

Alicja Cuper, Małgorzata Cuper-Ferrigno

Some remarks on grammaticalization

The State School of Higher Education in Chełm

Abstract

This article is devoted to the process of grammaticalization involving language change as discussed in the current literature. The paper deals with the processes underlying grammaticalization, including repetition, reanalysis, analogy and unidirectionality.

Keywords: *grammaticalization, unidirectionality, reanalysis, analogy, repetition*

Abstrakt

Poniższy artykuł poświęcony jest procesowi gramatykalizacji. Przedstawia on różne definicje proponowane przez naukowców dotyczące tego zjawiska. Praca ta omawia procesy prowadzące do i funkcjonujące w gramatykalizacji. Autorzy artykułu omawiają znaczenie powtórzenia, definicje ciągłości, reanalizy, analogii i jednokierunkowości.

Słowa kluczowe: *gramatykalizacja, jednokierunkowość, reanaliza, analogia, powtórzenie*

This article attempts to explain the meaning of the term "grammaticalization" in contemporary linguistic research by focusing on different processes operating in and leading to grammaticalization.

Before turning to the very definition of grammaticalization, it is important to stress that in recent literature there are two terms used to describe this process. The older term is "grammaticalization", while the newer form is "grammaticization". Some linguists avoid the longer word because grammaticalization could be understood as 'entering the grammar of a language', i.e., becoming 'grammatical'. Grammaticization, on the other hand, suggests a process whereby a form may become fixed and constrained in distribution without committing the linguist to a view of grammar as a fixed, bounded entity. As Hopper and Traugott (1993: p. xvi) put it, a similar point can be made in a different way:

It is said that grammaticalization stresses the historical perspective on grammatical forms, while grammaticization focuses

on the implications of continually changing categories and meanings for a synchronic view of a language, thus placing the entire notion of synchrony in question.

It is worth pointing out, however, that the titles of some recent major works contain the longer form i.e., grammaticalization (e.g. C. Lehmann, 1985; Heine and Reh, 1984; Traugott and Heine, 1991; Heine, Claudi, and Hünne-meyer, 1991a). Therefore, we will stick to the term 'grammaticalization'.

The Definition of Grammaticalization

The term 'grammaticalization' was coined by the French linguist Antoine Meillet in 1912. He defined it as *l'attribution du caractere grammatical a un mot jadis autonome* 'the acquisition of grammatical character in a formerly autonomous word'. However, the classic definition used in different studies (Lehmann, 1985, p. 303; Heine-Claudi- Hünne-meyer, 1991a, p. 149; Hopper-Traugott, 1993, p. 2) is that of Kuryłowicz (1965, p. 69): "grammaticalization consists in 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, e.g., from a derivative formant to an inflectional one". In this view, grammaticalization is the process illustrating the development of fully grammatical forms (function words, clitics, and inflections), as well as more grammatical forms such as derivational affixes, from independent lexical items.

However, according to others, it is not enough to define grammaticalization as a process by which a lexical item becomes a grammatical morpheme, but rather it is important to stress that this process occurs in the context of a particular construction (Traugott-Heine, 1991, p. 5). In fact, it may be more accurate to say that a construction with particular lexical items in it becomes grammaticalized, instead of saying that a lexical item becomes grammaticalized. Thus *going to* does not grammaticalize in the construction exemplified by 1.:

1. *I am going to the store.*

But only in the construction which is followed by a verb as in 2.:

2. *I am going to help you.*

Christian Lehmann (1982, p. vi) in his *Thoughts on Grammaticalization and New Reflections on Grammaticalization and Lexicalization* wrote:

Grammaticalization is a process leading from lexemes to grammatical formatives. A number of semantic, syntactic and

phonological processes interact in the grammaticalization of morphemes and of whole constructions. A sign is grammaticalized to the extent that it is devoid of concrete lexical meaning and takes part in obligatory grammatical rules.

