The Origin of Dual-form Adverbs: Grammaticalization or Lexicalization?

Milagros Chao Castro[1]
Universidade de Santiago de Compostela

Abstract

The formation of dual-form adverbs, items derived from an elementary adjective which present a suffixless and a suffixed adverbial variant, e.g. *short/shortly*, is a complex process in which up to three different strategies can be involved, namely conversion, derivation, and historical evolution. Some authors, such as Brinton (2002), Hagège (1993), or Quirk et al. (1985: 1525-1530), among others, have kept these processes within the bounds of lexicalization. However, taking into account the evidence provided by the analysis of the dual-form adverb *great/greatly*, this paper tries to demonstrate that the same strategies can result in either lexicalization or grammaticalization.

1. Introduction

A dual-form adverb can be defined as an item derived from an elementary adjective which presents two adverbial variants, one of them is identical with the elementary adjective while the other one presents the ending *–ly*. There are three main strategies involved in the formation of dual-form adverbs, namely conversion, derivation and historical evolution.[2] Authors such as Brinton (2002), Hagège (1993) or Quirk et al. (1985) associate these processes with lexicalization.

[2] I use the label "historical evolution" to refer to a chain of phonological changes which includes the levelling to /e/ of unstressed vowels, the weakening of this /e/ to schwa and its subsequent loss.

However, the analysis of the origin and development of these adverbial variants has revealed that these strategies can also result in grammaticalization.

Therefore, the first section (section 2) is devoted to the analysis of the processes which give rise to dual-form adverbs. Section 3 deals with the processes of lexicalization and grammaticalization as regards the formation of dual-form adverbs, exemplified by means of the analysis of the dual-form adverb *great/greatly*. Finally, in section 4, the conclusions drawn from this study are presented.

2. Conversion, derivation, and historical evolution: the origin of dual-form adverbs

Dual-form adverbs derive from elementary adjectives and show two adverbial variants, a suffixless form and a suffixed one, e.g. *short/shortly*. The origin of these adverbial forms can be explained by means of three different strategies: conversion, derivation and historical evolution.

Conversion is the process used to explain the origin of the suffixless adverbial form. It is defined by Quirk et al (1985: 1558) as a "derivational process whereby an item is adapted or converted to a new word class without the addition of an affix." Thus, the elementary adjective gives rise to the suffixless adverbial form, e.g. *short* (adj.) < *short* (adv.).

However, the appearance of this suffixless adverb can also be explained by a process which I subsume under the label "historical evolution." In OE adverbs were formed by adding the suffix –*e* to adjectives. In late OE unstressed vowels began to suffer a process of levelling and weakening to schwa. During ME schwa fell, thus causing the formal identification between the adjective and the adverb (see example (2) below).

Therefore, both conversion and historical evolution result in homomorphy between the elementary adjective and the suffixless adverbial form. Nevertheless, the main difference between these word-formation processes is the fact that conversion begins with one word and it ends with two, while historical evolution always presents two

words, from the beginning to the end. The following examples illustrate the processes of conversion and historical evolution respectively:

(1) Conversion: *main* ((adj.) OE mæζen (Beowulf)) & *main* ((adv. from the adj. (1632)).

(2) Historical evolution: OE *heard* (adj.) & *hearde* (adv.) > from ME onwards *hard* (adj.) & *hard* (adv.).

The appearance of the suffixed form of dual-form adverbs shows a two-fold explanation. On the one hand, it is explained by means of derivation,[3] that is, by adding the adverbial suffix –*ly*[4] to the elementary adjective. The origin of this suffix dates back to OE –*lice*, which was used to form adverbs. In OE many adverbs were formed by adding –*e* to the corresponding adjective. *-lic* was a very productive suffix used to form adjectives at the time, so it was very common to create adverbs from adjectives ending in *-lic*. –*lic* + *-e*, *-lice*, early became regarded as an adverbial suffix which could be used besides or instead of –*e*: *heardlice, holdlice*.

On the other hand, the existence of the adjectival suffix –*ly* (from OE –*lic*) can also be used to justify the appearance of the suffixed adverbial form by means of conversion. Therefore, the addition of the adjectival suffix *-ly*[1] to the elementary adjective gives rise to a derived adjective; and an adverb in –*ly* is obtained from this derived adjective by means of conversion.

