DISCOURSE MARKERS OF REFORMULATION FROM THE PERSPECTIVE OF GRAMMATICALIZATION

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Abstract

In this article Discourse markers of Reformulation, as proposed in Del Saz & Fraser (2003), are analysed from a synchronic and diachronic point of view to ascertain whether their development can be explained in terms of the body of studies known as grammaticalization theory. The fact that English reformulators constitute a very heterogeneous group with regard to semantic specialization and phonetic erosion among other characteristics, seems to point to the fact that grammaticalization is better seen as "an epiphenomenal result of independent processes" (Newmeyer 2001: 188), rather than a distinct process in language change. At most, it can be argued that grammaticalization is the change from a lexical unit, to a more grammatical entity.

Key Words: Discourse markers, grammaticalization, Language Change.

Resumen

En este artículo, se han analizado los Marcadores del Discurso de Reformulación (Del Saz & Fraser 2003) desde un punto de vista sincrónico y diacrónico para averiguar si su desarrollo puede explicarse a través de la teoría de la gramaticalización. El hecho de que los reformuladores en inglés constituyen un grupo muy heterogéneo en cuanto a la especialización semántica y la erosión fonética, entre otras características, parece apuntar a que la gramaticalización es "un resultado epifenomenal de procesos independientes" (Newmeyer 2001: 188) más que un proceso de cambio lingüístico distinto de otros. A lo sumo, se puede argumentar que la gramaticalización es el cambio de una palabra o frase de una categoría léxica a una categoría gramatical.

Palabras clave: Marcadores del discurso, gramaticalización, evolución lingüística.

1. Introduction

Discourse Markers of Reformulation (del Saz 2003), henceforth DMs of RF, constitute a sub-class of Fraser's (1999) *Elaborative Discourse Markers*. They specify the type of relationship created between a *source discourse segment*, S1, or any of its constituents and a *reformulated segment*, S2. The result is a reinterpretation in the S2 of the discourse segment,

S1, in terms of what was said, meant, or implied (cf. del Saz 2003; del Saz & Fraser 2003 unpublished manuscript).

Ex. 1. (S1) Masochism is congenital; *that is to say,* (S2) you must have inherited it. (BNC)

Reformulation is triggered by the speaker's desire to achieve his/her communicative goals and to overcome any communicative problems that may be encountered in situations where the first formulation may be out of place, incoherent, or might not successfully reflect the speaker's communicative intentions. In all these cases reformulations prevent, signal, or even solve problems of misunderstanding between speakers. Thus, DMs of RF fulfill a key role in achieving interactional goals by explaining, clarifying, illustrating, identifying, correcting or rectifying the first formulation or some aspect of it, in order to render a reformulation that is more in accordance with the speaker's communicative goals or intentions.

It is our purpose in this article to analyze DMs of RF from both a synchronic and diachronic point of view to ascertain if their current status as DMs can be explained in terms of the body of studies known as grammaticalization theory (cf. Meillet's 1912/1926; Hopper 1987; Croft 1990; Craig 1991, Hopper and Traugott 1993).

2. Grammaticalization

Broadly speaking, grammaticalization is seen as a process involving the gradual change of a word or phrase from a lexical category to a more grammatical one (cf. Bybee et al. 1994). Grammaticalization has been subject to harsh criticism from several linguists who question its validity as a distinct language change process (cf. Janda & Joseph 1988; Campbell 1998: 241-242; Newmeyer 2001). They view it instead as "an epiphenomenal result of independent processes" (Newmeyer 2001: 188). However, we will use Bybee et al's (1994) core definition as a starting point in our analysis of DMs of RF as our initial hypothesis is that certain lexical items do become grammaticalized. Furthermore, we will draw on Bybee et al's (1994: 9-22) theory of grammaticalization and Hopper's (1991) grammaticalization principles, also developed in Archakis (2001: 1254-1255).

We will start with the concepts that we feel are germane to our analysis of DMs. The first, DIVERGENCE, refers to the fact that a lexical form may undergo grammaticalization while the original form "may remain as an autonomous lexical element" (Hopper 1991: 24). Archakis (2001, 1254) further defines this notion as "the tendency of the lexical source to change according to predictions based on its behaviour as a lexical item". Archakis' point seems reasonable because, apart from possible arbitrary developments of words, most examples of semantic change are based on some kind of metaphorical, metonymical or otherwise logical relationship between the original term and its successors, i.e., *one*, which developed from the indefinite article *an*.

