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THE CLASSIFICATION OF ENGLISH WORD CLASSES: JESPERSEN AND DESCRIPTIVE ACADEMIC GRAMMAR

This paper is concerned with the classification of word classes in English. The subject of investigation are both the division of lexical items into categories and the criteria applied for the taxonomy. Moreover, some terminological problems are taken into consideration.

The evolution of the approach to these aspects of word-class taxonomy is analysed on the basis of Jespersen's traditional grammar (1948, 1958) and descriptive academic handbooks of English grammar by Quirk et al. (1972, 1985). Apart from a number of changes in the classification of parts of speech and terminology, there can be observed a significant shift from semantic/notional to syntactic/formal properties as criteria for determining word-class membership.

The two diverging stances on the criteria for the division of word classes are reflected in two dominating modern approaches, i.e. generative and cognitive grammar, with the former employing syntactic and the latter semantic features.

1. Introduction

The study of linguistic categorization can be concerned with lexical concepts as well as with linguistic forms. Linguistic forms are grouped into grammatical categories, including categories like *word*, *affix*, *noun*, *verb phrase*, *possessive genitive* and many more. Since the early days of language study words have been divided into units traditionally referred to as *parts of speech*. Modern linguists tend to label the units *word classes* as the term *parts of speech* is assumed to evoke negative connotations of the widely-criticised notional approach. Yet, the present paper, which is a part of a larger study on the classification of English word classes, is going to regard the terms *word classes*, *parts of speech* and *categories* as equivalent, and hence, use them interchangeably.

The main theoretical approaches dominating the late twentieth century linguistics, i.e. generative (Chomsky, 1965, 1986) and cognitive grammar (Langacker, 1987), pay considerable attention to the issue of word classes. Since the above-mentioned models stem from earlier findings it may be useful to go back to traditional views on parts of speech and to have a closer look at the evolution from traditional to descriptive academic grammar. The term 'traditional grammar' is restricted here the works of Jespersen (1948, 1958), whereas 'descriptive academic grammar' refers to academic handbooks of English grammar by Quirk et al. (1972, 1985). However, the paper does not take account of structuralist analyses like

those of Fries (1952) or Hockett (1958), or more contemporary systemic/functional approaches (Halliday, 1985; Downing & Locke, 1992).

The very division of lexical items into parts of speech, the definitions of categories, the division of particular classes into subclasses as well as some terminological aspects will be presented. Both Jespersen (1948, 1958) and Quirk et al. (1972, 1985) touch upon the issue of criteria that the classification of word classes should be based on. Moreover, several problematic cases concerning the membership in word classes are taken into consideration.

Finally, the paper attempts to relate the earlier accounts of word classes to the modern generative and cognitive studies.

2. Traditional/notional approach

The classical notional classification of word classes comprises: noun, pronoun, verb, adverb, adjective, preposition, conjunction, interjection (Crystal, 1987). The division is based on semantic definitions which employ unclear notional criteria (e.g. noun names 'a person, thing or place', *verb* is a 'doing word', whereas *adjective* is a 'describing word'). Such notional definitions are of very restricted nature since they are said to reflect the structure of merely two languages, namely Latin and Greek (Crystal, 1987). Hence, the notional approach is claimed to be inadequate for systematic and consistent attempts at classification of parts of speech. Nonetheless, some influences of the notional approach can be traced in the treatment of word classes by cognitive grammarians as "cognitive grammar makes specific claims about semantic structure and the notional basis of fundamental grammatical categories" (Langacker, 1987: 183).

