

# Conversion vs. unmarked word-class change<sup>1</sup>

Salvador Valera

Conversion is traditionally a matter of same form and different word-class. A sample of potential cases of conversion in the British National Corpus is analysed for the origin of their formal identity with respect to several word-classes. In some cases the process is one of conversion, in others it is not and other reasons have to be invoked to explain why the same form is ascribed to several categories.

## 1. Introduction

Conversion is one of the processes that may take part in the creation of new lexemes in English. As such, it can be viewed as a conceptual item for categorization of word-formation resources, or as a category that can be applied to a number of members that are created by the same process and meet certain conditions as far as their formation is concerned.

The customary use of this category is the classical one in that it has discrete limits as in the Aristotelian tradition (Aarts et al. 2004: 1). Approaches in which such concepts as **apparent conversion** (Kruisinga 1931-32: 97, cited in Vogel 1996: 7), **quasi-conversion** and **pseudo-conversion** (both in Tournier 1985: 174, 180), or **approximate conversion** (Quirk et al. 1985: 1566 et passim) are allowed are rare and have not become widespread, even if they may rest on solid grounds. These are different from distinguishing **degrees of conversion**, as in the distinction between full and partial conversion: while in the former a contrast is meant on the nature of the process whereby a lexeme is classified as a new word-class, in the latter a contrast is meant on the degree of lexicalization and/or features of the new category adopted by the word in question as a new word-class.

These qualifications in the use of the term ‘conversion’ and the lack of agreement on the word pairs on which it can be used<sup>2</sup> point at the issue of where the limits of conversion lie and how they can be defined. The publication of several books on the subject in the past decade (Cetnarowska 1993, Štekauer 1996, Vogel 1996, Twardzisz 1997) brought to light a disturbing lack of clear criteria to set the limits of the concept of conversion. Apparently, this has been so since the first recorded use of the term ‘converted’ [words], in 1761 (Sundby 1995: 36-37). In fact, explicit awareness of the difficulty inherent in the standing concept of conversion, as in Dokulil (1968a: 215), Stein (1977: 220), Pennanen (1984: 90), Tournier (1985: 171-173), van Marle (1985: 144) or Vogel (1996: 1-3), seems to be an exception rather than a rule in the specialized literature.

The usual view is that conversion obtains whenever the conditions of different word-class and formal identity (or minor change in form, as long as it cannot be equated with affixation) concur. This paper argues on the difficulties posed by the units obtained

from applying this approach: a review of potential cases of conversion found in the British National Corpus (hereafter, BNC) illustrates a number of disparate cases which are hard to classify as the result of one and the same process, especially if the process in question is one of word-formation and, in particular, if it is what we know as conversion.

As far as the processes under consideration here are concerned, the resulting description follows in the main the approach by Tournier (1985), but differs from that in separating the analysis of most cases from conversion: the sources of formal identity and syntactico-semantic variation will be classified as morphological, syntactic or semantic according to which dimension of the word is most or primarily affected in the process. However, I will not call any of these ‘conversion’, because all they have in common with conversion is the profile of the output (formal identity with syntactic and semantic variation), and this alone seems in principle not enough to qualify as the necessary condition for conversion. Leaving that aside, all that these processes have in common is a relation between the base and the derived element, and may qualify just as unmarked word-class change. When, as is often the case, the relation is one of sharing the same original morpheme, it can be explained in terms of **homomorphy** (Quirk et al. 1985: 70-71), although the concept is somewhat unclear as expounded there (cf. Valera 1996). This separates conversion, a process, from the relationship existing between lexemes, be they derived by conversion or not, but does not meet the original question of this paper: why one and the same form may serve different syntactic functions and/or have different meanings, that is, which are the processes that may result in the same profile as (the one obtained by) conversion.

As mentioned above, although this morphosyntactic profile has often been associated with conversion, it may not always be the result of this particular word-formation process, or of word-formation at all. This has been in the literature at least since as early as Kruisinga (1931-32, II: 96-161, cited in Dokulil 1968a: 221), and Dokulil (1968a: 216, 221, 232-233). The latter draws a very relevant line between **conversion** and **word-class change** (‘Wortartübergang’), the latter of which can be of different types (nominalization, verbalization, adjectivalization, adverbialization, Dokulil 1968a: 229-233) and which refers to cases that can be considered to consist in syntactic or semantic processes other than conversion. The difference between conversion and word-class change is, for Dokulil (1968a: 233), that in the latter no full word has been converted to another full word of a different word-class, but that one form of a word is interpreted as a form of another word-class. Unlike word-formation, where creation of a new word is of primary importance, these are, for Dokulil, syntactico-semantic processes that lead to a new word only secondarily. The difference is, then, one of the process that is responsible for the creation of a new word. Stein (1977: 228-230) and Vogel (1996: 1-5) also give an account each of some processes that may yield the same results as conversion.

Therefore, awareness of an extended use of the term ‘conversion’ beyond what strictly is conversion seems to exist. The alternative to viewing these as instances of conversion seems to have found little recognition. This may be because such an approach may seem hard to articulate, too fine-grained or perhaps less operative, but largely also because it may require a criterion for conversion other than the conventional one of word-class change.<sup>3</sup>

Additionally, the description of apparent cases of conversion in terms of several processes rather than just one is so much more complex and faithful to linguistic facts which, however, are so foreign to what the speaking community perceives, that it may be seen only as the linguist's view. Be it as it may, to the best of our knowledge no corpus-based study has been made of the influence of processes other than conversion in the morphological syntactic and semantic profile of words that conversion also produces.

## 2. Materials and methods

A list of potential cases of conversion based on the category preposition (PREP) was returned from the BNC using the *Frequency lists* function of *The Zurich BNCweb Query System* for *Lemmata tagged as PREP in the whole BNC*, with no restriction for range of frequency or of texts (that is, including both spoken and written texts in English). This limits the potential cases of conversion contained in that list to those which comply with a prerequisite of homography. Admittedly, this leaves out word-pairs traditionally accepted as conversion in which a small orthographical change as a result of voicing has taken place, but these are comparatively few in number and may affect the category under study (preposition) only marginally, if at all. The choice of prepositions is because they are one of the so-called closed word-classes, which have been analysed least often in respect of conversion.

The resulting list of 465 lemmas was screened for all the entries that were correctly tagged as any other word-class also, thus being potential instances of conversion.<sup>4</sup> After removal of all irrelevant cases,<sup>5</sup> a record of 117 entries was obtained in which at least one sense of the lemma entails classification as more than one category<sup>6</sup> (see Appendix I<sup>7</sup>).

These entries were subsequently analysed for identification of the processes responsible for multiple classification of the same lemma as different word-classes and, hence, for their matching the usual profile ascribed to word-pairs related by conversion.

Various hypotheses can be advanced to explain unmarked word-class change of some of the units tagged as prepositions and as something else. These hypotheses only account for the general tendencies, i.e. do not explain all the cases. Even so, the analysis shows at least some patterns in the relation between prepositions and other word-classes (excluding the incorporation of nouns to complex prepositions, which falls beyond the scope of this study in that it involves sequences of words rather than words alone); these patterns are shown in section 3 below.