The following diagram presents all the possible origins of dual-form adverbs and the processes involved in their appearance:

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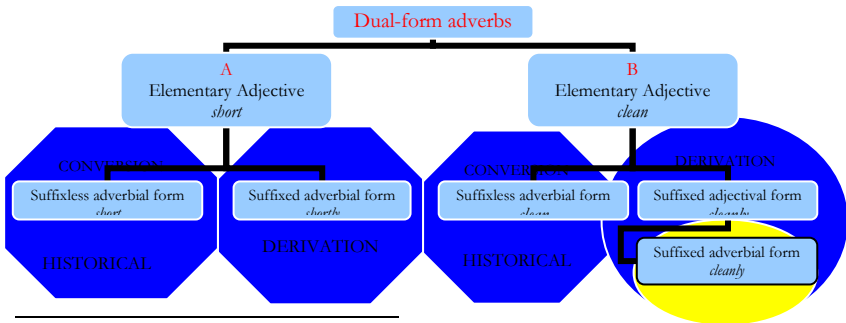
[3] Derivation is defined by Huddleston, Pullum et al. (2002) as a "process of forming a new base by the addition of an affix."

[4] The *OED* refers to the adverbial suffix as –*ly*[2] and to the adjectival suffix as *-ly*[1].

3. The origin of dual-form adverbs: grammaticalization or lexicalization?

3.1. *Lexicalization and grammaticalization reconsidered*

3.1.1. *Grammatical vs lexical*

A lexical item is a content word. Quirk et al. (1985: 68) define it as "a word as it occurs in a dictionary." For Lehmann (2002: 14) the term "lexical" can mean "belonging to the inventory" or "having a specific, concrete meaning." On the other hand, according to Brinton & Traugott (2005: 11) the adjective grammatical can mean "conforming to the rules of the grammar" or "having an abstract, structural/functional, or indexical meaning."

The distinction between grammatical and lexical is also related to the distinction between open classes of words and closed classes of words. According to Talmy (2000, I: 22) an open class of words is "quite large and readily augmentable relative to other classes," that is, groups of items to which new elements can be added. This author includes, within this concept the word-classes, Nouns, Verbs, and Adjectives. On the other hand, he defines a closed class of words as "relatively small and fixed in membership," that is, groups to which new elements are rarely added. Thus, according to Talmy, determiners, prepositions, adverbs, particles, etc would be closed classes of words. Taking into account Talmy's distinction, open classes of words would consist in lexical items whereas closed classes of words would include grammatical items.

However, using the labels *lexical* and *grammatical* to characterize word-classes as a whole is, in my opinion, a categorical statement which must be qualified. Although word-classes show a predominance of either lexical or grammatical items, as Lehmann (2002: 8) points out, both kinds of items may be found within a word-class, e.g. the Spanish prepositional word-class in which lexical prepositions such as *tras* 'behind' and grammatical prepositions such as *de* 'of' can be found.

3.1.2. *Grammaticalization and lexicalization*

The term *grammaticalization* was first coined by Meillet (1912) in his *Linguistique Historique et Linguistique Générale*. He defines the process as the "attribution du caractère grammatical à un mot jadis autonome" (Meillet, 1912: 131). Meillet's study has been followed by continuous reflections on grammaticalization (Lehmann, 1985; Hopper and Traugott, 1993; Diewald and Wischer, 2002), which have tried to contribute new ideas to the clarification of this process. The general ideas taken from these reflections are the following:

a) Grammaticalization implies a movement from a content word or construction to a grammatical word or construction, e.g. *have* (full verb) ---- *have* (auxiliary).

b) Alternatively, grammaticalization may involve a grammatical item becoming more grammatical, e.g. *I am going to* ---- *I'm gonna.*

Nevertheless, one of the most controversial aspects related to grammaticalization is determining when such process is at work. Thus, some authors have suggested different criteria whose application allows the identification of the process as well as the establishment of the different degrees of grammaticalization that an item may have reached. Lehmann (1985) presents the following six processes:

(i)   Attrition, e.g. Proto-Indo-European **esti* > Engl. *is* (frequently /z/)

(ii)   Paradigmaticization, e.g. *have* (full verb) + DO + participial adjective (objective predicative complement) > *have* (aux.) + past participle (full verb) + DO, e.g. *I have it done* > *I have done it.*

(iii) Obligatorification, e.g. French pronouns: *je suis.*

(iv)   Condensation, e.g. *have* or *be* used as auxiliaries.