3. Traditional grammar: Jespersen

Otto Jespersen (1948, 1958) introduces the following division of parts of speech: substantive, adjective, pronoun, verb, particle. As far as terminology is concerned, the term 'substantives' is here preferable to 'nouns' since sometimes substantives and adjectives may be classed together under the label 'nouns'. The class of pronouns includes pronominal adverbs (modern demonstrative, interrogative, relative and indefinite pronouns) and numerals (which may be regarded as a separate class, not a subclass of pronouns). The category of verbs includes a problematic subcategory of verbids (i.e. modern participles and infinitives), whose 'verbal' status is to some extent doubtful. Particles (including adverbs, prepositions, conjunctions and interjections) may be negatively defined as a 'dustbin class' for all items that do not fit the other classes (Jespersen, 1948; 1958).

Jespersen expresses an open criticism of notional definitions as they focus on the meaning of words in question only. However, the other extreme stance, i.e. taking into consideration merely the form of items, is not adequate either. It seems worth mentioning here de Saussure's view that "forms and functions are interdependent and it is difficult, if not impossible, to separate them" (Saussure, 1959: 135). Jespersen concludes that 'form', 'function' and 'meaning' should all be taken into account. Still, 'form' is the most obvious test of the class membership, whereas 'meaning' is the most difficult factor to deal with (Jespersen, 1958: 60). Jespersen remarks that it is not sufficient to examine an isolated form, nor is it safe to base word-class categorisation on inflectional morphology as some inflectional endings are found

in items of more than one part of speech (e.g. *-ed* as a verb ending, but also found in adjectives derived from nouns like *blue-eyed* or *talented*). The absence of a complete set of 'formal' (syntactic) features attributed to a given class does not exclude a word from the class (Jespersen, 1958: 60-61). Thus, a word may possess just one feature characteristic of a category and still belong to the category. This may be regarded as the anticipation of what the late twentieth century studies in linguistic categorisation label 'degree of membership'.

According to Jespersen the five classes, i.e. substantive, adjective, pronoun, verb and particle, are 'grammatically distinct enough' to be recognised as separate parts of speech; however, the classes are by no means notional: "they are grammatical classes and as such will vary to some extent – but only to some extent – from language to language" (Jespersen, 1958: 92).

Jespersen points to some problematic cases in the classification of word classes recognised even in the late twentieth century works (cf. Crystal, 1987: 92). One ought to consider examples where a change of function of a word in a sentence entails a change in category membership:

What part of speech is *round*?

- SUBSTANTIVE: *He took his daily round.*
- ADJECTIVE: *a round table.*
- VERB: *He failed to round the lamp-post.*
- ADVERB: *Come round tomorrow.*
- PREPOSITION: *He walked round the house.*

or

What part of speech is *while*?

- SUBSTANTIVE: *He stayed here for a while.*
- VERB: *to while away time.*
- CONJUNCTION: *...while he was away.*

(Jespersen, 1958)

As it has been noted above, Jespersen tends to regard substantives and adjectives as subclasses of a larger class of nouns. This view stresses similarities holding between the two parts of speech. Indeed, substantives and adjectives seem to have much in common to the extent that it is sometimes difficult to distinguish them. For instance, a question may be posed whether 'first-words', as Jespersen refers to them, in English compounds become adjectives, e.g. *intimate and bosom friends*, *London publishers*, *a Boston young lady*, *a cotton umbrella*, *everyday occurrences*, *turnpike roads* (Jespersen, 1958: 62). Jespersen postulates that the distinction between substantives and adjectives results from the assumption that the former possess a more special meaning, whereas the latter have a more general signification. However, this specialisation of meaning cannot be treated as an entirely reliable criterion for determining class membership; to decide whether a word is a substantive or an adjective formal criteria ought to be applied (Jespersen, 1958: 72-81). In generative grammar the similarities between categories are captured by binary features, and both nouns and adjectives are assigned the same feature [+N] (Chomsky, 1965).