Another definition introduced by James A. Matisoff (1991, p. 384) refers to the process of grammaticalization by means of the term "metaphor". Matisoff wrote:

Grammaticalization may also be viewed as a subtype of metaphor (etymologically "carrying beyond"), our most general term for a meaning shift. [...] Grammaticalization is a metaphorical shift toward the abstract, "metaphor" being defined as an originally conscious or voluntary shift in a word's meaning because of some perceived similarity.

The Role of Repetition

In the literature devoted to grammaticalization we find extensive discussions on semantic change and its sources (see Heine, 1991; Traugott, 1989; Bybee, 1994). It can be noticed, however, that definitely less emphasis is put on the development of morphosyntactic and phonological properties. Joan Bybee in her article titled "Mechanisms of change in grammaticalization: the role of frequency" states that repetition plays an important role in the various changes that a grammaticalizing construction undergoes. The importance of repetition to grammaticalization has been noted by Haiman in his discussion (Haiman 1994) of the parallels between the general cultural phenomenon of ritualization and the process of grammaticalization in a language. This issue has also been addressed by Boyland (1996) in his analysis of the effects of repetition on the cognitive representation of grammaticalizing constructions. Bybee, building on these works, argues for a new definition of grammaticalization, namely, one which recognises the crucial role of repetition in grammaticalization and characterises it as 'the process by which a frequently used sequence of words or morphemes becomes automated as a single processing unit' (Bybee, 2000, p. 2).

Haiman (1994) makes a case for regarding the process of grammaticalization as *ritualization*. He distinguishes four aspects of ritualization, which are the result of repetition. These are:

- a. habituation,
- b. automatization,

- c. reduction of form,
- d. emancipation.

Habituation results from repetition and it depletes a cultural object or practice of its force and its original significance as well. Besides, repetition causes automatization of a sequence of units and the sequence of units undergoes reanalysis as a single 'processing chunk' (Bybee, 2000, p. 2) with formerly separate units losing their individual meaning. Furthermore, repetition leads to the reduction of form through weakening of the individual gestures comprising the act and through the reorganization of the whole sequence into one 'automated' unit. And finally, there is emancipation, where the sequence takes on a more symbolic function inferred from the context in which it occurs. On the basis of this, Bybee argues that frequent repetition plays an important role in the changes that take place in the grammaticalization process, including the following:

- (i) Frequency of use leading to the weakening of semantic force by habituation the process by which an organism ceases to respond at the same level to a repeated stimulus,
 - (ii) Phonological changes of reduction and fusion of grammaticalizing construction being conditioned by their high frequency,
 - (iii) Increased frequency conditioning a greater autonomy for a construction, which means that the individual components of the construction (such as *go*, *to*, or *-ing* in the *be going to*) weaken or lose their association with other instances of the same item (the phrase is reduced to *gonna*),
 - (iv) The loss of the semantic transparency accompanying the rift between the components of the grammaticalizing construction and their lexical congeners allowing the use of the phrase in new contexts with new pragmatic associations, leading to semantic change,
 - (v) Autonomy of a frequent phrase making it more entrenched in the language and often conditioning the preservation of otherwise obsolete morphosyntactic characteristics.
- (Bybee, 2000, p. 3)

What are Clines?

Admittedly, it is impossible to discuss grammaticalization without mentioning the concept of a 'cline'. From a diachronic point of view, forms do not shift abruptly from one category to another, but go through a series of gradual transitions, which tend to be similar in type across languages.

Consequently, a content word such as *back*, which denotes a body part, comes to stand for a spatial relationship in *in/at the back of*, and is becoming an adverb and perhaps eventually a preposition or even a case affix. The development from a content word, to a relational phrase, to an adverb and preposition and even to a case affix, is an example of what is meant by a 'cline'.

The term 'cline' has both diachronic and synchronic implications. From a historical point of view, a cline is a natural pathway along which forms evolve. From a synchronic perspective, on the other hand, a cline can be thought of as a 'continuum', "an arrangement of forms along an imaginary line at one end of which is a fuller form of some kind, perhaps lexical, and at the opposite end a compacted and reduced form, perhaps grammatical" (Hopper-Traugott, 1993, p. 7).