(v)   Coalescence, e.g. French *de* + *le* = *du.*

(vi)   Fixation, e.g. fixed position of the perfect auxiliary: aux. + full verb.

Besides Lehmann, other authors have proposed other principles of grammaticalization. Hopper (1991) defends five different principles:

a) Layering, e.g. the expression of the past in English: ablaut (*they sang*), affixation (*I admired it*), periphrasis (*we have used it*).
b) Divergence, French *pas* 'step' and *pas* (negative particle).
c) Specialization, e.g. French *pas* became the main negation marker.
d) Persistence, e.g. the future auxiliary *will* retains traces of its original lexical meanings.
e) De-categorialization, e.g. *considering* in *Considering its narrow beam, the boat…* loses the properties of a verb and it functions as a conjunction.

Although lexicalization has not been so extensively studied as grammaticalization, authors such as Wischer (2000) or Laurel Brinton (2002) have carried out studies on this topic. Wischer (2000: 359) defines it as "the process that turns linguistic material into lexical items, i.e., into lexemes, and renders them still more lexical." Brinton, in her study, analyzes lexicalization basing her investigation on the definitions provided by other authors (Bauer, 1983; Quirk et al., 1985; Hagège, 1993; Hopper and Traugott, 1993; Lehmann, 2002). She deals with nine different interpretations of lexicalization:

1. adoption into the lexicon.[5]
2. falling outside the productive rules of grammar, e.g. *butterfly*, *husband/house* (Bauer, 1983: 48).
3. ordinary processes of word-formation, e.g. backformation, conversion, derivation (Quirk et al., 1985: 1525-1530; Hagège, 1993: 171ff).
4. grammatical word (category) > lexical word (category), e.g. *up* (particle) > *up* (verb) (Hopper and Traugott, 1993: 49, 127).
5. syntactic construction > lexeme, e.g. *in+stede* > *instead* (Hopper and Traugott, 1993: 127; Moreno Cabrera, 1998: 214; Wischer, 2000: 258).
6. bound morpheme > lexeme, e.g. *-ism*, *-ology* > *ism*, *ology* (Anttila, 1989: 151; Ramat, 1992: 549-550).

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[5] In a broad sense, lexicon is understood here as an inventory of lexical and grammatical units (Brinton & Traugott, 2005:89)

7. independent morphemes > monomorphemic form, e.g. *drank+jan > drench* (Newmeyer, 1998: 263-264).

8. idiomatization, e.g. *butterfly* (Lehmann, 2002).

9. semanticization (Hopper and Traugott, 1993: 223n), e.g. *aquelar* (Galician Language).

3.2. *The processes of grammaticalization and lexicalization of the dual-form adverb* great/ greatly *and of the items related to it*

On the basis of the information provided by the OED, I have represented in Figure 1 below the different movements of the elementary adjective great and of the items derived from it, great (adv.), greatly (adv.), and greatly (adj.), in the continuum that leads from lexicon to grammar and vice versa.

a) The horizontal two-way arrow at the bottom of the figure represents the continuum from lexicon to grammar. Items are distributed in the figure according to the place which they occupy in this continuum, that is, from left to right, from more lexical to more grammatical. This distribution is based on the consideration that derived items, *greatly* (adj.) and *greatly* (adv.), constitute open classes of words, and open classes of words are associated with lexical items (see section 3.1.). Following Quirk et al.'s (1985: 438) definition of adverbs, it is possible to divide them into three different types from the morphological point of view: simple, compound, and derivational. Simple and compound adverbs would constitute closed classes of words, while the derivational type would be an open class of words. According to this classification, there are two grammatical types of adverbs and one lexical, or at least less grammatical, type. Therefore, *great* (adj.) and *great* (adv.)[6] can be considered simple items which constitute closed classes of words, which usually consist of grammatical items. Hence, as mentioned above (section 3.1.1.), although all categories show a predominance of either lexical or grammatical items, both kinds of forms can be found within a category (Lehmann, 2002: 8). Thus, the adjective category consists mainly of lexical items, though such forms may exhibit different degrees of lexicalization (open vs.