In modern studies the problem of compounds, signalled by Jespersen, has not been satisfactorily explained since the allegedly reliable formal (syntactic) criteria do not always provide clear evidence for category membership. Again, adjectives can be taken into account

as it appears that not all adjectives possess features characteristic of the category. Not all adjectives can be used both attributively and predicatively and some cannot be graded. Taylor (1989: 185) gives a particularly problematic case to consider, namely the status of *apple* in *apple pie*. If *apple* is regarded as a noun then the whole expression is a NN compound, but if it is an adjective then *apple pie* is an ADJ N phrase. The example phrase seems to be a NN compound analogous to *biology teacher*, but there is some evidence for the adjectival status of *apple* as some speakers consider the following acceptable:

- the predicative construction *This pie is apple.* (as opposed to **This teacher is biology*)
- the comparative expression *This pie is more apple than that one.*
- pronominal expression *I wanted a meat pie, not an apple one.*
(Taylor, 1989:185)

4. Academic grammar: Quirk et al.

A significant difference in the approach to parts of speech can be noticed when one analyses later academic handbooks of grammar. To better illustrate the gradual change in the division of word classes as well as in the criteria employed, two subsequent editions of the grammar by Quirk et al. (1972 and 1985) will be taken into account.

A Grammar of Contemporary English (Quirk et al., 1972) proposes the following taxonomy:

closed classes – article, demonstrative, pronoun, preposition, conjunction, interjection

open classes – noun, adjective, verb, adverb.

First of all, a distinction between closed and open word classes is made. The closed classes cannot normally be extended by creation of new members; hence, all members of the closed classes can easily be listed. Apart from this, closed class items are mutually exclusive (i.e. the use of one item excludes the possibility of using any other) and mutually defining (i.e. it is less easy to state the meaning of an item than to define it in relation to the rest of the system). On the other hand, open classes are open in the sense that they are indefinitely extendable, i.e. new members are constantly being created.

Parts of speech tend to be heterogeneous, e.g. within the open class of 'verb' there is a closed subclass of 'auxiliary verb'. Moreover, the very names of word classes are traditional and cannot be regarded as a safe guide to their meaning.

A Comprehensive Grammar of the English Language (Quirk et al., 1985) postulates a modified classification:

closed classes – modal verb, primary verb, preposition, pronoun, determiner, conjunction

open classes – noun, adjective, full verb, adverb.

Two lesser categories, i.e. numerals and interjections, can be added. Also, Quirk et al. (1985) draw attention to the unclear status of some words of unique function such as the negative particle *not* or the infinitive marker *to*.

Let us examine the changes in the 1985 grammar, as compared with the 1972 edition, in detail. The traditional category 'article' is now included in the larger class of 'determiners'. Another change is concerned with the class 'verb' which is divided into three categories: 'primary', 'modal' (both closed classes) and 'full verbs' (open class). The heterogeneous

category 'adverb' can be split into two subgroups: an open class of adjective-based adverbs (e.g. *completely*) and a closed class (comprising adverbs like *here, there, now*, etc.), the latter being still heterogeneous.

The two problematic categories of numerals and interjections are worth attention too. Numerals have an unclear status as they possess features of both open (infinite membership) and closed (mutually exclusive and mutually defining) classes; 'in a way, numerals constitute a miniature syntax of their own, within the larger syntax of the English language' (Quirk et al., 1985: 74). Interjections, on the other hand, constitute a closed class since those fully institutionalized are few in number. Contrary to other closed classes, they are grammatically peripheral because they do not enter relationship with other word classes and are loosely connected to sentences in which they appear orthographically or phonologically. They are also peripheral to the language itself as they often involve the use of sounds which do not otherwise occur in English (Quirk et al., 1985: 74).