The concept of LAYERING, which refers to the co-existence of new and old layers "within a functional domain" (Hopper 1991: 22), for example, apophony and the use of alveolar suffixes in the English tense system, is applicable to the class of DMs as a whole, in that DMs exist alongside pauses or hesitation markers which can also serve the same kind of purpose. However, LAYERING is, in our opinion, such a general principal that little more need be said about it here.

Another concept, PERSISTENCE, that is, "the retention of earlier lexical meaning in the grammaticalized form" (Archakis 2001, 1254) is also exemplified in the grammaticalized

term, *one*, which derives from *an*. Specialization and Phonetic Reduction are also putative markers of grammaticalization and are attested in numerous examples. In the case of meaning, what normally occurs is a move from a more lexical to more a grammatical meaning. As Newmayer (2001: 198) points out "*Have* in the sense of 'perfect aspect' does not convey *less* information than *have* in the sense of 'possess'". Consequently, we are also wary of the term "semantic bleaching" (Sweetser 1998) which, in any case, only occurs in a small number of cases, for example, the development of the operator *do*. All of these terms are closely related. Looking at the development of a term, Persistence and Specialization are linked to Divergence but from the point of view of the end product.

There are two major concepts we will not be making use of in our analysis. The first, DE-CATEGORIALIZATION, refers to "the tendency of the grammaticalized form to drift away from the major lexical categories towards secondary categories" (Archakis 2001, 1254). This seems to us merely a corollary of DIVERGENCE and therefore of little practical use. The second, UNIDIRECTIONALITY, which states that the path taken by grammaticalization is always from less grammatical to more grammatical, seems to have been demoted as a major characteristic of grammaticalization by Hopper and Traugott (1993, 95) who note that there "is nothing deterministic about grammaticalization and unidirectionality" and that change may not reach completion. In any case it is impossible to verify how far along the path towards grammaticalization a particular item may be. Moreover, many counter-examples have been found, that is, grammatical items often become more lexical.

3. THE DEVELOPMENT OF MODERN DMS OF RF

The DMs of RF we have analyzed are the following: that is to say, that is, in other words, for example/instance, namely, to wit, viz/i.e, or rather, (or) more precisely, (or) more accurately and (or) better still/yet. Frequency of occurrence, using the British National Corpus (BNC henceforth), has been decisive for selecting some lexical units over their synonymous counterparts, as in the case of (or) more precisely, rather than to be more precise. The BNC has also been used as a source to illustrate current uses of DMs of RF. In order to account for the earliest instances of these lexical units, we have resorted to the Oxford English Dictionary (henceforth OED).

3.1. That is/That is to say

The DM *that is,* according to the OED, historically derives from *that is to say.* However, the earliest examples given of both are from the same text and, therefore, from the same date: 1175.

Ex. 2. c1175. Lamb. Hom. 123 et is to seggane: Gif þa hefdmen of þissere worlde hefden icnawen crist. (OED)

Ex. 3. c1175. Lamb. Hom. 105 De oder mihte is Castitas, bet is clenesse on englisc. (OED)

This makes it very difficult to say with certainty, as the OED seems to do, that *that is* derives from *that is to say*. Nevertheless, they clearly serve the same function as DMs. Moreover, *that is* cannot be contracted to *that's* in either, which could be construed as proof that one derives from the other although it is also clear in these two phrases that *that* and *is* are stressed because they are found between pauses and therefore have to be highlighted

phonetically. We believe that this accounts for the fact that *none* of the DMs of RF we have looked at undergo phonetic reduction. The DM, *that is*, contrasts with its deictic and anaphoric counterparts as these can always be contracted even when they carry the sentence stress:

Ex. 4. Now *that's* what I call a programme. It lasted only one and a half hours but it satisfied body and soul. (BNC)

In any case, if we concede that *that is* constitutes a shortened form of *that is to say*, what has taken place is phrase truncation, rather than phonetic reduction.

As a component of a DM, *that* has been completely stripped of its anaphoric function (DIVERGENCE) which McCarthy (1994: 275) states is to refer "across from the current focus to entities or foci that are non-current, non-central, marginalizable or other-attributed" although it does retain its function as a connector –pointing to PERSISTANCE. Evidence of the more pragmatic nature of the DM, *that is*, can be found in the fact that it is neither singular nor plural. If not, the following example would not be possible as *magistrates* is plural and *that* is singular.