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[6] All suffixless forms of dual-form adverbs are simple adverbs, though not all simple adverbs are forms of dual-form adverbs, e.g. *never, always*.

closed subclasses of words). On the other hand, the adverb category is basically formed by grammatical items, but such forms may show different degrees of grammaticalization (open vs. closed subclasses of words).

Figure 1. The processes of grammaticalization and lexicalization of the dual-form adverb *great/ greatly* and of the items related to it.
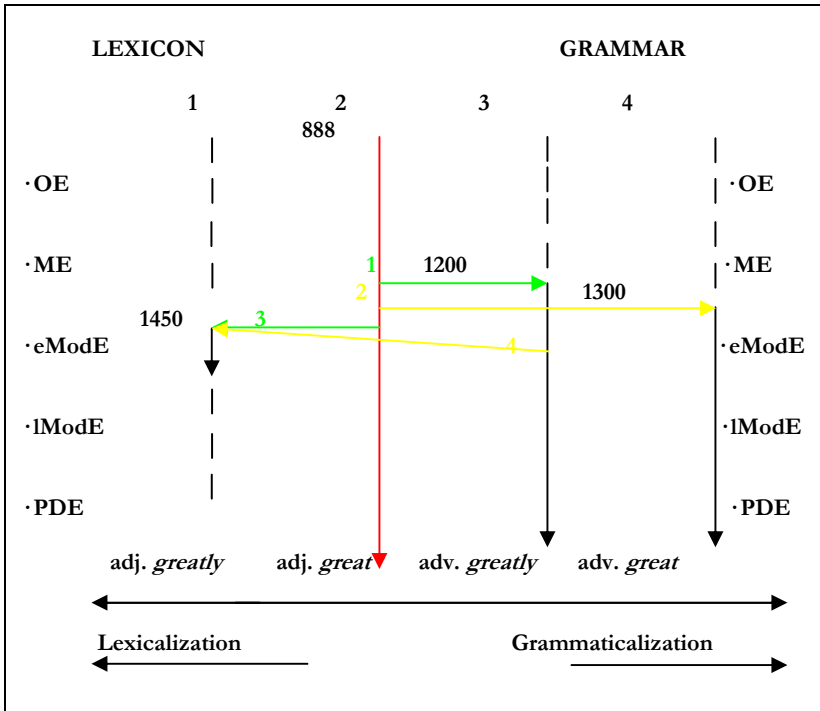
b) The horizontal arrows which go from line 2, *great* (adj.), to lines 3, *greatly* (adv.), and 4, *great* (adv.) indicate that both adverbial forms derive from the elementary adjective. On the one hand, the elementary adjective gives rise to the suffixed adverb by means of derivation, *great* adj. + *-ly²* (*OED* s.v. *greatly*, adv.) (horizontal green arrow number 1). On the other hand, the suffixless adverb is the result of a process of conversion with the elementary adjective (horizontal

yellow arrow number 2), which appeared four hundred years earlier. Therefore, taking into account the direction of these horizontal arrows with regard to the continuum which goes from lexicon to grammar, the word-formation processes involved in the formation of the dual-form adverb *great/ greatly*, namely derivation and conversion, result in grammaticalization. Grammaticalization can be justified by means of Hopper's (1991) principles and Lehmann's processes. Thus, divergence can be observed since the elementary adjective from which the dual-form adverb derives remains as an autonomous lexical item. Both adverbs show traces of their original lexical meanings taken from the elementary adjective, thus persistence is found. Lehmann's paradigmaticization is also present, insofar as *great* (adv.) is integrated into the adverbial subtype 'simple adverbs' (Quirk et al., 1985). Fixation can also be observed in the suffixless form of dual-form adverbs: when an item is grammaticalized, it tends to occupy a fixed position. Quirk et al. (1985: 405) recognize this tendency of the suffixless form to occur in a fixed position, "the adjective form, if admissible at all, is restricted to a position after the verb or (if present) the object".[7] The following examples illustrate this tendency of *great* (adv.) to occur after the verb or the object:

(3) *Horses that labour great, are cast in ditches for the Dogges to eate* (1609 ROWLANDS *Dr.Merrie-man 6*) (*OED* s.v. *great*, adv.).