## 3. Unmarked word-class change and prepositions

### 3.1 *Formal*

#### 3.1.1 *Morphological alteration*

Loss of orthographical material may operate at the beginning of a word (aphaeresis), or at the end (apocope). In the sample **aphaeresis** is rare and practically irrelevant. All

these cases result in unmotivated formal identity and a case of conversion is discarded by the lack of any morphological link between the units and their sharp contrast in meaning. Loss of elements in these cases is often marked by an apostrophe that still distinguishes each word in written but not necessarily in spoken form: in the latter, the differences may rely on the stress contrast between each term:

- (1)<sup>8</sup> Politicians talk **bout** World economics. [F9M 928]
- (2) Jilly Jonathan was pale but had calmed down after the **bout** of hysterical weeping that had overcome her once they had got her to the hotel. [A0D 273]

Some of these examples come from transcription of weak forms of verbs, so the formal alteration is both phonological and orthographical:

- (3) Ultimately death itself may be seen **as** a release. [A02 160]
- (4) But check – capitalism an [sic] greed **as** caused us to need Clean air to breathe, Yes. [F9M 984 to 985]

Historical linguistics has proved that formal identity of morphologically related word pairs may be caused by **morphosyntactic loss**, that is, diachronic loss of inflectional and/or derivational word-class-specific marks.<sup>9</sup> In practice this has the same effect as conversion, since word pairs that in Old English were derivationally related but formally identifiable in terms of different classes gradually became identical following the loss of their specific word-class marks, and formally indistinguishable when out of context. This has been assessed differently in relation to conversion. This kind of morphosyntactic loss in morphologically and semantically related (but formally different) words can be attested only in two entries of our study list: *over* (PREP) with respect to *over* (ADJ), and *up* (PREP) with respect to *up* (ADV).<sup>10</sup> In the rest of cases no such different forms for different word-classes can be documented with certainty.<sup>11</sup>

### 3.1.2 Homonymy

Some units share the same form but have so unrelated meanings that they are set as a group apart in the sample. The contrast in meaning is understood in the area of homonymy and polysemy, which are here taken to apply to different words with the same form, and one word with different meanings, respectively.<sup>12</sup>

The contrast between homonymy and polysemy has been discussed profusely.<sup>13</sup> A view of these as part of a gradient has been proposed,<sup>14</sup> and a number of criteria have been used for establishing the difference between the extremes: etymological, semantic, grammatical, as well as a variety of other tests, but the fact that these tests are often questioned by the same authors who cite them bears witness to the complexity of the issue.<sup>15</sup>

Clear cases of conversion are seldom cited in relation to homonymy insofar as they fail to comply with any of the requirements of homonymy, for example in belonging to different word-class (cf. Lyons 1977, II: 560; see also 3.3.2). However, lexicographical practice seems to vary a lot and presentation of instances of conversion as different

entries, just as is normally done with homonyms in dictionaries, is not rare (cf. Huddleston 1984: 106, Lipka 1990: 2).

Following convention, I will consider homonymy whenever there is not a semantic relation or link between diverging instances of the same form, as in the following:

- (5) She survived the fall **down** the hill. [A0D 424]
- (6) [...] soon Erika was in her fleece of **down**, sleeping the sleep of the young and the innocent and the pure of heart. [A7A 2921]
- (7) The two girls would not be back **till** the following weekend. [A6N 170]
- (8) Their time is constantly spent in **tilling** the soil, manuring it with ashes, raking and hoeing it with wooden hoes. [A6M 431]

### 3.2 *Syntactic*

#### 3.2.1 *Prepositions or adverbs?*

The study sample includes a number of what has been called sometimes **prepositional adverbs** (Quirk et al. 1985: 713-174). The ambiguity of the term is a reflection of the ambiguity that these words are imbued with: they are prepositional because a relation is felt to exist with a preposition that is followed by an implicit complement, while at the same time they are to a large extent adverbs in that they are not followed by any explicit dependent and are themselves an independent reference, usually of time or space location, both syntactically and semantically:

- (9) If trees are **alongside** a road they are likely to conceal telephone or power wires, making it dangerous to go between them. [A0H 1176]
- (10) One tractor pulls it, another keeps a trailer moving **alongside** to receive the crop. [A3A 145]
- (11) I shut the door **behind** him and locked it. [A08 3108]
- (12) It is vital to have good side mirrors on the car in order to be aware of traffic which is **behind** or overtaking. [A0H 286]

The traditional categories adverb, preposition and conjunction have always been unstable in terms of their categorization (cf. Michael 1970: 534-535), and a reading of many members of any of these categories in terms of the other is possible (cf. Kastovsky 1996: 197). Prepositions are grammatical words linked to a following element or complement; the complement in question can be of a nominal or adverbial kind but, whatever the realization, the preposition and the complement are often considered one unit from a semantic point of view (Lundskær-Nielsen 1993: 17-18). Deletion of the corresponding complement erases the traditional distinction between adverbs (independent units) and prepositions (phrase-linking units).

It has been suggested that prepositions develop into adverbs as a result of losing their objects or complements. This is known as the **absolute use of the preposition**. Strict distributional approaches, like Tallerman's (1998: 45 et passim), have termed this **intransitive** use of prepositions, establishing a parallel with what can likewise be called **absolute use of transitive verbs**. In any case, the possibility of making the object of the preposition explicit, or leaving it unexpressed lies behind the concept of prepositional adverbs.

The relation between prepositions and adverbs can be established in terms of their syntactic capabilities, as this is the only aspect in which they coincide at all: both prepositional and adverb phrases can act as adverbials. When, as mentioned above, the preposition is not accompanied by an explicit object which has an evident referent, it may retain its syntactic function (adverbial) without any substantial meaning change. As it no longer serves the function of connecting phrases (as is commonly assumed for prepositions), but stands alone and functions as an adverbial, hardly anything precludes its classification as an adverb, if this is preferred. In this sense, the label 'prepositional adverb' is ambiguous in the framework of conventional word-classes, but is obviously right in signalling the fact that some units can be followed by an object or not, and raises an argument against the traditional word-classes being the optimal system for English and an argument for a specific new categorisation (this point was made to me by Laurie Bauer).

As these prepositions occur without a complement, they are perceived as independent units and, hence, as adverbs by virtue of their relation to the syntactic function adverbial adjunct (as described in Quirk et al. 1985). Structural capabilities, like premodification by *right*, is interpreted as evidence of prepositional status (but this does not seem to take into account the fact that some units that accept *right* can never take a complement, like *here* or *then*, or that words that can be followed by clauses, and hence considered conjunctions, like *until* or *when*, can also take the premodifier *right* and, by the same rule, would then have to be considered intransitive prepositions).

The so-called prepositional adverbs have seldom been related to the process of conversion (and rightly so even if they comply very much with the conditions set for conversion), as the process responsible for recategorization of certain units along these lines (ellipsis) is not one of word-formation.

### 3.2.2 *Prepositions or adjectives?*

Tagging of some prepositions as adjectives in BNC results basically from their occurrence in prenominal position:

- (13) We arranged to meet on a bench **outside** the Royal Academy at five o'clock. [A0F 2611]
- (14) A special type of **outside** light is the security light. [A16 260]
- (15) Yet panels have to be one **above** the other, not side by side. [A08 1011]
- (16) The **above** definition does not adequately answer the question. [A12 594]

The discussion on to what extent these are instances of conversion runs parallel to that of nouns premodifying other nouns. Opposing views are available in the literature on whether they are instances of conversion or not: Dokulil (1968a: 231, 1968b: 57), Marchand, (1969: 360), Trnka (1969: 183), and Miller and Fellbaum (1992: 209-210) argue against a case of conversion, while the opposite can be found in Bammesberger (1989: 23) and Zandvoort (1972: 266, for partial conversion). These may also be understood to belong in the outer layer of word-classes (van Marle 1985: 140) insofar as they are transposed elements.<sup>16</sup>