We can distinguish two types of clines:

- a) a cline of grammaticality,
- b) a cline of lexicality.

The first one may be exemplified by the following continuum:

content item > grammatical word > clitic > inflectional affix

The second cline would include derivational affixes such as *-ness*, *-ment*, etc. and such units as syntactic phrase, compound, and affix, e.g.:

free word > clitic > derivational affix

a basket full (of eggs...) > a cupful (of tea) > hopeful

As suggested by Heine, the particular paths along which certain forms develop should be called 'grammaticalization channels', and internal relations and structures within these channels should be called 'grammaticalization chains' (Heine-Claudi-Hünemeyer, 1991a, p. 222).

Further characteristics of the grammaticalization process may comprise phonological changes such as reduction, assimilation, deletion of consonants and vowels producing sequences that require less muscular effort (Browman and Goldstein, 1990; Mowrey and Pagliuca, 1987). For example, *going to* becomes *gonna* and in certain contexts is reduced further to [ɔn] as in *I'm (g)onna*.

Secondly, since specific, concrete meanings entering into the process of grammaticalization are generalised and become more abstract, they become appropriate in a growing range of contexts. Again, the construction *be going to* may serve as a prime example. In Shakespeare's English the only possible meaning of *be going to* was the literal one, namely, that of movement.

However, in the course of time we can interpret this construction not only as movement but also as intention and future.

1. MOVEMENT: *We are going to Windsor to see the King.*
2. INTENTION: *We are going to get married in June.*
3. FUTURE: *These trees are going to lose their leaves.*

Thirdly, the frequency of use of a grammaticalizing construction increases dramatically as it develops. One source of the increased frequency is a growth in the types of contexts in which the new construction is possible. Thus, *be going to* with the meaning of movement (as in 1.) was only found in contexts where movement was to take place, with subjects that were volitional and mobile. Now it can be used in contexts where no movement in space on the part of the subject is implied. Finally, changes present in grammaticalization are very gradual and often accompanied by much variation in form and function.

Reanalysis and Analogy

There are two mechanisms which lead to grammaticalization: reanalysis and analogy. Broadly speaking, reanalysis and analogy have been considered significant for change in general; while the former modifies underlying representations (semantic, syntactic or morphological) and causes some rule change, the latter, by contrast, modifies surface manifestations and as such does not bring about any rule change.

Langacker (1977, p. 58) defines reanalysis as 'change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation'. One type of reanalysis frequently found in grammaticalization is *fusion*. Fusion consists in the merger of two or more forms across word or morphological boundaries. *Compounding* is a prime example here. Within compounding we can distinguish, for instance, the development of many highly productive derivational affixes in English. This process gave rise to such affixes as *-hood*, *-dom*, *-ly*, which formerly existed as full nouns meaning 'condition', 'state, realm', and 'body, likeness', which were compounded with other nouns as below:

- a. cild – had 'condition of a child' > childhood,
- b. freo – dom 'realm of freedom' > freedom,
- c. man – lic 'body of a man, likeness of a man' > manly.

(Hopper-Traugott, 1993, p. 45).

Items such as those given above can be found in different languages. Heine and Reh (1984: 269-281) have listed many of them in African languages.

Besides, certain nouns in English are said to function as emphasizees as in 'talk one's *head* off', 'work one's *tail* off'; others, like *body*, *head*, *belly*, *soul*, *breath*, *person* tend to develop as reflexives (Heine and Reh 1984, p. 272). Also, the development of English modal auxiliaries is an instance of reanalysis as it involves morphosyntactic change and is strictly bound up with syntax. Generative linguists were particularly interested in this topic (Traugott, 1965; Lightfoot, 1979), treating the development of English auxiliaries as a prime example of syntactic change, but see Hopper and Traugott (1993, p. 45), for their treatment of modals as an instance of the larger process of grammaticalization.