(4) *To pay their respects to their Governor in Chief, who receives them very great* (1698 FRYER *Acc.E. India & P.* 279) (*OED* s.v. *great*, adv.).

(5) I think the show is going great (Frown[8] –A 23210).

c) The horizontal green arrow number 3) shows the origin depicted in the *OED* for the adjective *greatly*. According to this etymological dictionary, this adjective was formed by adding the adjectival suffix -*ly*[1] to the elementary adjective *great* (*OED* s.v. *greatly*, adj.). However, I have also included another arrow in Figure 1 (the yellow arrow number 4) which goes from *greatly* (adv.) to *greatly* (adj,)

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[7] Notice that Quirk et al. do not consider the suffixless form an adverb, but they refer to it as the 'adjective form'. However, *slow* is one of the examples classified by Nevalainen (1994a: 248) and Ungerer (1988) as a dual-form adverb.

[8] Available in Hofland et al. 1999.

and which stands for a process of conversion. This process, in my view, offers a more accurate explanation of the origin of this homomorphic –*ly* adjective, since the adverb *greatly* (1200) is recorded two hundred and fifty years earlier than the adjective *greatly* (1450). So late an appearance of the adjective with respect to the adverb seems to be related not to -*ly*[1], but to -*ly*[2], as the result of a process of conversion. Moreover, it is not likely that the language used a different pattern of formation to create a new item which presents a homomorphic counterpart which appeared long before the new one, and with which the new item is related etymologically. The leftward movement of either arrow number 3 (derivation according to the *OED*) or arrow number 4 (conversion according to my hypothesis), implies lexicalization. Thus, derivation and conversion have resulted in lexicalization, from a lexical item to a more lexical one and from a grammatical item to a lexical one respectively. This process of lexicalization exhibits what Quirk et al. define as sense-orientation (1985: 1529). This means that not all words admit conversion; words with a general meaning are more inclined to conversion, e.g. *a cup of coffee* > *he cupped his hands*, but *a mug of coffee* > **he mugged his hands*; on the other hand, when a word undergoes conversion, the resulting item takes only a particular meaning of the original word. In the case of *greatly* (adj.), this item takes only one meaning from *greatly* (adv.), namely 'great' (*OED* s.v. *greatly*, adj.), which corresponds to senses 1 and 4a from the adv. (*OED* s.v. *greatly*, adv.).

4. Conclusions

This paper has analyzed the most important processes involved in the origin and development of dual-form adverbs, namely conversion, derivation and historical evolution. I have also presented the most relevant aspects concerning the processes of grammaticalization and lexicalization. In this regard, contrary to authors such as Hagège (1993) or Quirk et al. (1985), who consider that word-formation processes and grammaticalization are mutually exclusive, I have demonstrated that conversion and derivation, as well as historical evolution, can result either in grammaticalization or lexicalization. Thus, both processes are at work in the origin and development of these adverbial forms.

I have exemplified how the above-mentioned word-formation processes and grammaticalization and lexicalization are related by means of the study of the dual-form adverb *great/greatly*. The analysis of this dual-form adverb has revealed that conversion and derivation result in grammaticalization as regards the formation of the suffixless and suffixed adverbial forms (*great/greatly*), whereas the same processes result in lexicalization when they are involved in the creation of the homomorphic adjective in *–ly* (*greatly*, adj.).

It must be noticed that this paper is a general approach to the processes of grammaticalization and lexicalization involved in the origin of dual-form adverbs, and, from this general perspective, I have shown tendencies. Therefore, in order to achieve a more specific perspective of the relation between these processes and the development of dual-form adverbs, these adverbial forms should be divided according to semantic and syntactic criteria, in order to analyze how grammaticalization and lexicalization work in each different group of items.

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