It is well-known that many nouns (or other units) gaining access to prenominal position acting as premodifiers in a noun phrase (as in, e.g. *concrete floor*) are the result of a common syntactic process acting in an underlying structure, rather than cases of (partial) conversion. This is a development of the generative hypothesis of the Transformation known as **adjective shift**, much less acknowledged today than in the heyday of generative grammar, although not abandoned entirely (cf. Ferris 1990: 115). Similar syntactic processes may operate on adverbs too. This explains constructions like *the then president* (cf. Kastovsky 1989: 189) and, from my point of view, also apply in the case of prepositions shown here. In fact, few dictionaries (and even fewer grammars, if any) present *then* as an adjective, for the same reasons, that is, because the adverb *then* is still an adverb, as can be seen from its syntactic and semantic relation to the head noun *president*.<sup>17</sup>

This kind of example is behind the description of the term **transposition**, understood as “[...] the use of a word in another than its normal function” by contrast with derivation, which entails change of word-class or lexical class (Marchand 1967: 325). Although these prenominal units can also be considered to form compounds (cf. Bauer 1998), according to this distinction nouns premodifying other nouns<sup>18</sup> are the result of syntactic processes, not of word-formation.<sup>19</sup> The fact that the same semantic interpretation can be found in noun phrases in which the prenominal element is an adjective and in others in which it is a noun (as in *criminal lawyer* vs. *tax lawyer*, examples taken from Levi 1976: 34, cited in Boas 1977: 28) does not necessarily mean that premodifying nouns of this kind are adjectives (i.e., cases of conversion). In fact, it calls into question the adjectival nature of those premodifying adjectives, which can be dubbed **adjectival** from a morphological and syntactic (rather, distributional) point of view, but maybe not from a semantic one (*deals with crime*). After repeated prenominal position, and following ellipsis of their head, some of these may actually be tagged as nouns:

- (17) Don't go back **inside** your house to use the phone. [A0J 219]
- (18) They'll appreciate the **inside** of the house far better now. [A6N 2057]
- (19) Even as he uttered the words a strange noise could be heard from **beyond** the French windows. [A0D 726]
- (20) For Alfred Watkins, it was not a sudden flash of inspiration from the **beyond** but something which had been building up within the deeper levels of his being throughout a lifetime of contact with his native countryside. [BMT 290]

### 3.3 *Semantic*

#### 3.3.1 *Conversion*

Conversion, understood as adaptation, variation, or revision of the meaning of a word (categorical<sup>20</sup> and/or otherwise) for the expression of a related idea as a different category of thought, and whose syntactic consequences entail grammatical or word-class recategorization, is also present in the sample:

(21) I slowly made my way **down** the road. [A0F 1343]

(22) We upped periscope, identified it, then **downed** periscope. [CKC 3723]

However, this section also follows on from the brief review of homonymy in 3.1.2 above. Some words show a semantic pattern that matches the traditional concept of polysemy, at least as far as their various meanings enable them to take on various syntactic functions. Meaning extension entails here syntactic shift from adverbial to subject complement, which has been interpreted as semantic equivalence to adjectives (cf. Quirk et al. 1985: 732-733):

(23) Both programmes are the largest of their kind **in** the country. [A00 140]

(24) A federal government report revealing that diets don't work has triggered a revolt against the £20 billion slimming industry. Starvation is out and curves are **in** – there's even a National Association to Advance Fat Acceptance. [AL3 81 to 82]

Although realization of the function subject complement does not make a word an adjective, these units may admit coordination with adjective phrases functioning as subject complements and retain their meaning when combined with copula verbs other than *be*, thus complying with at least some of the requisites often cited as proper to adjective phrases functioning as subject complements.<sup>21</sup> On the other hand, these units diverge from prepositions or adverbs in taking complementation and in realizing other functions with intensive relation, like object complement. Compare the literal example in (28) below from which (29) to (31) diverge:

(25) I can't carry bowls of boiling water **about** PREP the place. [AD1 281]

(26) I was **about** to throw it at one of the maids as she passed beneath me with a tray of glasses, but just then Claire came out of the reception room. [A0D 1756]

(27) She seemed **about** to launch herself into a speech but then thought better. [ASN 717]

(28) She saw them **about** to protest. [JYE 4043]



The change from literal to figurative meaning here follows the pattern described by Robins (1987: 53): metaphorical extension operates on specific meaning (here normally space location) to one (or more) rather abstract one(s) (varied, but often diverse types of states):<sup>22</sup>

- (29) There will be six major TV spectaculars in the run-up to the contest, and A special camera unit will be based with the Irish team to bring fans the **inside** stories. [K32 2203].
- (30) She rambled on, “We had a broken night, too. Little Trevor was sick three times – too many sweeties before bedtime, I expect, so I’m all **behind** like the cow’s tail this morning.” [FPM 747 to 748]

Following what was presented in 3.1.2, convergence of different but related lexical meanings as in the examples above coincides with polysemy except for the fact that the various meanings are systematically associated with different syntactic functions and are, on these grounds, associated with a different word-class. However, Lipka (1986: 133 et passim, 1990: 138) argues that different morphological and syntactic features as in conversion entail different words and are closer to homonymy. The same applies, for this author, in the case of metaphor and metonymy, even if the latter two differ from conversion in not being word-formation processes.

As Lipka points out (1986: 133-134), in this area metaphorical extension, lexical relations like homonymy and polysemy, and conversion converge at least superficially. However, it seems appropriate to deal with these words at this stage in terms of conversion understood in a broad sense as far as they comply with formal identity and a syntactico-semantic variation very similar to what is found in, say, instances of noun-verb (or verb-noun) pairs like *fox* or *neck*. Of course, the semantic processes may differ in each case, and although those differences are open to description, at this stage it may suffice to say that a semantic change has occurred and that these examples may qualify as conversion by such syntactico-semantic changes. The main difference with instances of conversion as in *down* above is that in the former the process is one of conversion, change of categorial meaning, and the relation is one of homomorphy in the sense given by Quirk et al. (1985), whereas in the latter the process of conversion entails, besides change of categorial meaning, metaphorical extension, and the relation is therefore not only one of homomorphy but also one of literal vs. figurative meaning.

### 3.3.2 Grammaticalization

Grammaticalization imposes “[...] *semantic bleaching* and *phonological reduction* [...]” (Campbell 1998: 238, emphasis as in the original). This operates on full words or words with lexical meaning (open word-classes) and develops functional words or words with grammatical meaning (closed word-classes). The process is due, according to Lehmann (cited in McMahon 1994: 167), to linguistic creativity, and may turn what once was a word into an affix (McMahon 1994: 160, Murray 1996: 332).

Grammaticalization clearly differs from conversion in involving phonological change associated with semantic change. However, the view of grammaticalization as a semantic change (as in Campbell 1998: 241) suggests that grammaticalization could be

seen as parallel to conversion as far as the objectives of this paper are concerned, except that with a consistent directional (open to closed word-classes) and phonological and semantic pattern (**attrition**, Lehmann 1985: 307).

