals are polyfunctional in the sense that they express no less than two types of modality. One usually distinguishes dynamic, deontic and epistemic modality. Modals are polyfunctional, while so called modal content words, i.e. words with modal meaning which are not subject to a *gzm* process, have only one modal meaning. This difference could be illustrated on the basis of the word pair *móc* ‘can’ vs *umieć* ‘to be capable’. The former can express ‘capability’, ‘objective possibility’, ‘permission’ (deontic), and ‘medium degree of probability’, while the latter is confined to ‘capability’.

– capability (dynamic):

(16) *Ja nie mogę/umiem tańczyć dobrze.* (<http://thea.blog.pl>)

– objective possibility (dynamic):

(17) Polish *Ale jeśli pani zażąda, mogę/?umiem się postarać o weksle gwarancyjne, a w Europie odeślę natychmiast pod wskazany adres.* (Hłasko)

– permission (deontic):

(18) *Skazani na najwyższy wymiar kary mogą/*umieją w stanie Utah wybierać sposób, w jaki chcą umrzeć.* (Gazeta Wyborcza)

– medium probability (epistemic):

(19) *Na nizinach może/*umie padać umiarkowanie.* (www.moja-ostroleka.pl)

This semantic polyfunctionality can be seen as the result of an increased process of semantic bleaching. Research on Old Polish has shown that this polyfunctionality of modals grew in historical times; e.g. it could be shown that the epistemic meanings developed relatively recently (Hansen 1998 and 2001): the first instances of the epistemic use of *musieć* are found in the second half of the 16th century and epistemic *powinien* is not attested before the 19th century:

(20) *Rátuymy tego młodzieńcá niewiem kto iest, musi być mąż osobiwy.* (Bielski Kronika 1564)

(21) *Projekt ten nie powinien znaleźć wielkiego oporu.* (Mickiewicz Pisma filomatyczne 1817–1821).

On the surface modals look like lexical verbs but syntactically they share properties with grammatical markers. The modal takes over the first semantic valence slot of the main verb and does not influence the selection of the subject argument. The following sentences show that the syntax of modals is different from non-grammaticalized content words; compare again *móc* with *umieć*:

a) modals can combine with either humane or inanimate subjects:

(22) *Biały chleb może/*umie sprzyjać zmianom trądzikowym.* (www.zdrowie.med.pl)

b) modals can be used in subjectless cxns

(23) *Tak dalej w Polsce być nie może/*umie.* ‘It can’t go on like this in Poland.’

c) modal constructions allow passive cxns

(24) *Gdy student nie może rozwiązać zadania, obwinia się za to jego [...]* (www.ifil.uz.zgora.pl)

(24’) *Gdy student nie umie rozwiązać zadania, obwinia się za to jego [...]*

vs passive:

(25) *Niektóre zadania mogą/*umieją być rozwiązane ołówkiem.* (www.allegro.pl)

The modal *móc* does not effect the selection of the first argument and therefore allows impersonal sentences as in (23) or passive cxns (25). *Student* in (24) fills a semantic argument position opened by the verb *rozwiązać* ‘to solve’ and not by *móc*. The non-grammaticalized lexeme *umieć* ‘to be capable’ determines the selection of the first argument and therefore cannot be used in impersonal or passive sentences. This syntactic behaviour indicates that the modals open two syntactic (subject phrase and infinitive phrase), but only one semantic valence slots. The loss of a syntactic valence slot is a typical gzn symptom of the condensation of the structural scope. The gzn profile of modal cxns can, thus be summarized in the following way: modals arise from lexical verbs and become polyfunctional modal markers (semantic bleaching), in some cases they retain old lexical meanings (e.g. the modal *wypadać*), but do not underly phonological erosion. They show the loss of valence slots which is a symptom of a condensation process leading to an analytical verbal form. This specific gzn profile allows comparisons with other elements underlying gzn processes in Polish, but also in any other language.