Ex. 5. The varied world in a courtroom. MAGISTRATES' Courts have been in existence for hundreds of years, presided over by lay Justices of the Peace (magistrates), *that is* people who have no legal qualification. (BNC)

An explanation for this is that DMs (Archakis 2001: 1252) "have gradually lost their referential meaning and acquired a more abstract and pragmatic meaning in the sense that they refer not so much to situations in the world being talked about but mainly to the very act of speaking". This would seem to make this DM of RF a clear case of Specialization.

3.2. In other words

The earliest example in the OED, the meaning of which is identical to modern examples, dates back to 1834.

Ex. 6. 1834. H. MARTINEAU *Moral* i. 17 To make a greater quantity with the same capital; *in other words*, to abridge the labour. (OED)

This DM does not seem to have undergone any phonetic changes. Semantically nothing seems to distinguish it from the meaning of the lexical phrase (PERSISTENCE) except that although it is seemingly plural in meaning, it can be used to refer to an S2 containing one single word (DIVERGENCE) as illustrated in the following example or a series of words.

Ex. 7. Throughout the period of the Rough Wooing, there existed in Scotland men known as the "assured Scots", those who formally contracted with and were often paid by the English-*in other words* collaborators. (BNC)

Interestingly in the BNC corpus practically all examples of the sequence *in other words* are DMs of RF although the lexical use of this phrase is also found in a non-discourse marker sense as a verb complement:

Ex. 8. Gina used to snarl "Allo!" down the phone. She was a little uneasy with the letter H and put it in *other words*, which was confusing; "hungry" "angry" were often made to sound the same. (BNC)

3.3. For example/instance

Both these phrases, unlike the original lexical elements, function exclusively as DMs of RF (DIVERGENCE). The first attested DM use of *for example* in the OED is 1557 and 1707 in the case of *for instance*, as illustrated below, although they also occur in their variant forms as *for example/instance*. The first instances of *for instance* and *for example* without *as* are first found in the OED in 1657 and 1641 respectively.

- Ex. 9. 1557. RECORDE *Whetst*. A iij b, Euen nombers euenly, are such nombers as maie bee parted continually into euen halfes, till you come to an vnitie. *As for example*, 32. 1676 tr. (OED)
- Ex. 10. 1707. J. STEVENS tr. *Quevedo's Com. Wks.* (1709) 350 Such Sayings are a Discredit to your self. *As for instance* the Devil and his Dam. (OED)
- Ex. 11. 1657. R. LIGON *Barbadoes* (1673) 19 The proof of this I found by looking on the Stars.., *for instance*, there is a little Star call'd Auriga [etc.]. (OED)
- Ex. 12. 1641. W. HAKEWILL *Libertie of Subject* 123 *For example,* Wharfage, Cranage, Scavage, and such like. (OED)

PERSISTENCE of original meanings is clearly traceable if we consider the fact that both *example/instance* had been used as nouns before they took on a more specialized pragmatic function as reformulators.

The primary sense of *example*, according to the OED (cf 1447) is "something taken out, a sample or specimen" and also "a typical instance, a fact that illustrates":

- Ex. 13. 1447. O BOKENHAM *Seyntys* Introd. (Roxb.) 3 And to thys manifold of nature *Exaimplys*, acordyth weel scripture. (OED)
- Ex. 14. 1398. TREVISA *Barth. De P.R.* ii. Xvi. (1495) C ij a/1 The angels take by yefte and yeue forth by *example*. (OED)

In the case of *instance*, its development from noun to DM is less transparent than in the case of *for example* and it seems to have evolved from one of the original meanings of "eagerness, solicitation, a judicial process", to that of "fact or example brought forward in support of a general assertion or an argument, or in illustration of a general truth" (OED):

- Ex. 15. c1374 CHAUCER *Boeth.* V. pr. Vi. 135 (Camb. MS.) bou ne shalt nat demyn it as prescience of things to comyn, but bou shal demyn it moore ryhtfully, bat it is science of presence, or of *Instaunce*. (OED)
- Ex. 16. 1597 SHAKES. 2 *Hen. IV.* IV.i. 83 The examples Of euery Minutes *instance* (present now) Hath put vs in these ill-beseeming Armes. (OED)

Ex. 17. 1573 G. HARVEY *Letter-bk*. (Camden) 115 A marvelous *instance* Against all dalliance. (OED)

It is from the original meanings of these nouns that these lexical units have taken on a pragmatic function as reformulators and have thus gone from meaning *example/instance*, to pointing to an illustration of the S1 or some aspect of it. This process of SPECIALIZATION from noun to DM has brought with it some syntactic restrictions. As DMs of RF, these two lexical units are restricted to the singular form, even if more than one example is offered to illustrate a claim in S1 –proof of its pragmatic status. Thus they contrast with the full lexical nouns which are found both in the singular and plural (*one, two, three...examples/instances*):