Probably due to these similarities, cases of grammaticalization like *bitter cold* or *dead tired* are normally not presented as instances of conversion (Dokulil 1968a: 232).<sup>23</sup> Yet, some of the cases that can be found in the corpus are clearly in accordance with what is described as grammaticalization but that can also be said of conversion. These cases occur most clearly in the word-class preposition, where units that can be described as word-forms of verbs also display syntactic and semantic features of prepositions. As most of these are verbs in transitive use, the structural unit that originally was the direct object (the subject in the rare cases of intransitive structures or past participle forms that are available in the corpus)<sup>24</sup> are now adopted as the complement of the prepositional complement:

- (31) He was **regarding** her closely, his very-blue eyes disconcertingly direct. [BMW 544]
- (32) Thus the dictionaries were quite wrong **regarding** the Dorset family of Forsey. [B1P 162]
- (33) We had been given an army escort and were **following** an officer who was taking us to the camp. [CH5 4302]
- (34) This clause was introduced **following** the abortive national docks strike this summer. [A2T 128]

Grammaticalization of these words results in actual meaning change and association with a syntactic behaviour which falls beyond what would be deemed verbal.<sup>25</sup> Although these words may be felt to retain some verbal meaning, there may be considerable meaning change, they frequently lack a subject, explicit or not, and no longer retain the potential for verbal inflection (consider, however, *except* and *excepting*), nor can take clause constituents as dependents as freely as unquestionable cases of verbs can. To say the least, they are losing their verbal status and on their way to becoming lexicalised as prepositions. This would be a similar case to that of the preposition *during*, except that in the latter the base verb is today obsolete, whereas the words discussed here are not. If, as suggested by Lehmann (1985: 306), we wanted to test to what extent these words have become grammaticalized according to their degree of autonomy, we would see that none of the examples alone can perform a function in themselves or stand as a clause constituent alone.

Similar cases, like French *pendant*, originally a participle but today a preposition (as cited in Darmesteter 1877: 56), are interpreted as non-productive and as word-class change of a historical kind by Vogel (1996: 14), and hence detached somewhat from conversion. However, the number of participles that can be considered as converted to prepositions in the corpus seems to indicate that the pattern is not only available, but fully profitable too in the framework of English prepositions and, to a lesser extent, of conjunctions as well (**availability** and **profitability** as used in Bauer 2001).

### 3.4 Other

#### 3.4.1 Word-class categorization: prepositions and conjunctions

A group of units occurs in the corpus by virtue of their simultaneous categorization as preposition and conjunction (besides other categories):

- (35) **Before** their arrival at Heathrow, their passports and tickets were confiscated [...]. [A03 936]
- (36) [...] they were separated from the other passengers, put into a van and driven around for several hours **before** being forced back on the plane and sent out of the UK. [A03 936]
- (37) There was a brief moment of silence **before** Ethel spoke again. [A0D 2287]
- (38) It has been in our family **since** 1850. [A0X 1547]
- (39) **Since** Beaumont's days, there have been just ten head gardeners down the generations. [A0G 158]
- (40) More than a hundred years have passed **since** Morelli started writing [...]. [A04 968]

In the conventional system of word-classes, words are separated into prepositions and conjunctions based on the structural nature of the following unit. However, structural reasons would also sustain categorization as different word-classes of such dissimilar words as *very*, *accordingly* or *now*, on the grounds that their syntactic (and structural) and semantic capabilities are very different too. Why such a distinction is made in the case of prepositions and conjunctions, but not for these adverbs may be imposed by the framework that the question is set in, namely the conventional system of word-classes. That is, prepositions are separated from conjunctions (even if they seem to be morphologically, syntactically and, especially, semantically close, if not identical), because the classical word-classes contemplate this separation. By contrast, the above adverbs are not separated into different categories for the opposite reason, that is, no separation of this kind is allowed in the conventional system of word-classes.

The debate on how to categorize these words in English has been going on for decades<sup>26</sup> and has resulted in classical papers like Jacobsson's (1977), in which the alternatives of bringing these words (and some adverbs) together in one category (particles), and leaving them as separate units are weighed. The latter position, that is, the one in accordance with tradition is the dominant one. This debate raises questions that a study of conversion cannot elude. The point at issue is, basically, in what terms the separation of some units as prepositions and as conjunctions should be explained. Lack of formal mark, as cited by Dokulil (1968b: 57-58) for German applies in English too, so the only remaining criteria to support the distinction are syntactic and semantic. Opposite to what Dokulil presents, these seem to us, however, not sufficient for a clear

distinction, at least in English. The options here apparently limit themselves to either considering two closely interrelated words or one word with different functional potentials. In either case, the answer seems to raise more questions than the ones it is supposed to solve.

In the former, the problem is which kind of relation exists between the alleged two words. Such a relation seems to have as its basic features formal identity, syntactic variation, and semantic identity. Syntactic variation here does not actually mean different function, instead it stands for the structural limitation of prepositions linking phrases whereas conjunctions link clauses. However, different structural realizations of connected elements do not seem to be a very influential feature by force, and certainly does not entail different categorization in respect of other word-classes, for example, when the dependant of a verb is realized by a phrase or a clause. At any rate, even the difference between the elements following prepositions and conjunctions seems to be overrun by corpus evidence when presumed prepositions are found to introduce clauses, both finite and non-finite:<sup>27</sup>

(41) Kay Hopps will have responsibility for the running **of** the office. [A00 149]

(42) The chance **of** getting infected from a pint of blood is less than 1 in a million. [A01 26]

(43) Announce yourself clearly and think **of** what you intend to do. [A06 2112].

Some words certainly impose constraints on the kind of structural unit that they can introduce (*because* and *that*, for example, only introduce clauses), but a number of prepositions seems to admit phrases as well as clauses after them. The fact that these clauses may have to be non-finite ones does not seem very relevant, as the *-ing* form involved in those is clearly verbal and the structure complies with the requisites required to be considered a clause.

The second option, that of considering only one word or one category for the different behaviours above, breaks across the system of word-classes. The capacity of introducing different structural units is so widespread among prepositions and conjunctions that an explanation in terms of a new, more comprehensive word-class seems more logical than one of a dense categorial space between the classes preposition and conjunction. This suggests that prepositions could be contemplated as a subgroup of conjunctions, such that some conjunctions could link clauses and phrases, some only clauses, and some only phrases. This would dispose of the question of which relation holds between morphologically, syntactically and semantically identical prepositions and conjunctions. In doing so, a problem would be solved too, for this relation cannot be coherently explained as homonymy or polysemy on the one hand, or a process of conversion on the other, in view of the formal, syntactic and semantic identity holding between the alleged prepositions and conjunctions.

#### 4. Discussion

To say that the problem with conversion is that it may have been used to explain any word pairs whose members share the same form and differ essentially in their word-class is an overgeneralization, but it is illustrative of a widespread view of many cases too. Many pairs affected by processes other than conversion have been described as conversion, no doubt because the effects of those processes are the same, that is, because they result in unmarked word-class change. In the literature, the process has often been extended to a morphosyntactic profile, that of formal identity, different word-class and related meaning, but this is not exclusive of conversion. This profile corresponds with what Vogel (1996) calls ‘merkmallose Wortartwechsel’, and which, as shown above, may be the result of a number of processes, conversion being only one among them.

However, the term ‘conversion’ is often used loosely, regardless of the process responsible for that profile, because conversion is taken for granted in any word pairs matching the characteristic profile of words related by conversion, even if they are not the result of conversion themselves. This may be congruent as far as the relation between lexemes is concerned, that is, the relation between the original elements (homomorphy?) may be similar or identical in the main, but it is not accurate as far as the processes involved therein are. In general, this practice has always left space for stretching the concept of the process of conversion to a morphosyntactic and semantic relationship consisting, in broad lines, in formal identity, syntactic variation, and lexical proximity. In doing so, considerable confusion may have been caused between what has the same effects on words as conversion on the one hand, and what actually is conversion on the other, that is, this may have influenced the general view of conversion as particularly widespread in English compared to other languages or to other word-formation processes.<sup>28</sup>

However illustrative of the point that this makes, the case of prepositions is admittedly far from paradigmatic. Conversion is one of the major reasons why units are ascribed to several word-classes in categories like nouns or verbs, but then conversion is not limited to nouns or verbs. Actually, the attention given to those two categories is probably behind the position of taking the relation of sharing the same original morpheme for the process responsible for the relation (usually conversion). On the other hand, prepositions do not show variants that are often present in other categories. Nonetheless, if the differences that have been mentioned here for prepositions are deemed relevant, then something similar should be admitted of noun-verb pairs (and others), which is probably where controversy is most likely to appear.