Whereas reanalysis refers to the development of new out of old structures, analogy, on the other hand, 'refers to the attraction of extant forms to already existing constructions' (Hopper-Traugott, 1993: 53). Reanalysis and analogy involve innovation along different axes. While reanalysis is connected with syntagmatic axis of linear constituent structure, analogy, by contrast, operates along paradigmatic axis of options at any one constituent node (Jakobson and Halle, 1956). For Meillet and his contemporaries time analogy had a very narrow sense: it was conceived as a process where irregularities in grammar, especially at the morphological level, were regularized; it was treated as 'proportion' or 'equation'. This, in turn, gave rise to analogizing singular – plural alternations such as *child* – *children* to *child* – *childs* as most other nouns alternate. This gives us the following formula:

$$\begin{aligned} \text{cat} : \text{cats} &= \text{child} : x \\ x &= \text{childs} \end{aligned}$$

(Hopper-Traugott, 1993, p. 56)

However, this does not account for the selection of one member of a pair as a model. According to Kuryłowicz (1945, p. 9), there is a tendency in linguistic change to replace a more constrained form with a more general one and not vice versa. Later, Kiparsky (1968) redefined analogy in phonology as a rule extension, stressing that analogy is not random in any language change. Kiparsky treated analogy as the generalization or optimization of a rule from a limited domain to a broader one.

The Notion of Unidirectionality

From a diachronic perspective, grammaticalization is said to be a unidirectional process: lexical items undergoing grammaticalization must first serve commonly needed discourse functions; then they become syntactically

fixed and may amalgamate morphologically as a stem or an affix. The basic assumption is that there is a relationship between two stages A and B, such that A occurs before B, but not vice versa. This is what is meant by unidirectionality. What is important is that changes occurring in a grammaticalizing path do not have to go to completion, which means that they do not have to move to the very end of the cline. 'A given grammaticalization process is arrested before it is fully implemented' (Hopper-Traugott, 1993).

Generalisation

While grammaticalization is often characterised as a process in which "grammatical meaning develops out of lexical meaning by a process of generalisation or weakening of semantic content" (cf. Givon, 1973; Fleischman, 1982), generalisation is defined as 'an increase in the polysemies of a form' (Hopper-Traugott, 1993, p. 96) or as 'an 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, p. 2).

There are two types of generalisation:

- a) generalisation of meaning,
- b) generalisation of grammatical function.

In the case of generalisation of meaning it is not important whether the meanings become less distinct in the process of grammaticalization, but whether there are any conditions on which meanings undergo grammaticalization and how the meanings of lexical items that become grammatical may change.

It has long been observed (cf. Heine 1991a) that the best candidates amenable to grammaticalization are words that are culturally independent, i.e. those expressing universal human experience. They should also represent concrete and basic aspects of human relations with the environment, with a strong emphasis on the spatial environment, including parts of the human body. The relationship in space between one object and another is often expressed in terms of a human body parts' relation to the rest of the body. Thus, the noun for *head* evolves into a preposition meaning 'on top of, on'. *Back* is used for *in back of*, *face* for *in front of*, *belly* or *stomach* for *in* (Heine, 1991a, pp. 126-131).

Another important observation about the lexical items found in grammaticalizing constructions is that they are themselves already highly generalised in meaning. Accordingly, out of motion verbs, *go* and *come* are the most general in meaning, they incorporate only movement and directionality and

not manner. Among stative verbs, it is *be* and *have* that grammaticalize, and for active verbs, the most generalised *do* (Bybee, 1994).

Decategorization

Decategorization is the term used to denote a processes during which a noun or a verb loses – while becoming a grammatical element – its morphosyntactic properties (Hopper, 1991). In some cases, the lexical item from which a grammatical morpheme arises will remain in the language (e.g. *go* retains many lexical uses, despite the grammaticalization of *be going to*), and in other cases, the lexical item disappears and only the grammatical element remains (*can* is grammaticalized, and the main verb from which it developed *cunnan* 'to know', has disappeared). In both cases the grammaticalizing element ceases to behave like a regular noun or verb.