4.2 The gzn of imperative cxns

In this paragraph, we would like to give a more comprehensive account of the gzn of the imperative marker *niech* (for details see Hansen 2004b). We are going to look into the gzn parameters erosion of form, coalescence with the lexical verb and fixation of word order. In its typical usage *niech* expresses a request directed towards the third or — in formal address — the second person:

(26) *Niech Piotr spróbuje tego pasztetu!*

(26’) *Niech pan spróbuje tego pasztetu!*

According to Havránek (1980, p. 462ff) and Brückner (1927, p. 360) the uninflected morpheme *niech* etymologically goes back to the negation of the negated imperative of the verb *hajati* ‘to bother’.¹⁰ The Polish verb *niechać* still attested in Old Polish (see ex. 2 above) got out of use and has been replaced by the prefixed verb *zaniechać*. *Niechaj* got shortened to *niech*. So we find a sequence of shortening processes: *nie chaj* > *niechaj* > *niech*. Now, we will briefly look into the gzn parameters ‘bondedness’ and ‘fixation’. The data show that the imperative marker, indeed, tends to be located in juxtaposition with the lexical verb. It is, however, still possible to put lexical items between imperative marker and main verb; these are e.g. clitical pronouns or adverbs as in the following examples:

(27) *Niech pan tak nie mówi!*

A second question is whether the imperative markers occupy a fixed position in relation to the main verb. The most obvious restriction concerns the position before or after the main verb. Although there are no strict rules concerning juxtaposition we find a strong rule determining the word order ‘imperative marker precedes main verb’. The imperative marker tends to be placed at the beginning of the clause, but it can also occupy the second syntactic slot after the the first constituent or a particle (so-called Wackernagel position); cf.:

(28) *Dowodem na to **niech** będą słowa Orygenesy.* (IPI PAN)

(29) *Więc **niech** się Pani zlituje i często do nas pisuje.* (IPI PAN)

To sum up, in the case of *niech* we find clear symptoms of erosion of the phonological substance, shifts from more concrete to more abstract meanings, a medium degree of coalescence with the lexical verb and a strong fixation of the sequence imperative marker before lexical verb.

4.3 The gzn of avertive *cnx*

Without going into details we would like to mention a gzn path which recently attracted the attention of the general linguists. As in many other languages (e.g. Russian, Serbian/Croatian, German) the verb *chcieć* gave rise to the usage labeled as ‘opierać się czemuś, przychodzić z trudnością’ (Słownik języka polskiego 1992). In the typological literature, this function is called ‘avertive’ (Kuteva 1998; see Drobnjaković 2009). The avertive gram indicates that an action was on the edge of taking place but eventually did not:

(30) *Mam subaru libero i jest taki problem, że nie chce zapalić.* ‘I’ve got a Subaru and I’ve the problem that it doesn’t want to start.’ (<http://motoforum.pl>)

The avertive differs from the volitional meaning in its restriction to negative contexts and the compatibility with inanimate subjects.

¹⁰ ‘czasownik sam złożony z *nie* i *chać*, *chajać*, co u nas nieznanne, ale na Bałkanie *chajati* ‘dbać’, ‘troszczyć się’ [...] (Brückner 1927, p. 360).

5 Outlook: further perspectives on the study of gzn phenomena in Polish

In the previous section we have presented analyses of selected Polish cxns in the light of gzn theory whereby we had to restrict ourselves to some very few aspects. As a matter of fact, gzn phenomena are ubiquitous, and, therefore we would like to conclude this article by listing some further areas of future research on gzn phenomena in Polish¹¹:

- the development of secondary prepositions from other parts of speech like *podczas*, *zamiast*, *według* etc.
- the transition of the perfect tense into a general past tense as in the change *przysiągł jeśm* > *przysiągł-em*.¹²
- The rise of new imperative markers derived from *wziąć* in spoken language as in