In principle, form being irrelevant and function being not always reliable and stable ground, meaning remains as perhaps the only field on which the limits of conversion could be based. Whenever an item assumes new inflections and positions, it can be argued that it has been converted. This does not necessarily mean that “[T]he question, which part of speech a word belongs to is thus one of form, not of meaning”, as stated by Sweet (1891-98, I: 39) and tacitly accepted in many approaches still today. In fact, it does not detract from the fact that inflection and distribution are after all formal marks closely related to syntactic function, and that function depends ultimately on meaning. Form and function show operation of a word-formation process and, especially, of

semantic changes (cf. Dokulil 1968a: 215, 220, 222-223), but the ultimate reason must be meaning. This is in line with the stress laid sometimes on the semantic dimension of conversion, on the assumption that this process operates not just on the syntactic side of words, but mainly on the semantic one.<sup>29</sup> Conversion is a word-formation process that creates a new word, and therefore, introduces a change of meaning, however subtle, rather than change of function (which may result from the former). That change of meaning may range from change of **prototypical word-class meaning** (Vogel 1996: 46) or **categorial meaning**, to other processes which can involve figurative extension. In the latter case, it may include change of **subcategorial meaning**, and be considered as conversion in the descriptions in which conversion is accepted within the limits of one and the same word-class (see note 3) or a type of conversion is accepted within the limits of one and the same word-class (cf. Quirk et al. 1985: 1563-1566). Whether this should be considered as conversion or not falls beyond the questions addressed in this paper, but acceptance of that would at any rate lead to distinctions between classes or concepts which are not the usual ones in terms of which we tend to classify words (categories like gradability, stativeness or countability instead of word-classes or parts of speech) and, consequently, to a totally different notion of conversion.

Be it as it may, from this point of view, conversion is semantic with syntactic consequences, rather than syntactic with semantic consequences, as we have also found to happen in the sample studied. Yet, this is not enough to separate cases in which conversion is indisputable from those in which a primarily morphological or syntactic process has resulted in the same profile as the one obtained in conversion. To do that, the process responsible for the change has to be identified. If, as we say, conversion is ultimately a matter of semantic change, it is then also a matter of presenting concepts and ideas in one way or the other according to the aspect that is intended to receive focus (whether we want to call it *INSTANCE*, *PROCESS*, *PERFORMER*, etc.,<sup>30</sup> see Štekauer 1996). Only the semantic processes that operate this, be it simply a change of categorial meaning or more, would in principle be entitled to be admitted within a strict concept of conversion.

Therefore, whether a distinction between what looks like conversion and what is conversion is desirable or not is controversial. Acceptance of, say, any of the processes reviewed in 3 above as producing cases of conversion ultimately means acceptance of conversion as a nearly unlimited concept, as it could be applied to endless cases. It seems from the literature that the decision here depends to a large extent on the nature of the process that yields the formal, functional and semantic circumstances in question (diachronic or not, morphological or not, ...). Varying degrees of conversion might be contemplated if conversion were viewed as a category or class of word-forming processes, although, in the light of the above, the category would be so heterogeneous that it would hardly make any sense to throw everything together only for the sake of a similar result. In any case, it seems convenient at least to be aware of the existence of a number of co-occurring processes that are so different in nature that they can hardly be grouped together from any point of view other than their effect on the words on which they operate. If, after reviewing these processes, we still prefer to group all these operations under the category *conversion*, it seems that it will be for practical convenience rather than for theoretical coherence.

Salvador Valera  
Depto. de Filología Inglesa  
Universidad de Jaén  
23.071 Jaén  
Spain

svalera@ujaen.es

## Notes

<sup>1</sup> This paper is based on the manuscript *Conversion vs. multiple word-class membership* presented at the Workshop on Conversion held in May 2002 following the Tenth Morphology Meeting of Budapest. While that manuscript benefited enormously from discussion with Prof. Laurie Bauer, the contents of that version and of this one are my responsibility alone. I am grateful to him and to Prof. Pavol Štekauer for their contributions to this paper and for their continuous support.

<sup>2</sup> Cf. for example the traditional acceptance as conversion of cases in which there is phonological and orthographical variation, as in *belief / believe*, vs. rejection of conversion and description as a separate process when there is only phonological variation, in particular, stress shift, as in Naumann and Vogel (2000: 935-936), Lehmann and Moravcsik (2000: 751) and Iacobini (2000: 867) (cf. also Mel'čuk 2000: 529).

<sup>3</sup> Word-class change has always been the cornerstone of the concept of conversion, even if the process has sometimes been presented not in terms of word-class change but of syntactic one (Marchand 1969: 359 et passim), change of syntactic category (Dalton-Puffer 1996: 29, O'Grady and Guzman 1996: 157), creation of a new lexeme (Katamba 1994: 70), or change of semantic and syntactic category (Cetnarowska 1993: 11, 1996: 15). For some authors, the distinct feature of conversion is the association to a new formal class, this being signalled by adoption of a new inflectional paradigm (cf. Dokulil 1979: 90, cited in Cetnarowska 1993: 14). Whatever the wording, the descriptions and the examples used in the references cited above, and in general in the literature, implicitly demand that the syntactic change involve functions characteristic of at least two word-classes. Cf., however, Leech (1974: 214-216), for whom the change affects “[...] syntactic function (and usually the meaning) [...]”, but not necessarily word-class categorization.

<sup>4</sup> The range of tags is ADJ, ADV, ART, CONJ, INTERJ, PREP, PRON, SUBST and VERB. UNC (foreign, repetitions, parts of a lemma, ...) is not considered. INTERJ and PRON are not shown in Appendix I because no entry involved categorization both as PREP and INTERJ, or as PREP and PRON.

<sup>5</sup> Units tagged as any given category by virtue of their combination with (an)other word(s) to form a complex unit (complex prepositions or conjunctions), and units tagged as different word-classes but where no actual cases of several categories occur, like wrong tags, typographical mistakes and other irrelevant cases.

<sup>6</sup> As many entries were allowed as lemmas were returned by the BNC for coverage of formally altered units as shown in section 3.1.1. Inevitably, this means that, for example, *regarding* and *regardin'* are allowed two different entries.

<sup>7</sup> Appendix I also shows sources of unmarked word-class change and their occurrence for each word-class, whenever they can be identified and involve the category PREP under study. In entries like *concerning*, marked as ADJ, PREP and VERB, only the processes between the PREP and whichever other categories are considered. This means, in this case, that only grammaticalization of the verb is identified as a relevant process, while the causes why the entry is also tagged ADJ are left out, because they do not involve the category PREP.



<sup>8</sup> In what follows, pairs of examples will show first the example with the preposition (tagged PREP), and then whichever other(s) word-class(es) is (are) commented on with the appropriate word-class tag. All the examples are followed by their reference code in the BNC.

<sup>9</sup> Cf. for example Mätzner (1873: 476 et passim, cited in Vogel, 1996: 8), Sweet (1891-98, I: 325, 429), Biese (1941: 18, 388 et passim), Jespersen (1909-49, III: 403, VI: 86 et passim, VII: 46), Magnusson (1954: 53), Mustanoja (1960, I: 314, 648-650), Marchand (1969: 94, 362-363), Tournier (1985: 169-171, 179-180), Bammesberger (1989: 144), Minkova (1991: 38, 126-127), Lass (1994: 234, 250-251), Murray (1996: 333-334) and Vogel (1996: 43-44) for syncretism or levelling of inflectional paradigms, and its later effect upon the morphological characterization of word-classes in stages after Old English.