We can illustrate this change as a 'cline of categoriality' (Hopper-Traugott, 1993, p. 104):

major category (> adjective / adverb) > minor category

The major categories are open lexically: nouns and verbs, and minor categories comprise prepositions, conjunctions, auxiliary verbs, pronouns and demonstratives. Between these two categories we find adjectives and adverbs which constitute an intermediate category. Major categories are present in almost all languages, whilst minor categories vary from language to language.

The process of decategorization comprises two paths of development, often called 'grammatical clines'. These are:

- a. a noun – to – affix cline
- b. a verb – to – affix cline

The first cline can be presented as follows:

relational noun >
 secondary adposition >
 primary adposition >
 agglutinative case affix >
 fusional case affix >

(Lehmann, 1985, p. 304).

A relational noun carries the meaning of location or direction especially in relation to some other noun. *Way*, *top*, *side* and names of body parts such as *foot*, *head*, and *back* are relational nouns. They often appear as the head nouns of phrases such as *by the side of* (> *beside*). The term 'adposition' is used for prepositions and postpositions. Secondary adposition defines concrete rather than grammatical relationships. They are often composed of

relational nouns, e.g., *ahead of a column*. Primary adposition, on the other hand, is monosyllabic and indicates purely grammatical relationships such as *by*, *of*, and *to*.

The other path of development is as follows:

- full verb >
- (vector verb) >
- auxiliary >
- clitic >
- affix >

(Bybee, 1985a).

Full verbs versus vector verbs have a full lexical meaning and a grammatical status. Vector verbs represent any intermediate stage between full verb and auxiliary. It is a quasi-auxiliary which is finite, and accordingly carries markers of tense, aspect and mood. 'Semantically, it adds nuances of aspect, direction, and benefaction to the clause' (Hopper-Traugott, 1993, p. 109).

An example of a noun which has lost much of its categoriality is the conjunction *while* which was previously a noun meaning a length of time. Today it is very limited in its use as a noun. When it is a clause – initial and functioning as a conjunction, it has no noun properties. Thus, it does not take articles nor can it be modified as in:

* I was there the same while you were

In other contexts its use as a noun is restricted to set phrases such as *for a while*, *a long while*. In other contexts its use as a noun is restricted to set phrases such as *for a while*, *a long while*. It cannot be freely used as a noun; consequently, the following examples are unacceptable:

- a. * *I've been there many whiles*
- b. * *I waited a boring while*
- c. * *The while was very long*

Specialization

When confronted with text samples in different languages, we can find out that some vector verbs become more frequent whilst others become less frequent. Accordingly, certain verbs gain the ascendancy in the competition for auxiliary status. This exemplifies specialization, that is 'the process of reducing the variety of formal choices available as the meanings assume greater grammatical generality' (Bréal, 1991, p. 143; Hopper, 1991, p. 22). Here we can see a great difference between lexical and grammatical items. When ta-

king into account any kind of meaning domain, we will see that the number of lexical items considerably exceeds the number of grammatical morphemes. Furthermore, lexical items constitute an open class, where new items can be added infinitely, while the inventory of grammatical morphemes is added very sparingly, by items stemming from the lexical class. If we compare the number of ways of modifying actions and events by means of lexical adverbs with the inventory of tense and aspect distinctions, which are expressed grammatically, we find that the process of grammaticalization is very selective and in this process only a few lexical forms turn into grammatical morphemes. Therefore, specialization does not comprise the elimination of alternatives, but it is manifested by textual preferences which are conditioned by semantic types, discourse genres and sociolinguistic contexts.