Ex. 18. The lack of accounting harmonisation, particularly between the US and the UK, is seen by many bankers as the key issue in the development of the Euro-equity market, where new issues of shares are offered in more than one country simultaneously. *Two examples* highlight the problems. When British Telecom was privatised, shares were issued both in the US and the UK (and other jurisdictions). (BNC)

Ex. 19. 1964 M CRITCHLEY *Developmental Dyslexia* i. 2 Another kind of dichotomy also came about, which looked upon cases of alexia without agraphia as *instances* of 'agnosic alexia'. (OED)

3.4. Namely

This reformulator functions exclusively as a DM of RF. Its original and no longer extant meanings, *particularly, especially, above all,* found from around 1175, are quite distinct from the modern meaning, pointing to a semantic and syntactic change –from an adjunct to a conjunct. DIVERGENCE thus, is not present but PERSISTENCE, vis-à-vis the noun that this DM derives from, is evident.

Ex. 20. 1175 *Lamb. Hom.* 139 Sunnedei ah efri cristenne Mon *nomeliche* to chirche cume. (OED)

Ex. 21. c1450 *Merlin* 8 In that the feende repaireth moste, bothe in man and woman, *namly*, when they be in grete ire. (OED)

3.5. To wit

Derived from the OE verb *witan*, it is first attested in the DM sense in the long form *that is to wit* in 1340:

Ex. 22. 1340. Ayenb. I Tuaye lettres of be abece, bet is to wytene A. and b. (OED)

Unlike *that is to say* which was reduced to *that is,* it is the verb phrase, *to wit,* which has survived in this case with a consequent reduction in form. The first attested example of the short form *to wit* is found in 1577.

Ex. 23. 1577 WOLTON *Cast. Christians* B viij b, That common saying.., that the beginning of virtue is of Nature, *to wyt* of Perfect Nature. (OED)

We think it is safe to say that *to wit* is semantically opaque to the vast majority of today's speakers of English and it survives almost exclusively in written texts of a formal nature:

Ex. 24. Whether for statutory or voluntary appointments and bodies, the abandonment of another gross inequity-to wit, ageism-requires a more sophisticated set of judgments. (BNC)

To wit is somewhat of a fossil as the original verb and its derivatives have disappeared. PERSISTENCE is only evident to those who are aware of its etymology.

3.6. Viz (Videlicet/i.e. [id est])

These two DMs were borrowed verbatim from Latin and have retained their original meaning to the present day showing PERSISTENCE but no DIVERGENCE. The earliest examples belong to Latin texts. *Videlicet* was first attested in an English text in 1464 and its reduced form *viz* in 1540:

Ex. 25. 1646. *Mann. & Househ. Exp.* (Roxb.) 452 Alle odre percellis that are enteryd and engrosyd in my lordis book *videlicet:* Ferst etc. (OED)

Ex. 26. 1540. J. LONDON in Ellis *Orig. Lett.* Ser. iii. III. 132 Thyder resortyd suche as hadde any slottiche wydowes lockes, *viz.* here growen to gether in a tufte. (OED)

Nowadays, in the vast majority of cases, the abbreviated form, *viz*, is used. The original meaning is probably unknown to the vast majority of speakers: *videre* "to see" + *licet* "it is permissible" (OED).

With regard to *i.e./id est*, the long form is attested in the OED in a Latin text to provide the equivalent of a Latin term in English as early as 805 while *i.e.* appears for the first time in 1315.

Ex. 27. c1315. Shoreham *Poems* 3 Ac a deythe and he not *[i.e.* wots not] wanne. (OED)

In the BNC, there are no cases of the full form: *id est*. The abbreviated form, *i.e.*, has almost become a punctuation mark and may sometimes be replaced by a colon.

3.7. Or rather

Functioning as a DM, *rather* is necessarily preceded by the conjunction *or* thus distinguishing it from other DMs of RF, namely, *(or) more precisely, (or) more accurately*, where the presence/absence of *or* is optional. *Or rather* does not seem to be used in contexts other than those of reformulation, as corroborated by the 784 hits in the BNC. The obligatory presence of *or* (cf. Fraser 2002) distinguishes the reformulator from that of its contrastive counterpart *rather*. However, we can safely say that, in spite of the presence of *or*, we are looking at a clear case of both DIVERGENCE and PERSISTENCE.