<sup>10</sup> As in *This subtle scheme has advantages **over** simpler divisions*. [A04 1590] vs. examples like *'For you the war is **over**'*; *he said*. [B0U 690].

<sup>11</sup> This analysis is based on data taken from Simpson and Weiner (1989). The entries of this dictionary were searched for the earliest forms of the entries under study (as long as they remain in use), and subsequent comparison in order to check whether the word in question ever systematically differed in form for syntactico-semantic behaviours proper to different word-classes. The historical records and annotations to the evolution of these words was disregarded, the dictionary thus being used as a mere source of actual examples of previous stages of English.

<sup>12</sup> For example, Leech (1974: 228), Lyons (1981a: 146, 1981b: 49, 51), Palmer (1981: 101), Lipka (1986: 128), Robins (1987: 53).

<sup>13</sup> Cf. Ullmann (1951: 115, cited in Robins 1987: 54), Lyons (1981a: 147-148), Lipka (1990: 140).

<sup>14</sup> Cf. Heger (1974: 171). For Cowie (1982: 51, cited in Lipka 1990: 139) and Lipka (1986: 138), homonymy and polysemy are not an opposition; instead, there is a scale with several degrees of formal and semantic unity.

<sup>15</sup> Cf. Southworth (1967: 357), Leech (1974: 228-229), Malkiel (1976: 61 et passim, cited in Robins 1987: 60), Lyons (1977, II: 550 et passim, 1981a: 147), Palmer (1981: 102 et passim), Paul (1982: 294-303), Huddleston (1984: 105), Lipka (1986: 129 et passim, 1990: 136 et passim), Robins (1987: 56). Cf. especially Kastovsky (1982: 123, cited in Lipka 1986: 131-132).

<sup>16</sup> Cf. the discussion in Štekauer (2000: 212 et passim).

<sup>17</sup> However, cf. Stein (1977: 228-229, 232) for *above* in *the above remark* as conversion. Cf. the discussion in Jespersen (1909-49, II: 335-337), Quirk et al. (1985: 453), Kastovsky (1989: 189), or in Aarts (1997: 244), which are based on similar arguments as Marchand's (1966: 135 et passim) on word-class membership of noun-premodifying nouns; cf. also Adams (1973, cited in Štekauer 2000: 106), and Štekauer (2000: 112-113). Cf. Dokulil (1968a: 232) for similar cases.

<sup>18</sup> And also noun-premodifying adjectives that do not accept predicative position as the origin of their attributive behaviour, as in *musical comedy* (Kastovsky 1974: 18-19).

<sup>19</sup> Cf. the discussion in Marchand (1966: 135 et passim) and Kastovsky (1974: 19) and, similarly, in Dokulil (1968b: 57) on the fact that this structure, as well as that of *the poor*, does not form a new lexeme and, therefore, does not belong in word-formation.

<sup>20</sup> **Categorial meaning** is here understood as explained by Pounder (2000: 98) “[...] i.e., the meaning a word has by virtue of being noun or verb, etc.” This is usually expressed in broad concepts (semantic prototypes / archisemes / ...; cf. Štekauer 1996: 39 et passim). This has also been referred to as *prototypical word-class meaning* (Vogel 1996: 46).

<sup>21</sup> Cf. for example Jespersen (1909-49, III: 396) or Quirk et al. (1985: 732-733). Qualification as “[...] a **quasi**-adjectival function as complement” (my emphasis) when prepositional phrases function as subject complement as in Quirk et al. (1985: 658) is not unanimously accepted (cf., by contrast, Jespersen 1909-49, III: 402) and seems dictated by structural considerations rather than by actual semantic interpretation. On this issue cf. also Allan (1973: 387 et passim).

<sup>22</sup> The metaphorical link, if there is any at all, is not always obvious, though: *Everything was down on paper*. [AB5 1506].

<sup>23</sup> However, cf. Tournier (1985: 184) on the adverb *mighty* as a case of conversion.

<sup>24</sup> Cf. for example **Failing** *success in negotiation, however, the struggle had to be carried on by any means possible*. [FES 449], **Given** *this premise, we should not be surprised to find the police are in the forefront of support for proposals such as the introduction of identity cards*. [AOK 641], or *They were later released **pending** reports to the youth and community service*. [AJM 49].

<sup>25</sup> Ellipsis of the conjunction *that* after certain verbs or when it is part of certain locutions may also result in a change of meaning: when the conjunction is missing, the only element to act as a grammatical link between clauses is the word with which the conjunction was associated. The result is that these words, verbs or adverbs, *become* the grammatical link and lose their lexical meaning to gain grammatical one as conjunctions: *But, unless you are **considering** a particularly large donation, it is unlikely that you would need to include any complicated form of wording*. [A01 309], **Considering** *the interest rate blows, the market turned in a resilient performance*. [A37 167], **Ironically, considering** *they are bought mainly by people who don't need to ask the price, Armani considers that the selling point of his signature clothes is that you can wear them forever*. [A7P 211]. Two examples from *The Lancaster-Oslo / Bergen Tagged Corpus of Modern English* cited in the preliminary version of this paper mentioned in note 1 can be given here for cases other than verbs: *He got to work **immediately***. [A40:83] vs. *Yes – I knew him **immediately** I saw him*. [P15:150]. These cases differ from mere grammaticalization in that all these conjunctions are associated with loss of the conjunction *that*. This process requires ellipsis as well as change of meaning.

<sup>26</sup> For the question of prepositions, cf. Lundskaer-Nielsen (1993: 190).

<sup>27</sup> The program used for corpus tagging also ignores this difference between preposition and conjunction: it often marks entries PREP regardless of the structural unit that may follow them.

<sup>28</sup> For such a view of conversion, cf. Kruisinga (1931-32, III: 478), Biese (1941: 6), Trnka (1969: 186), Zandvoort (1972: 265), Bauer (1983: 226), Huddleston (1984: 23), Pennanen

(1984: 79), Quirk et al. (1985: 1558), Tournier (1985: 169-170). For an opposite view, see Marchand (1969: 363-364).

<sup>29</sup> Szymanek (1989: 82, cited in Twardzisz 1997: 70), Akmajian et al. (1995: 25), Cetnarowska (1996: 15), O'Grady and Guzman (1996: 157), Štekauer (1996: 45 et passim, 2000: 13-14), Twardzisz (1997: 85 et passim). The importance of meaning is clearest in the descriptions by Dokulil (1968a), Kastovsky (1969), Mel'čuk (1982) and Štekauer (1996).

<sup>30</sup> These are probably difficult to synthesize in one or few archisemes because the semantic change inherent in conversion and in other word-formation processes is presumably made in the framework of psycholinguistic categories that do not necessarily correspond with linguistic categories, even less with those that are used for the description of word-classes. This idea, pointed out to me by M. Bygate (pers. comm. 2001) in respect of the problem of secondary word-class conversion, explains the difficulty in fitting the categories intuitively used by speakers within the categories that the linguist wants to use (word-classes). In Coseriu's words, "[...] las categorías son realidades del lenguaje, que existen independientemente de nuestra decisión de deslindarlas y definir las" (1962: 247, cited in Lipka 1971: 213, similarly Sapir 1921: 212, cited in Lipka 1971: 212). The results, however accurate the description of the semantic features is, may be approximate because the correspondence of these semantic features with a group of largely arbitrary word-classes is approximate too.