Divergence

Divergence, called also 'split' (Hopper, 1991, pp. 24-25) or 'form – meaning asymmetry' (Heine-Claudi-Hünemeyer, 1991b, pp. 212-213), is a term used to describe a situation in which a given form maintains its lexical characteristics in certain contexts while undergoing grammaticalization in other contexts. Thus, two forms of common etymology may coexist, one grammaticalized and the other not, as in the case of the numeral *one* and the article *a/an*. The two may coexist for long periods and may even co-occur in the same construction, e.g., dummy and main verb *do*. In the OE, *an* had a stressed long vowel as in *stān*. It meant 'one, certain'. The expected phonetic development of that word would have been [own] as in *stone*. However, we can notice certain differences between these two words in different dialects. In Scottish the two words continue to have the same vowel [eyn/*steyn*], in other dialects we get a full form [w[^]n]. The cliticized form of this word is the vowel [ə], with the retention of the [n] when followed by a vowel. 'The divergent histories of the stressed and unstressed forms can be seen in alternations such as the following: Would you like *a* Mai Tai? – Yes, I'd love *one*.' (Hopper-Traugott, 1993, p. 117).

A more detailed example of divergence is present in Malay. In this language nouns in certain discourse contexts are preceded by a classifier (Hopper, 1986). Classifiers are present in many languages in connection with number words. The following examples are taken from Malay narrative text titled 'Hikayat Abdullah' (quoted after Hopper, 1986, pp. 64,77,144, respectively):

Ada – lah kami lihat tiga *orang* budak – budak kena hukum
 happen we see three <CL> boy – Pl get punishment

'We happened to see three <CL> boys being punished'
 Maka pada suatu pagi kelihatan – lah sa – *buah* kapal rendah
 and on one morning was: seen a – <CL> ship low
 'Then one morning a <CL> low ship was sighted'
 Mati – lah tiga *ekor* tikus
 dead – lah three <CL> rat
 'Three <CL> rats were killed'

The words such as: *orang*, *buah*, and *ekor* are classifiers. In Malay, they are used to indicate that the noun to which they refer is new and important to the discourse. They cannot be used interchangeably, though: *orang* is used before human nouns, *buah* before objects of a bulky size, and *ekor* before nouns which denote animals. Moreover, in this language there is a more general classificatory word – *suatu* used before singular objects and competing with *buah*:

Maka di – beri - nya hadiah akan Sultan itu suatu kereta bogi
 and he gave as – gift to Sultan the a:<CL>carriage buggy
 'And he gave a <CL> buggy carriage to the Sultan as a gift'

(Hopper, 1986, pp. 166)

It can be noticed from the examples above that the classifiers are preceded by a number word such as *tiga* or the singular clitic *sa* – 'one, a'. However, *suatu* is never preceded by any quantifiers. This is caused by the fact that historically the *s* – of *suatu* is the singular morpheme *sa* – that is present with the other classifiers when the classified noun is singular. Furthermore, those classifiers in Malay also function as autonomous nouns. *Buah* means fruit, *orang* means person, man, and *ekor* – tail. Accordingly, there is a divergence between a lexical meaning and a grammaticalized meaning.

Renewal

Renewal is the process by means of which existing meanings take on new forms. A prime example of renewal is the history of the English intensifiers such as, say, *very* in *very dangerous*. In the course of history different intensifiers were used: *fearfully*, *terribly*, *incredibly*, *really*, *truly*, *pretty* etc. We can notice that *very* is often interchangeable with *most*, *surprisingly*, *extremely*, *highly*. Again, the choice of these intensifiers may be dictated by specialization needs. Intensifiers, on account of their emotional function, are particularly prone to renewal. However, there are other categories which are also

renewed even with some degree of predictability. Examples include negative constructions such as 'no way' (e.g., *No way we are taking this book*), which in spoken English are replacing the negative form 'n't – not'.

It is important to stress that when one form is renewed by another form, it may or may not occur in the same constituent position. A case in point are 'English intensifiers such as awfully (...) [which] are simply substitutes, involving no new syntactic or phonological strategy' (Hopper-Traugott, 1993, pp. 122). The spoken negator 'no way' has hardly anything in common with 'n't'.