(31) *Weźcie się ze mnie nie śmiejcie.*

- the rise of the reciprocal pronoun *nawzajem*;
- the development of the verb ‘to give’ plus infinitive into

a) a causative cxn as in

(32) *W 89. min postanowił bowiem dać odpocząć Piotrowi Jawieniowi.*

b) a modal passive cxn as in

(33) *To się nie da zrobić.*¹³

- the rise of the existential copula cxn from the possession verb *mieć* as in (10) *Nie ma ani jednego porządnego lekarza.*
- the transition of the noun *pan* into a personal pronoun
- the development of reflexive markers into other cxns leading to a high poly-functionality of the morpheme *się*. Compare examples (34)–(38).
 Reflexive: (34) *Karol się goli.*
 Reciprocal: (35) *Chłopcy się biją.*
 Anticausative (36) *Drzwi się otwierają.*
 Modal passive (37) *Ta tkanina dobrze się pierze.*
 Deagentive: (38) *Ziewnęło mi się.*
- the rise of the resultative cxn with *mieć* + participle as in *mam to zrobione*¹⁴
- the rise of the passive cxn with *zostać*

This non-exhaustive list shows the perspectives of a fruitful application of gzn theory to the panchronic study of the Polish language.

¹¹ We are aware of the fact that some of these changes may already have been described in traditional frameworks. Gzn theory, however, would allow for a fresh look on known data.

¹² An important study on this highly common gzn path is Bybee et al. (1994).

¹³ For the gzn of the verb ‘to give’ in Slavonic see von Waldenfels (2009).

¹⁴ See Wiemer/Giger 2005.

References

- Bańkowski (2000). Andrzej Bańkowski, *Etymologiczny słownik języka polskiego*. Warszawa.
- Besters-Dilger/Drobnjaković/Hansen (2009). Juliane Besters-Dilger, Ana Drobnjaković, Björn Hansen, Modals in the Slavonic languages, *Modals in the Languages of Europe. A Reference Work*. (Empirical Approaches to Language Typology 44). [eds. Björn Hansen, Ferdinand de Haan], Mouton de Gruyter, Berlin, 167–199.
- Brinton/Traugott (2005). Laurel Brinton, Elizabeth Traugott, *Lexicalization and language change*, Cambridge University Press, Cambridge.
- Brückner (1927). Aleksander Brückner, *Słownik etymologiczny języka polskiego*. Warszawa.
- Bybee/Pagliuca (1985). Joan Bybee, William Pagliuca, Cross-linguistic comparison and the development of grammatical meaning, *Historical semantics, historical word formation*, [ed. J. Fisiak], Amsterdam, Mouton de Gruyter, 59–83.
- Bybee/Dahl (1989). Joan Bybee, Östen Dahl, The creation of tense and aspect systems in the languages of the world, *Studies in Language* 13 (1), 51–103.
- Bybee/Perkins/Pagliuca (1994). Joan Bybee, Revere Perkins, William Pagliuca, *The evolution of grammar. Tense, aspect, and modality in the languages of the world*, University of Chicago Press, Chicago.
- Bybee (2003a). Joan Bybee, Cognitive processes in grammaticalization, *The New Psychology of Language, Volume II*, [ed. M. Tomasello], Lawrence Erlbaum Associates Inc., New Jersey, 145–167.
- Bybee, 2003b: Joan Bybee, Mechanisms of change in grammaticization: the role of frequency, *The Handbook of Historical Linguistics*, [eds. Brian D. Joseph, Richard D. Janda], Blackwell, Oxford, 2003, 602-623.
- Dahl, Ö. (2000). Östen Dahl, *Tense and Aspect in the Languages of Europe* (Empirical Approaches to Language Typology: Eurotyp 20-6), Mouton de Gruyter, Berlin, New York.
- Daneš (1966). František Daneš, The Relation of Centre and Periphery as a Language Universal, *Travaux Linguistiques de Prague 2: Les problèmes du centre et la périphérie du système de la langue*, 9–21.
- Drobnjaković (2009). Ana Drobnjaković, *The grammaticalization of Polish tense, aspectual and modal auxiliaries*, PhD Dissertation, Katholieke Universiteit Leuven.
- Fischer/Rosenbach (2000) Olga Fischer, Anette Rosenbach, Introduction, *Pathways of change: Grammaticalization in English*, [eds. Olga Fischer, Anette Rosenbach, Dieter Stein] Benjamins, Amsterdam, 1–37.
- Fischer/Norde/Perridon (2004). Olga Fischer, Muriel Norde, Harry Perridon, Introduction: In search of grammaticalization, *Up and down the cline — the nature of grammaticalization*, [eds. Olga Fischer, Muriel Norde, Harry Perridon], Benjamins, Amsterdam, 1–16.
- Findra (2008). Ján Findra, Mikroparadigma slangu a elipsa *nemusím*, *Kultúra slova* 42, 7–14.
- Fried/Östman (2004). Mirjam Fried, Jan-Ola Östman, Construction Grammar: A thumbnail sketch, *Construction Grammar in a Cross-Language Perspective*, [ed. Mirjam Fried, Jan-Ola Östman], John Benjamins, Amsterdam, 11–86.