## References

- Aarts, Bas. 1997. *English Syntax and Argumentation*. London: Macmillan.
- Aarts, Bas, Denison, David, Keizer, Evelien and Popova, Gergana (eds.). 2004. *Fuzzy Grammar. A Reader*. Oxford: Oxford University Press.
- Adams, Valerie. 1973. *An Introduction to Modern English Word-Formation*. London: Longman.
- Akmajian, Adrian; Demers, Richard A.; Farmer, Ann K.; and Harnish, Robert M. 1995 [1984]. *Linguistics. An Introduction to Language and Communication*, 4th ed. Cambridge, Mass.: MIT Press.
- Allan, Keith. 1973. "Complement Noun Phrases and Prepositional Phrases, Adjectives and Verbs." *Foundations of Language* 10, 377-397.
- Bauer, Laurie. 1983. *English Word-Formation*. Cambridge: Cambridge University Press.
- Bauer, Laurie. 1998. "When Is a Sequence of Two Nouns a Compound?" *English Language and Linguistics* 2(1), 65-86.
- Bauer, Laurie. 2001. *Morphological Productivity*. Cambridge: Cambridge University Press.
- Bammesberger, Alfred. 1989. *English Linguistics*. Heidelberg: Carl Winter.
- Biese, Yrjoe M. 1941. "Origin and Development of Conversions in English." *Annales Academiae Scientiarum Fennicae B XLV*(2).
- Boas, Hans U. 1977. "Transpositional and Semantic Adjectives Revisited." In: H. E. Brekle and D. Kastovsky (eds.), *Perspektiven der Wortbildungsforschung. Beiträge zum Wuppertaler Wortbildungskolloquium vom 9.-10. Juli 1976*. Wuppertaler Schriftenreihe Linguistik 1. Bonn: Bouvier Verlag Herbert Grundmann, 20-31.
- Campbell, Lyle. 1998. *Historical Linguistics. An Introduction*. Edinburgh: Edinburgh University Press.
- Cetnarowska, Bożena. 1993. *The Syntax, Semantics and Derivation of Bare Nominalisations in English*. Katowice: Uniwersytet Śląski.
- Cetnarowska, Bożena. 1996. "Constraints on Affixless Derivation in Polish and English: the Case of Action Nouns." In: H. Kardela and B. Szymanek (eds.), *A Festschrift for Edmund Gussmann from his Friends and Colleagues*. Lublin: The University Press of the Catholic University of Lublin, 15-28.
- Coseriu, Eugenio. 1962. *Teoría del lenguaje y lingüística general*. Madrid: Gredos.
- Cowie, Anthony. 1982. "Polysemy and the Structure of Lexical Fields." *Nottingham Linguistic Circular* 11, 51-64.
- Dalton-Puffer, Christiane. 1996. *The French Influence on Middle English Morphology. A Corpus-Based Study of Derivation*. Berlin: Mouton de Gruyter.
- Darmesteter, Arsène. 1877. *De la création actuelle de mots nouveaux dans la langue française et des lois qui la régissent*. Paris: Friedrich Vieweg.
- Dokulil, Miloš. 1962. *Tvoření slov v češtině. I: Teorie odvozování slov* [Word-Formation in Czech. 1. A Theory of Derivation]. Praha: Československá Akademie Věd (Polish translation: *Teoria derywacji*, 1979. Wrocław: Zakład Narodowy im. Ossolińskich).
- Dokulil, Miloš. 1968a. "Zur Frage der Konversion und verwandter Wortbildungsvorgänge und -beziehungen." *Travaux linguistiques de Prague* 3, 215-239.
- Dokulil, Miloš. 1968b. "Zur Frage der sog. Nullableitung." In: H. E. Brekle and L. Lipka (eds.), *Wortbildung, Syntax und Morphologie*. The Hague: Mouton, 55-64.
- Dokulil, Miloš. 1979. *Teoria derywacji*. Wrocław/Warszawa: Ossolineum.
- Ferris, D. Connor. 1990. "An Example of Interaction between Syntax and Semantics." In: J. Tomaszcyk and B. Lewandowska-Tomaszcyk (eds.), *Meaning and Lexicography*. Amsterdam/Philadelphia: John Benjamins, 112-121.
- Heger, Klaus. 1974. *Teoría semántica. Hacia una semántica moderna II*. Madrid: Alcalá.

- Huddleston, Rodney D. 1984. *Introduction to the Grammar of English*. Cambridge: Cambridge University Press.
- Iacobini, Claudio. 2000. "Base and Direction of Derivation." In: G. Booij, Ch. Lehmann and J. Mugdan (eds.), *Morphologie. Morphology. Ein internationales Handbuch zur Flexion und Wortbildung. An International Handbook on Inflection and Word-Formation. 1. Halband. Volume I*. Berlin: Walter de Gruyter, 865-876.
- Jacobsson, Bengt. 1977. "Adverbs, Prepositions, and Conjunctions in English: a Study in Gradience." *Studia Linguistica* XXXI(I), 38-64.
- Jespersen, Otto. 1909-49. *A Modern English Grammar on Historical Principles*. London: Allen and Unwin.
- Kastovsky, Dieter. 1969. "Wortbildung und Nullmorphem." *Linguistische Berichte* 2, 1-13.
- Kastovsky, Dieter. 1974. "Introduction." In: Dieter Kastovsky (ed.), *Studies in Syntax and Word-Formation. Selected Articles by Hans Marchand*, München: Wilhelm Fink, 10-22.
- Kastovsky, Dieter. 1982. *Wortbildung und Semantik*. Düsseldorf: Pädagogischer Verlag-Schwann-Bagel.
- Kastovsky, Dieter. 1989. "Word Formation." In: R. Dirven (ed.), *A User's Grammar of English: Word, Sentence, Text and Interaction*. Frankfurt am Main: Peter Lang, 171-213.
- Kastovsky, Dieter. 1996. "The Representation of Space in English Derivational Morphology." In: M. Pütz and R. Dirven (eds.), *The Construal of Space in Language and Thought*. Berlin: Mouton de Gruyter, 197-208.
- Katamba, Francis. 1994. *English Words*. London/New York: Routledge.
- Kruisinga, Etsko. 1931-32 [1911]. *A Handbook of Present-Day English*. 5th ed. Groningen: P. Noordhoff.
- Lass, Roger. 1994. *Old English. A Historical Linguistic Companion*. Cambridge: Cambridge University Press.
- Leech, Geoffrey. 1974. *Semantics*. Harmondsworth: Penguin Books.
- Lehmann, Christian. 1985. "Grammaticalization: Synchronic Variation and Diachronic Change." *Lingua e Stile* 20(3), 303-318.
- Lehmann, Christian and Moravcsik, Edith A. 2000. "Noun." In: G. Booij, Ch. Lehmann and J. Mugdan (eds.), *Morphologie. Morphology. Ein internationales Handbuch zur Flexion und Wortbildung. An International Handbook on Inflection and Word-Formation. 1. Halband. Volume I*. Berlin: Walter de Gruyter, 732-757.
- Levi, Judith N. 1976. *The Syntax and Semantics of Nonpredicating Adjectives in English*. Ph.D. dissertation. North-Western University. Reproduced by the Indiana University Linguistics Club, Bloomington, Indiana.
- Lipka, Leonhard. 1971. "Grammatical Categories, Lexical Items and Word-Formation." *Foundations of Language* 7, 211-238.
- Lipka, Leonhard. 1986. "Homonymie, Polysemie und Ableitung im heutigen Englisch." *Zeitschrift für Anglistik und Amerikanistik* 34(2), 128-138.
- Lipka, Leonhard. 1990. *An Outline of English Lexicology. Lexical Structure, Word Semantics, and Word-Formation*. Tübingen: Max Niemeyer.
- Lundskær-Nielsen, Tom. 1993. *Prepositions in Old and Middle English*. Oxford: Oxford University Press.
- Lyons, John. 1977. *Semantics*. Cambridge: Cambridge University Press.
- Lyons, John. 1981a. *Language and Linguistics. An Introduction*. Cambridge: Cambridge University Press.
- Lyons, John. 1981b. *Language, Meaning and Context*. London: William Collins Sons & Co. (Spanish translation: *Lenguaje, significado y contexto*, 1983. Barcelona: Ediciones Paidós Ibérica).
- Magnusson, Rudolf. 1954. *Studies in the Theory of the Parts of Speech*. Lund Studies in English XXIV. Lund: C.W.K. Gleerup.