Renewal is often closely bound up with word order changes. In English, the original negation was expressed by means of *ne* which preceded the verb.

Ne canst Ðu huntian butan mid nettum?
not know you hunt – Inf except with nets
'Do you know how to hunt with anything but nets?'

(Hopper-Traugott, 1993, p. 122; after c.1000 Aelfric Coll. 62)

The negating morpheme *ne*, since it was subject to reduction through rapid speech, could even amalgamate with some verbs, e.g.,

- a. *ne wæs* 'not was' > *næs*
- b. *ne wolde* 'not wanted' > *noilde*

Later, it was replaced by the new phonologically fuller *not* which followed the verb:

(...) that moves not him: though that be sick, it dies not

(c.1000, Shakespeare, Henry IV Part 2. II. ii. 113).

Layering – The Result of Unidirectionality

Divergence together with renewal give rise to newer forms and meanings which exist alongside older forms and meanings. This leads to an effect that can be called *layering* or *variability*, which, in turn, is a characteristic of grammaticalization. According to Hopper and Traugott (1993), layering is the synchronic result of successive grammaticalization of forms which contribute to the same domain. Hopper (1991, p. 22) says that "within a broad functional domain, new layers are continually emerging; in the process the older layers are not necessarily discarded, but many remain to coexist with and interact with new layers".

An example of layering is when a full and reduced form coexist, having related forms and minimally different functions. An example of this, given by Hopper and Traugott (1993) is the coexistence in Classical Armenian of

three demonstratives: *ays* 'close to first person', *ayd* 'close to second person', *ayn* 'close to third person', and three articles *-s*, *-d*, *-n* (Greenberg, 1985, p. 277). In such cases it can be deduced that the reduced form is the later form. In other cases, a variety of different forms may coexist and they serve similar functional purposes.

Conclusion

In accordance with the definition of unidirectionality, grammaticalization involves shifts from a lexical item to a grammatical item or from a less grammatical to a more grammatical item taking place in the specific linguistic context. Grammaticalization clines are irreversible in the sense that linguistic changes proceed from "higher" to "lower levels" of the cline, and never the other way round. This, however, is not an absolute rule as one can find counterexamples in the domain of lexicalization of grammatical items, as in 'to up the ante, that was a downer, his uppers need dental work'. Other less obvious examples comprise the incorporation and fossilization of previously independent grammatical morphemes into lexical material, as is the case with the freezing of 'to-' in 'today'. Sometimes in many languages what originated as phonologically predictable alternations may be morphologized in the course of time (e.g., foot – feet is what remained of an earlier stage when the plural was *fo*t* – i*; phonetically *i* caused fronting of the preceding vowel but when *i* was lost, the fronted vowel remained as the sign of plurality). Andersen (1973) tries to explain the source of counterexamples to unidirectionality. He maintains that they come into existence thanks to the development of 'adaptive rules'.

References

- Andersen, H. (1973). "Abductive and deductive change". In *Language*, vol. 49.
- Boyland, J. T. (1996). *Morphosyntactic Change in Progress: A Psycholinguistic Approach*. Dissertation: University of California at Berkeley.
- Bréal, M. (1991) [1882]. G. Wolf. ed. and translator, *The Beginnings of Semantics, Essays, Lectures, and Reviews*. Stanford: Stanford University Press.
- Browman, C. P. and Goldstein, L. M. (1990). Tiers in articulatory phonology, with some implications for casual speech. In: Kingston, J. and Beckman, M. E. (eds.), *Papers in Laboratory Phonology I: Between the Grammar and the Physics of Speech*. Cambridge: Cambridge University Press.