- Haiman (1994). John, Haiman, Ritualization and the development of language, *Perspectives on Grammaticalization*, [ed. William Pagliuca], Benjamins, Amsterdam.
- Hansen (1998). Björn Hansen, Powstanie i rozwój słów modalnych w języku polskim. *Poradnik Językowy* 1/2, 25–43.
- Hansen (1999). Björn Hansen, Die Herausbildung und Entwicklung der Modalauxiliare im Polnischen. *Entwicklung in slavischen Sprachen* [ed. Tanja Anstatt] München: Verlag Otto Sagner, 83–169.
- Hansen (2000). Björn Hansen, The German modal ‘müssen’ and the Slavonic Languages — Reconstruction of a success story, *Scando Slavica* 46, 77–93.
- Hansen (2001). Björn Hansen, *Das Modalauxiliar im Slavischen. Grammatikalisierung und Semantik im Russischen, Polnischen, Serbischen/Kroatischen und Altkirchenslavischen*, (Slavolinguistica 2), Otto Sagner, München.
- Hansen (2004a). Björn Hansen, The boundaries of grammaticalization. The case of modals in Russian, Polish and Polish/Croatian, *What makes grammaticalization? A look from its fringes and its components*, [eds. Walter Bisang, Nikolaus P. Himmelmann, Björn Wiemer], Mouton de Gruyter, Berlin, 245–271.
- Hansen (2004b). Björn Hansen, The grammaticalization of the analytical imperatives in Russian, Polish and Polish/Croatian, *Welt der Slawen* XLIX, 257–274.
- Hansen (2004c). Björn Hansen, На полпути от словаря к грамматике: модальные вспомогательные слова в славянских языках, *Вопросы языкознания* 2006/2, 68–84.
- Hansen (2005). Björn Hansen, How to measure areal convergence: a case study of contact-induced grammaticalization in the German-Hungarian-Slavonic contact area, *Modality in Slavonic Languages. New perspectives*, [eds. Björn Hansen, Petr Karlík,], Otto Sagner, München, 239–257 (Slovak translation in *Jazykovedný Časopis* 56/2, 81–99).
- Hansen (2009). Hansen, Björn, The hypothetical use of Polish ‘mieć plus Infinitive’ revisited. *Von grammatischen Kategorien und sprachlichen Weltbildern — Die Slavia von der Sprachgeschichte bis zur Politsprache. Festschrift für Daniel Weiss zum 60. Geburtstag*. [eds. Tilman Berger et al.] München-Wien, 177–185.
- Hansen/de Haan (2009). Björn Hansen, Ferdinand de Haan, Concluding chapter: modal constructions in the languages of Europe, *Modals in the Languages of Europe. A Reference Work*. (Empirical Approaches to Language Typology 44), [ed. Björn Hansen, Ferdinand de Haan], Mouton de Gruyter, Berlin, 511–560.
- Haspelmeth (1999). Martin Haspelmath, Why is grammaticalization irreversible?, *Linguistics*, 37:1043–1068.
- Havránek (1980). Bohuslav Havránek (red.), *Etymologický slovník slovanských jazyků. Slova gramatická a zájmena*, Academia, Praha.
- Heine (1993). Bernd Heine, *Auxiliaries: cognitive forces and grammaticalization*, Oxford University Press, Oxford, New York.
- Heine/Kuteva (2002). Bernd Heine, Tania Kuteva, *World Lexicon of Grammaticalization*, Cambridge University Press, Cambridge.
- Heine (2003). Bernd Heine, Grammaticalization, *The Handbook of Historical Linguistics*, [eds. Brian D. Joseph, Richard D. Janda], Blackwell, Oxford, 575–601.
- Heine/Kuteva (2003). Bernd Heine, Tania Kuteva, On contact-induced grammaticalization. *Studies in Language*, 27, 529–572.