The meaning of *or rather* is rather opaque if compared to *(or) more precisely, (or) more accurately,* and is far removed from the earliest meanings of *rather* such as "earlier", "more quickly", "more readily", "sooner" some dating back to the 9th century (DIVERGENCE).

Ex. 28. c850. *O.E. Martyrol.* 26 Dec., Hie him miclan þe reðran wæron & þe *raðor* hine oftorf od hæfdon. (OED)

The seeds of the modern meaning of *or rather*, found in 1545, seem to derive from *rather* in the sense of "more readily", "sooner", which can also be found in Modern English in phrases like "I'd sooner/rather go out with the devil than with you".

Ex. 29. 1545. UDALL *Erasm. Par. Luke* (1548) 86 Nere about the summe of twelue or fifteen poundes sterlynge *or rather* aboue. (OED)

The step from the modern meaning of preferring one thing to another embodied in many uses of *rather* to that of rectification, embodied in *or rather*, seems to be quite a small one to us. Thus, this DM would seem to be a classical case of grammaticalization, involving DIVERGENCE and PERSISTENCE; in this case a temporal adverb becoming a DM of RF.

3.8. (Or) more precisely, (or) more accurately.

The first recorded use of *or more accurately* is 1834, and 1815 for its counterpart *or more precisely*:

Ex. 30. 1834. *Nat. Philos., Astron.* i. 13/2 (Useful Knowl. Soc.) Although the solar day is of variable length, we can ascertain its mean or average length; and this quantity is called a mean solar day. Ibid. 14/2 The length of the sidereal day is found to be uniformly 23 hours, 56 minutes, *or more accurately* 23h 56m 4s. b. all days: always, for ever. (OED)

Ex. 31. 1815. P. ROBERTS *Cambrian Antiq*. 46 The Roundabout, *or more precisely* the Cheshire-round, is danced by two only. (OED)

These reformulators have retained the meaning of their original lexical sources, the adverbs *precisely/accurately* (PERSISTENCE) and are much more transparent (from a semantic point of view) than other DMs from the same group such as *or rather*.

Unlike *or rather*, the DMs, *more precisely/accurately*, without the conjunction, can coexist alongside their lexical counterparts, which function as adverbials. It is clear that as DMs, these units have gradually taken on a much more pragmatic meaning in the sense that they signal a comparison between something that has been said in the discourse segment S1 and a new version of it that is more precise, accurate or exact, from the speaker's point of view or more in accordance with the facts stated. They have thus diverged from their original function.

3.9. (Or) Better still/yet

These DMs of RF have also retained much of the original meaning of their components while diverging from a functional point of view. The OED registers the use of *(or) better still* as a discourse marker in 1873. Co-existence with the adverbial use is also recorded. However, one of the two forms specializes as a DM of RF in order to signal an improvement on the previous utterance or part of it. As a DM it can combine with *or* unlike its adverbial counterpart. No example has been recorded for *(or) better yet* in the OED but it is used both as an adverbial and a DM.

Ex. 32. 1873. J. H. H. ST. JOHN PAKEHA *Rambles through Maori Lands* vii. 128 With a blanket, *or better still*, a possum rug. (OED)

Ex. 33. 1886. STEVENSON *Dr. Jekyll* i, The inhabitants were all doing well and all emulously hoping to do *better still*. (OED)

4. CONCLUSIONS

None of the DMs of RF that we have looked at participate of all the characteristics of grammaticalization although most participate of one or more of them. Secondly, none of them undergo phonetic reduction, possibly because they are found between pauses in speech. Cases exist, however, where whole words are omitted as is the case of *that is* and *to wit* or where words are abbreviated: *viz and i.e.* Nevertheless, it must be said that phonetic reduction and/or truncation may be due to frequency of use and have nothing to do with grammaticalization (Newmeyer 2001: 199). Thirdly, Specialization is found in all the DMs to the same degree but the only clear example we have found involving narrowing of meaning is *or rather*, and *to wit* and, to a lesser extent, *namely*. *Viz* and *i.e.*, for example are scholarly terms borrowed from Latin and have not changed at all.

We agree with Givón (1991) and Nicolle (1998) who challenge Bybee et al's (1994:106) stance that semantic development occurs in parallel with the formal aspects of grammaticalization. Although forms may change gradually, semantic change is probably "instantaneous"; when a speaker makes a conceptual leap from the original meaning to a new meaning (cf. *rather*). We believe that the locus for semantic change is conversation and that it occurs during the negotiation of meaning. However, we also firmly believe that for an item to become a DM, there must be something in the original meaning that suggests the DM function to various speakers in various contexts and at various times. Once more we agree with Archakis (2001, 1254) that the creation of a DM is dependent on its "behaviour as a lexical item".