- Malkiel, Yakov. 1976. *Etymological Dictionaries: a Tentative Typology*. Chicago: Chicago University Press.
- Marchand, Hans. 1966. "On Attributive and Predicative Derived Adjectives and Some Problems Related to the Distinction." *Anglia* 84, 131-149.
- Marchand, Hans. 1967. "Expansion, Transposition and Derivation." *La Linguistique* 1, 13-26. Reprinted in: Dieter Kastovsky (ed.), *Studies in Syntax and Word-Formation. Selected Articles by Hans Marchand*, München: Wilhelm Fink, 322-337.
- Marchand, Hans. 1969 [1960]. *The Categories and Types of Present-Day English Word-Formation*. 2nd ed. München: Carl Beck.
- Marle, Jaap van. 1985. *On the Paradigmatic Dimension of Morphological Creativity*. Publications in Language Sciences 18. Dordrecht: Foris.
- Mätzner, Eduard. 1873 [1860]. *Englische Grammatik, Erster Theil: Die Lehre vom Wort*. 2nd ed. Berlin: Weidmann.
- McMahon, April M.S. 1994. *Understanding Language Change*. Cambridge: Cambridge University Press.
- Mel'čuk, Igor A. 1982. *Towards a Language of Linguistics. A System of Formal Notions for Theoretical Morphology*. München: Wilhelm Fink.
- Mel'čuk, Igor A. 2000. "Morphological Processes." In: G. Booij, Ch. Lehmann and J. Mugdan (eds.), *Morphologie. Morphology. Ein internationales Handbuch zur Flexion und Wortbildung. An International Handbook on Inflection and Word-Formation. 1. Halband. Volume 1*. Berlin: Walter de Gruyter, 523-535.
- Michael, Ian. 1970. *English Grammatical Categories and the Tradition to 1800*. Cambridge: Cambridge University Press.
- Miller, George A. and Fellbaum, Christiane. 1992. "Semantic Networks of English." In: B. Levin and S. Pinker (eds.), *Lexical and Conceptual Semantics*. Cambridge, Mass.: Basil Blackwell, 197-229.
- Minkova, Donka. 1991. *The History of Final Vowels in English*. Berlin: Mouton de Gruyter.
- Murray, Robert W. 1996 [1987]. "Historical Linguistics: the Study of Language Change." In: W. O'Grady, M. Dobrovolsky and F. Katamba (eds.), *Contemporary Linguistics. An Introduction*. 3rd ed. London: Longman, 313-371.
- Mustanoja, Tauno F. 1960. *A Middle English Syntax. Part 1: Parts of Speech*. Memoires de la Société Néophilologique de Helsinki 23. Helsinki: Société Néophilologique.
- Naumann, Bernd and Vogel, Petra M. 2000. "Derivation." In: G. Booij, Ch. Lehmann and J. Mugdan (eds.), *Morphologie. Morphology. Ein internationales Handbuch zur Flexion und Wortbildung. An International Handbook on Inflection and Word-Formation. 1. Halband. Volume 1*. Berlin: Walter de Gruyter, 929-943.
- O'Grady, William and Guzman, Videia P. de. 1996 [1987]. "Morphology: the Analysis of Word Structure." In: W. O'Grady, M. Dobrovolsky and F. Katamba (eds.), *Contemporary Linguistics. An Introduction*. 3rd ed. London: Longman, 132-180.
- Palmer, Frank R. 1981 [1976]. *Semantics*. 2nd ed. Cambridge: Cambridge University Press.
- Paul, Peter. 1982. "Homonyms, Semantic Divergence and Valency." *Lingua* 58, 291-307.
- Pennanen, Esko V. 1984. "What Happens in Conversion?" In: H. Ringbom and M. Rissanen (eds.), *Proceedings from the Second Nordic Conference for English Studies: Hanasaari / Hanaholmen, 19-21 May, 1983*. Åbo: Åbo akademi, 79-93.
- Pounder, Amanda. 2000. *Processes and Paradigms in Word-Formation Morphology*. Berlin/New York: Mouton de Gruyter.
- Quirk, Randolph, Greenbaum, Sidney, Leech, Geoffrey and Svartvik, Jan. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Robins, Robert H. 1987. "Polysemy and the Lexicographer." In: R. W. Burchfield (ed.), *Studies in Lexicography*. Oxford: Clarendon Press, 52-75.
- Sapir, Edward. 1921. *Language*. New York: Harcourt Brace Jovanovich.

- Simpson, John A. and Weiner, Eva S. (eds.). 1989 [1933]. *The Oxford English Dictionary*. 2nd ed. Oxford: Clarendon Press.
- Southworth, Franklin C. 1967. "A Model of Semantic Structure." *Language* 43, 342-361.
- Stein, Gabriele. 1977. "The Place of Word-Formation in Linguistic Description." In: H. E. Brekle and D. Kastovsky (eds.), *Perspektiven der Wortbildungsforschung. Beiträge zum Wuppertaler Wortbildungskolloquium vom 9.-10. Juli 1976*. Wuppertaler Schriftenreihe Linguistik 1. Bonn: Bouvier Verlag Herbert Grundmann, 219-235.
- Štekauer, Pavol. 1996. *A Theory of Conversion in English*. Frankfurt am Main: Peter Lang.
- Štekauer, Pavol. 2000. *English Word-Formation. A History of Research (1960-1995)*. Tübingen: Gunter Narr.
- Sundby, Bertil. 1995. *English Word-Formation as Described by English Grammarians 1600-1800*. Studia Anglistica Norvegica 7. Oslo: Novus Forlag.
- Sweet, Henry. 1891-98. *A New English Grammar. Logical and Historical*. Oxford: Clarendon Press.
- Szymanek, Bogdan. 1989. *Introduction to Morphological Analysis*. Warszawa: Państwowe Wydawnictwo Naukowe.
- Tallerman, Maggie. 1998. *Understanding Syntax*. London: Edward Arnold.
- Tournier, Jean. 1985. *Introduction Descriptive à la Lexicogénétique de l'Anglais Contemporain*. Genève: Editions Slatkine.
- Trnka, Bohumil. 1969. "Conversion in English." *Brno Studies in English* 8, 183-187.
- Twardzisz, Piotr. 1997. *Zero Derivation in English. A Cognitive Grammar Approach*. Lublin: Lublin Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Ullmann, Stephen. 1951. *The Principles of Semantics*. Oxford: Basil Blackwell.
- Valera Hernández, Salvador. 1996. *Adjetivos y adverbios en inglés. La relación de homomorfía*. Granada: Servicio de Publicaciones de la Universidad de Granada.
- Vogel, Petra M. 1996. *Wortarten und Wortartenwechsel. Zu Konversion und verwandten Erscheinungen im Deutschen und in anderen Sprachen*. Studia Linguistica Germanica 39. Berlin / New York: Walter de Gruyter.
- Zandvoort, Reinard W. 1972 [1957]. *A Handbook of English Grammar*. 6th ed. London: Longman.