- Heine/Kuteva (2005). Bernd Heine and Tania Kuteva, *Language contact and Grammatical Change*. Cambridge University Press, Cambridge.
- Himmelman (2004). Nikolaus P. Himmelman, Lexicalization and grammaticalization: opposite or orthogonal?, *What makes grammaticalization?: A look from its fringes and its components*, [eds. Walter Bisang, Nikolaus P. Himmelman, Björn Wiemer], *Studies in Language*, 30 (3), Benjamins, Amsterdam, 21–42.
- Hopper (1991). Paul J. Hopper, On some principles of grammaticalization, *Approaches to Grammaticalization*, [eds. Elizabeth Traugott, Bernd Heine], Benjamins, Amsterdam, 17–35.
- Hopper/Traugott (2003). Bernd Heine, Elizabeth Traugott, *Grammaticalization*, 2nd edition, Cambridge University Press, Cambridge.
- Ivanová (2009). Martina Ivanová (ed.), http://www.pulib.sk/elpub2/FF/Ivanova1/pdf_doc/hlavicka.pdf, Prešovská univerzita v Prešove, Prešov, (<http://www.pulib.sk/elpub2/FF/Ivanova1/index.html>), 2009.
- Kortmann (1999). Bernd Kortmann, Iconicity, Typology and Cognition, *Form Mimicking Meaning: Iconicity in Language and Literature*, [ed. M. Nänny, O. Fischer], Benjamins, Amsterdam, 1999, 375–392.
- Kuteva (1998). Tania Kuteva, On identifying an evasive gram: action narrowly averted. *Studies in Language* 22, 113–160.
- Kuteva (2001). Tania Kuteva, *Auxiliation: An enquiry into the nature of grammaticalization*, Oxford University Press, Oxford.
- Lai (2001). H.L. Lai, On Hakka BUN: A Case of Polygrammaticalization, *Language and Linguistics*, 2(2), 137–153.
- Lamiroy (2003). Béatrice Lamiroy, Grammaticalization et comparaison de langues, *Verbum* 25, 411–431.
- Lehmann (1992). Christian Lehmann, Word order change by grammaticalization, *Internal and external factors in syntactic change*, [eds. Marinel Gerritsen, Dieter Stein], Mouton-de Gruyter, Berlin, 395–416.
- Lehmann (2002). Christian Lehmann, *Thoughts on Grammaticalization. A programmatic Sketch*. Second, revised edition. Arbeitspapiere des Seminars für Sprachwissenschaft der Universität Erfurt 9, 2002.
- Lehmann (2004). Christian Lehmann, Theory and method in grammaticalization, *Zeitschrift für germanistische Linguistik*, 32 (22), 152–187.
- Matras (1998). Yaron Matras, Convergent development, grammaticalization, and the problem of ‚mutual isomorphism‘, *Sprache in Raum and Zeit: In memoriam Johannes Bechert*, [eds. Winfried Boeder, Christoph Schroeder, Karl Heinz Wagner, Wolfgang Wildgen], Gunter Nart, Tübingen, 89–103.
- McMahon (1994). April M.S. McMahon, *Understanding language change*, Cambridge University Press, Cambridge.
- Meillet (1912). Antoine Meillet, L'évolution des formes grammaticales, *Scientia*, 12 (6), 130–148.
- Mistrík (1983). Jozef Mistrík, *Moderná slovenčina* Bratislava.
- Newmeyer (1998). Frederick J. Newmeyer, *Language Form and Language Function*, MIT Press, Bradford Books, Cambridge.
- Noël (2007). Dirk Noël, Diachronic construction grammar and grammaticalization theory. *Functions of Language*, 14, 177–202.