With regard to PERSISTENCE, all of the DMs we have looked at participate of this characteristic, although it is much clearer in some cases such as *in other words*, *(or)more precisely*, and *(or) better still*. However, in the case of *or rather*, its original meaning: "earlier/sooner" is only traceable on closer examination. With regard to *viz*, *to wit* and *i.e.*, only those who are aware of their etymology know that their original meaning persists. Finally, if we consider DIVERGENCE, certain DMs, *(or) more precisely* and *(or) better still*, do co-exist with the earlier adverbial phrases, *more precisely* and *better still*. However, in the case of *i.e.* and *viz.*, as they were borrowed from Latin, and their meanings have not changed DIVERGENCE is not a pertinent concept. Nor is it in the case of *to wit* as the original verb has practically disappeared. *Or rather* co-exists with other meanings of *rather* but the original meanings have disappeared.

The evidence we have gathered seems to point to the fact that although certain lexical items and phrases may become grammaticalized, grammaticalization cannot be said to constitute a "subset of linguistic changes through which a lexical item in certain uses becomes a grammatical item" (Hopper & Traugott 1993: 2). In this respect, we agree with Sweetser (1988: 389 cited in Newmeyer 2001: 197) that grammaticalization should be described and explained "in terms of the same theoretical constructs necessary to describe and explain lexical semantic change in general". In the case of DMs of RF, what they have in common is their function but they have developed in very different ways that seem to depend less on regular processes and more on random changes the causes of which are open to conjecture.

5. References

- Archakis, A. 2001. "On discourse markers: Evidence from Modern Greek". *Journal of Pragmatics* 33: 1235-1261.
- Bybee, J.L., Perkins, R.D., Pagliuca, W., 1994. *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World.* University of Chicago Press, Chicago.
- Campbell, L. 1998. Historical linguistics: An Introduction. MIT Press, Cambridge MA.
- Craig, C. 1990. *Ways to go in Rama: a Case Study in Poligrammaticalization*. Vol II. Eds. H. Traugott, H. Benjamins, Amsterdam. 455-492.
- Croft, W. 1990. Typology and Universals. Cambridge University Press, Cambridge.
- Del Saz, M. M. 2003. *An analysis of English Discourse Markers of Reformulation*. Servei de Publicacions de la Universitat de València.
- Del Saz, M.M. & B. Fraser. 2003. "Reformulation in English". (unpublished manuscript).
- Fraser, B. 1999. "What are Discourse Markers". Journal of Pragmatics 31: 931-952.
- Givón, T. 1971. "Historical syntax and synchronic morphology: an archaeologist's filed trip". *Chicago Linguistic Society* 7: 394-415.
- Hopper, P.J. 1987. "Emergent Grammar". Berkeley Linguistics Society 13: 139-157.
- Hopper, P.J. 1991 "On some principles of grammaticalization". *Approaches to Grammaticalization*. Eds. E. C. Traugott and B. Heine. Amsterdam, Benjamins. 18-35.
- Joseph B.D & Janda R.D. 1988. "The why and how of diachronic morphologization and demorphologization". *Theoretical Morphology: Approaches in Modern Linguistics*. Eds. M. Hammond and M. Noonan. Academic Press, San Diego. 193-210.
- McCarthy, M. 1994. "It this and that". *Advances in Written Text Analysis*. Ed. M. Coulthard. London: Routledge. 267-275.
- Hopper, P.J. & E.C. Traugott. 1993. *Grammaticalization*. Cambridge University Press.
- Meillet, A. 1912/1926. "L'èvolution des formes grammaticale". *Scientia (Rivista di Scienza)* 12, 26(6).
- Newmeyer, F. J. 2001. "Deconstructing grammaticalization". *Language Sciences* 23: 187-229
- Nicolle, S. 1998. "A relevance theory perspective on grammaticalization". *Cognitive Linguistics* 9, 1: 1-35.
- Sweetser, E. 1988. *Grammaticalization and semantic bleaching*. Berkeley Linguistics Society 14: 389-405.
- *The British National Corpus*, World Edition. 2000. Humanities Computing Unit of Oxford. *The Oxford English Dictionary on Compact Disc.* 1995. Oxford: Oxford University Press.