Quirk et al. claim that word classes tend to be heterogeneous, or even problematic, categories. Their classification should be based on the grammatical form and function of items, rather than on their semantic properties. Some important generalisations concerning the relation between word classes and their meaning can be made, however, they are not sufficiently reliable to be treated as criteria for determining class membership. A good example to consider is the generalisation about the 'stative' implications of nouns and adjectives, and the 'dynamic' implications of verbs and adverbs. Nouns are regarded as 'stative' since they typically refer to stable entities. On the other hand, verbs are characterised as 'dynamic' because they denote action, activity or some changing conditions (Quirk et al., 1985: 74). Consequently, adjectives express 'stative' meaning as they attribute stable properties to the referents of nouns, and adverbs are 'dynamic' as they provide the 'dynamic' implication of a verb with additional conditions of time, place, manner and so forth. Unfortunately, these semantic distinctions fail when the following sentences are considered:

John works hard. ('dynamic' adverb)
John is a hard worker. (the adjective takes on the 'dynamic' implications of the adverb)

(Quirk et al., 1985: 75)

Similarly, the impossibility of the use of some verbs in the progressive aspect may lead to a conclusion that they are 'stative' rather than 'dynamic'. Worse, some adjectives can be regarded as 'dynamic' since they can refer to temporary behaviour or activity (e.g. *He is being naughty again*) (Quirk et al., 1985: 74-75). Jackendoff (1993) provides further examples contradicting the generalisation about stative and dynamic implications of nouns and verbs, respectively. Indeed, a noun may name an action or event (e.g. *earthquake, concert*) rather than an object or stable entity. Prepositions may be used to refer not only to location (e.g. *in the house*) or time (e.g. *after work*), but also to properties (e.g. *out of luck, in a good mood*). Thus, no word category can be provided with a definition based on determining what kind of entity the category names. Neither does a particular entity correspond to a single word class. These findings lead to a conclusion that parts of speech cannot be defined in terms of meaning (Jackendoff, 1993:68-70).

The 1985 edition provides an interesting analysis of pronouns and *wh*-words. The very term pronoun is misleading as it suggests that pronouns are used as substitutes for nouns. In fact, a pronoun is claimed to be 'a surrogate for a whole noun phrase rather than a noun' (Quirk et al., 1985: 75). Moreover, a pronoun does not actually replace its antecedent, which is clear from the following:

- (1) *Many students did better than many students expected.*
- (2) *Many students did better than they expected.*

(Quirk et al., 1985: 85)

In (1) *many students* and *many students* refer to different groups of people, whereas in (2) *many students* and *they* refer to the same group. In other words, *they* cannot be said to replace *many students* in the example sentence. Therefore, the application of another term, namely *pro-form*, is proposed. Pro-forms are words or expressions which serve for recapitulating and anticipating the content of a neighbouring expression. Then, the category of pro-forms includes a number of words which belong to different traditionally recognised word classes, not just pronouns, e.g. *there, then, so, do* (Quirk et al., 1985: 76).

Similarly, what the members of the class of *wh*-words have in common (i.e. the initial position in a clause and the function of asking for the identification of the subject, object or the other parts of a sentence) appears to be entirely independent of their word-class classification. Indeed, *who, whom* and *what* function as pronouns, *when* can serve as a time adverb, *which* as a determiner (e.g. *Which way shall we go?*), and *how* can function as an adjective (e.g. *How do you feel?*) or a modifying adverb (e.g. *How old are you?*). To sum up, pro-forms and *wh*-words are sets of items which 'cut across the standard classification of words into parts of speech' (Quirk et al., 1985: 77).

5. Implications for modern studies

The approaches to the classification of parts of speech demonstrate differences in the very division into categories as well as in the criteria applied. Thus, the change from the emphasis on notional (semantic) to that on syntactic features can be observed. More recent studies on word classes still draw on the earlier findings, hence, they stress the importance of either semantic or syntactic properties as the criteria for determining word-class membership.

In the generative paradigm grammatical categories are clear-cut entities with either-or membership, which resembles classical (Aristotelian) features. Lexical items are assigned to word classes on the basis of common syntactic properties, including morphological (inflectional and derivational morphology) and distributional (certain slots in a syntactic construction are reserved for items of a particular category) features. However, transformational grammar adds another syntactic property, i.e. the ability of a string of words to undergo a transformation. Each transformational rule puts restrictions as to the word class of the constituents which make up an input (Chomsky, 1965; Taylor, 1989). Important is the exclusion of semantic features since the meaning of an item is assumed to be irrelevant for its category membership.