- Pallasová (1991). Eva Pallasová, Sémantika možnosti a nutnosti v staroslověnině. *Slavia* 60, 264–274.
- Ramat (1992). Paolo Ramat, Thoughts on degrammaticalization, *Linguistics*, 30, 549–560.
- Roeder/Hansen (2006). Carolin Roeder, Björn Hansen, Modals in contemporary Slovene. *Wiener slavistisches Jahrbuch* 52, 153–170.
- Stanojčić / Popović (1999). Živojin Stanojčić / Ljubomir Popović, *Gramatika srpskoga jezika*. Beograd.
- Szymczak (1992). *Słownik języka polskiego I–III*, [red. Mieczysław Szymczak] Warszawa.
- Traugott/Dasher (2002). Elizabeth Traugott, Richard Dasher, *Regularity in Semantic Change*, Cambridge University Press, Cambridge.
- Traugott (2003). Elizabeth Traugott, Constructions in grammaticalization, *The Handbook of Historical Linguistics*, [eds. Brian D. Joseph, Richard D. Janda], Blackwell, Oxford, 624–647.
- Traugott (2007). Elizabeth Traugott, The concepts of constructional mismatch and type-shifting from the perspective of grammaticalization, *Cognitive Linguistics*, 18. 523–557.
- Traugott (2008). Elizabeth, Traugott, Grammaticalization, constructions and the incremental development of language: Suggestions from the development of degree modifiers in English, *Variation, selection, development: probing the evolutionary model of language change*, [eds. Regine Eckardt, et al.], Mouton de Gruyter, Berlin/New York, 219–250.
- Večerka (1996). Radoslav Večerka, *Altkirchenslavische Syntax III. Die Satztypen: Der einfache Satz*, Weiher, Freiburg.
- von Waldenfels (2009). Ruprecht von Waldenfels, *The grammaticalization of ‚give‘ with infinitive complement in Russian, Polish and Czech*, PhD Thesis, University of Regensburg.
- Weiss (1987). Daniel Weiss, Funkcjonowanie i pochodzenie polskich konstrukcji typu ‘mam coś do załatwienia’, ‘coś jest do załatwienia’, *Deutsch-polnische Sprachkontakte*, [eds. Alek Pohl, André de Vincenz], Böhlau, Wien, 265–286.
- Weiss (1988). Daniel Weiss, Konstrukcje typu ‘mieć (coś) do załatwienia, być do załatwienia oraz dać (coś) do załatwienia: stopień ich s frazeologizowania dawniej i dziś. *Z problemów frazeologii polskiej i słowiańskiej* 4 [Mieczysław Basaj, Danuta Rytel], 153–175.
- Wiemer/Giger (2005). Björn Wiemer, Markus Giger, *Resultativa in den nord-slavischen und baltischen Sprachen. Bestandsaufnahme unter arealen und grammatikalisierungstheoretischen Gesichtspunkten*. Sagner, München