- Bybee, J. L. (1985a). *Morphology: A Study of the Relation between Meaning and Form*. Amsterdam: Benjamins.
- Bybee, J. L., Perkins, R. and Pagliuca, W. (1994). *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. Chicago: University of Chicago Press.
- Bybee, J. L. *Mechanisms of Change in Grammaticization: the Role of Frequency*. University of New Mexico. 19. Dec. 2000, [http://www.unm.edu/~jbybee/mechanisms of change.doc](http://www.unm.edu/~jbybee/mechanisms%20of%20change.doc), 19.12.2015.
- Fleischman, S. (1982). *The Future in Thought and Language: Diachronic Evidence from Romance*. Cambridge: Cambridge University Press.
- Givón, T. (1973). "The time-axis phenomenon". In *Language*, Vol. 49.
- Greenberg, J. H. (1985). Some iconic relationships among place, time, and discourse deixis. In Haiman, J. (ed). *Iconicity in Syntax*. Amsterdam: Benjamins.
- Haiman, J. (1994). Ritualization and the development of language. In Pagliuca, W. *Perspective on Grammaticalization*. Amsterdam: Benjamins.
- Heine, B. and Reh, M. (1984). *Grammaticalization and Reanalysis in African Languages*. Hamburg: Helmut Buske.
- Heine, B., Claudi, U. and Hünnemeyer, F. (1991a). *Grammaticalization: A Conceptual Framework*. Chicago: University of Chicago Press.
- Heine, B., Claudi, U. and Hünnemeyer, F. (1991b). From Cognition to Grammar – evidence from African Languages. In Traugott, E. C. and Heine, B. (eds). *Approaches to Grammaticalization*, Vol. 1. Amsterdam: Benjamins.
- Hopper, P. J. (1991). On principles of grammaticalization. In Traugott, E. C. and Heine, B. (eds.). *Approaches to Grammaticalization*, Vol. 1. Amsterdam: Benjamins.
- Hopper, P. J. and Traugott, E. C. (1993). *Grammaticalization*. Cambridge: Cambridge University Press.
- Jakobson, R. and Halle, M. (1956). *Fundamental of Language*. The Hague: Mouton.
- Kiparsky, P. (1968). Linguistic universals and linguistic change. In Bach, E. and Harris, R. T. (eds.). *Universals in Linguistic Theory*. New York: Holt, Rinehart and Winston.
- Kuryłowicz, J. (1945). "La nature des procès dits analogiques". In *Acta Linguistica*, Vol. 5, 121-138. (Reprinted in:) Hamp, E. P., Householder, F. W. and Austerlitz, R. (1966). (eds.). *Readings in Linguistics*, Vol. 2. Chicago: University of Chicago Press.

- Kuryłowicz, J. (1965). "The evolution of grammatical categories". In *Dio-gens*, Vol. 51.
- Langacker, R. W. (1977). Syntactic reanalysis. In Li, Ch. N. (ed.). *Mechanisms of Syntactic Change*. Austin: University of Texas Press.
- Lehmann, Ch. (1985). "Grammaticalization: synchronic variation and diachronic change". In *Lingua e Stile*, Vol. 20.
- Lightfoot, D. (1979). *Principles of Diachronic Syntax*. Cambridge: Cambridge University Press.
- Matisoff, J. (1991). Areal and universal dimensions of grammaticalization in Lahu. In Traugott, E. C. and Heine, B., Editors, (1991). *Approaches to Grammaticalization*. Vol. 2. Amsterdam: Benjamins.
- Meillet, A. (1912). "L'évolution des formes grammaticales". In *Scientia*, Vol. 12, No. 26, 6. (Reprinted in:) Meillet, A. (1958). *Linguistique historique et linguistique générale*. Paris: Champion.
- Mowrey, R. and Pagliuca, W. (1987). Articulatory evolution. In Ramat, A. G., Carrub, O. and Bernini, G. (eds.). *Papers from the VIIth International Conference on Historical Linguistics*. Amsterdam: Benjamins.
- Traugott, E. C. (1989). On the rise of epistemic meanings in English: an example of subjectification in semantic change. In *Language*, Vol. 65.
- Traugott, E. C. and Heine, B. (eds.). (1991). *Approaches to Grammaticalization*. Amsterdam: Benjamins, 2 vols.