Recent studies that stem from generative grammar confirm the importance of morphological and syntactic evidence for categorisation. Morphological properties of a word are said to provide 'an initial rough guide' to its categorial status (Radford, 1998: 35). A word belongs to a particular word class if it possesses the inflectional and derivational features of

the category. However, such evidence is not always sufficient due to the irregularity of inflectional morphology and the limited productivity of derivational morphology. It may happen that a word has some or even none of the morphological properties attributed to a given category. Then, syntactic criteria should be used as an instrument for determining word-class membership. A distinction can be drawn between lexical (content words or contentives) and functional (function words or functors) categories. The former possess descriptive content, whereas the latter mark grammatical function (e.g. number, person, case, etc.). Hence, nouns, verbs, adjectives, adverbs and prepositions are lexical categories, and particles, auxiliaries, determiners, pronouns and complementizers are functional ones (Radford, 1998).

Another approach to parts of speech employs the findings of prototype theory. It postulates the semantic basis of grammatical categories which are like natural categories with graded membership and fuzzy boundaries. Word classes have prototype structure with central members which fulfil a maximum number of criteria characteristic of a particular class, and more marginal members which do not comply with all the criteria. There exist prototypical nouns referring to a person or a thing as well as prototypical verbs referring to an action (Taylor, 1989: 191-192; Cruse, 2000: 267-268).

An alternative solution, though still closely related to prototype theory, is proposed by Givón (1979). The differences holding between word classes are viewed in terms of time-stability which constitutes a continuum. Thus, at one pole of the continuum there are entities of the highest time-stability whose properties do not change over time and which are typically encoded by nouns, whereas at the other pole there are highly time-sensitive experiences, i.e. events, which lack temporal stability and which are typically referred to as verbs. Adjectives encode experiences falling somewhere between the two poles (Taylor, 1989: 193; Cruse, 2000: 268).

Cognitive grammar, on the other hand, to some extent goes back to notional approach by claiming that grammatical categories are semantically determined since 'all members of a given class share fundamental semantic properties' (Langacker, 1987: 189). An expression's grammatical class depends on the nature of its profile. Since expressions can profile either things or relationships, nouns profile things (abstractly defined as regions of cognitive space), verbs profile processes (i.e. relationships scanned sequentially in their evolution through time), whereas the other classes (like adjectives, adverbs, prepositions) profile non-processual (or atemporal) relations (Langacker, 1987; 2001).

It is worth mentioning that the recent *Longman Grammar of Spoken and Written English* (1999), which is an entirely corpus-based grammar, postulates a slightly modified approach to the classification of word classes in comparison with the two academic handbooks by Quirk et al. (1972, 1985) analysed above. However, due to the type and size of the paper, it will not be discussed in detail here.

6. Conclusion

The above analysis illustrates the evolution of the classification of word classes from the early traditional to the late twentieth century academic grammar. The evolution embraces the issues of the division into word-class categories, terminology and the criteria the classification is based on.

As far as the criteria for the taxonomy of parts of speech are concerned there can be observed a shift from semantic/notional to syntactic properties. These two trends are

followed by modern theoretical frameworks: generative grammar favours syntactic criteria for word-class membership, whereas cognitive grammar employs semantic/notional ones. This has some implications for further research within these two theoretical models. The focus on syntactic features allows considerable leeway for generative studies, whereas the focus on semantic properties does the same for cognitive ones.

The analysis of the traditional and academic accounts of parts of speech raises a number of questions, some of which have not been provided with satisfactory answers by modern theoretical approaches. However, the traditional classification of word classes still serves as a basis for developing alternative models.

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