

0. HISTORICAL PRELUDE

Highlighted in this section are various important moments in the history of linguistic categorization.¹

0.1. Pānini

The first two extant attempts to categorize words were undertaken in two different parts of the world, in ancient Greece by Plato and in ancient India by Pānini, author of the oldest Sanskrit grammar. Pānini distinguished four classes of words: inflected ones (nouns and verbs) and uninflected ones (prepositions and particles). Nouns were inflected for case, verbs - for person, number, and tense. Since the verb in Sanskrit could stand alone as a complete sentence, it was taken as the core of the sentence with other words standing in specific relations to the verb. Of these words nouns were considered the most important and were designated by the term *kāraka* (literally ‘doing’, ‘acting’). Different kinds of *kāra*kas were distinguished depending on the type of relation between the denotata of the nouns and the action/process expressed by the verb. Although *kāra*kas were expressed by the case endings, the *kāraka*-system does not correspond directly to the European case system since *kāra*kas related nouns to verbs and hence the Sanskrit genitive which relates nouns to nouns did not express a *kāraka*. Two possible *kāra*kas were ‘agent’ and ‘object’.

As we can see, in Indian grammatical tradition the ability to inflect was taken as the basic criterion dividing words into two large classes – inflected ones and uninflected ones. Within the former class a distinction was drawn between nouns and verbs in terms of a distinction between ‘subject’ and ‘predicate’ and not in terms of different inflections carried by nouns as opposed to verbs.

The insights of Indian grammarians did not contribute to the progress of linguistic categorization in the Western world simply because their work was incorporated into European linguistics much later when the traditional Greek/Latin-based word class system was long established and adopted by linguists working on other European languages (although in other linguistic domains the influence of Sanskrit grammarians was great).

0.2. Plato and Aristotle

The history of linguistic categorization in Europe begins with Plato who considered some language-related philosophical questions in some of his dialogues, most notably *Cratylus*². Although the principal issue taken up in *Cratylus* concerns the correctness of names (to put it simply, why a dog is called a dog and not a cat), some attention is devoted to analyzing a sentence into two major components – the nominal one (onoma) and the verbal one (rheme): “... sentences are, I conceive, a

¹ This section is a synopsis based mostly on Robins (1966; 1990) and, in addition, Lyons (1968) and Kodukhov (1974). For original references, see Robins 1990.

² *Cratylus* and the philosophical issues raised in it have been subject to various, widely divergent interpretations (see a.o. Palmer 1989, Baxter 1992 and references cited there).

combination of verbs and nouns” (*Cratylus* 431b). Thus, Plato approached the problem of ‘noun-verb’ distinction very much like Pānini, also in terms of ‘subject’ versus ‘predicate’. Since Plato’s focus was purely syntactic (i.e. on sentential analysis), Platonic ‘nouns’ (*onomata*) and ‘verbs’ (*rhemata*) do not exactly correspond to nouns and verbs as these are conceived nowadays and are more likely to be identified with modern NPs and VPs.

Aristotle continued in the Platonic tradition but added a further distinct class of ‘conjunctions’ (covering conjunctions, pronouns and the article) to the Platonic system. This class included all those words which were neither nouns nor verbs but which served to combine nouns and verbs into propositions. Aristotle defined the *rheme* as indicating a time reference and as representing the predicate which allowed him, like Plato, to include adjectives among the *rhemata*, i.e. verbs (Robins 1990:31). However, although the verbal criterion of having time reference was first applied by Aristotle, it was not accompanied by the morphosyntactic criterion of carrying tense inflections. That the inflectional criterion was not yet at play can be seen from the following two facts. First, inflected pronouns and articles were categorized together with uninflected conjunctions under the general heading ‘conjunctions’, as mentioned earlier. Second, all morphological differences between basic and inflected word shapes, irrespective of whether it was an ‘*onoma-noun*’ or a ‘*rheme-verb*’, were covered by the same category of ‘*ptosis*’. Thus, the notion of ‘*ptosis*’ applied to oblique nominal cases, comparative and superlative forms of adjectives, deadjectival adverbs, non-present verbal tenses and other verbal inflections. In fact, “note the statement by Aristotle that *rhemata* by themselves, when not forming part of a sentence, are *onomata* (i.e. such word forms, like any isolated word forms, can be hypostatized, as in citation, and treated as nouns)” (Robins 1966:9).

Thus, both for Plato and Aristotle parts of speech were unambiguously parts of sentences: words became nouns or verbs only when they were put into sentences, outside of a sentence they had no categorial affiliations.

0.3. The Stoics

The inflectional criterion for deriving word class distinctions was brought into play by the Stoic grammarians. Their major theoretical achievement was to restrict the meaning of the term ‘*ptosis*’ to that of English *case*. By restricting *ptosis* to *case* and *case* to nouns, the Stoics made case the fundamental distinction between nouns and verbs and between, on the one hand, the group of case inflected pronouns and articles and, on the other, the group of invariant prepositions and conjunctions. Stoic case covered all the forms of case inflected words (basic non-inflected and inflected) and so a division was made between nominative and oblique cases. One consequence of taking case to be the basis for distinguishing nouns from verbs was that adjectives in Greek (and, later, Latin) were treated as a subclass of nouns (and continued to be treated so until the eighteenth century). In grouping adjectives together with nouns the Stoics differed from Plato and Aristotle who grouped adjectives together with verbs.

After *ptosis* was restricted to nominal words, verbal categories required separate terminology. Interestingly, the divisions in the verbal domain were also

case-motivated: active transitive, passive and intransitive verbs were recognized and their different syntax was taken to be closely linked with differences of case with which they constructed.

In addition to restricting case to nouns, the Stoics made another very important contribution, namely, the abstraction of the temporal and aspectual meanings inherent in the tense forms.

Thus, the Stoic word class system looks as follows:

1. Proper nouns	The term 'onoma' applied only to proper nouns. The Stoic motivation for the distinction between proper versus common nouns was semantic: reference to individual quality (being Socrates) versus reference to general quality (being a horse) (Robins 32-33)
2. Common nouns	
3. Adverbs, or <i>mesotes</i> 'those in the middle'	The class of adverbs was split off from the class of common nouns and named <i>mesotes</i> 'those in the middle' because syntactically they were associated with verbs but morphologically with nouns
4. Verbs	
5. Inflected articles	Aristotle's conjunctions were split into two classes: inflected (pronouns and articles) and uninflected (prepositions and conjunctions)
6. Uninflected conjunctions	

0.4. Dionysius Thrax

A turning point in the history of linguistic classification was the appearance in late 2nd century B.C. (around 100 B.C.) of the Greek grammar, *Téchnē grammatikē*, by Dionysius Thrax, a pupil of Aristarchus. He was a representative of the Alexandrian school. The Alexandrian school built further on what was achieved by the Stoics although the two schools were each other's rivals. As far as linguistics is concerned, it was the Alexandrians who were lucky to leave their seal on subsequent linguistic research and not the Stoics.

Two basic units of description are taken to be the sentence defined notionally as 'expressing a complete thought', the upper limit of grammatical description, and the word, the minimal unit of grammatical description. Words were organized into eight classes.

1. Noun: a part of speech inflected for case, signifying a concrete or abstract entity
2. Verb: a part of speech without case inflection, but inflected for tense, person and number, signifying an activity or process performed or undergone
3. Participle: a part of speech sharing the features of the verb and the noun

Those with case inflection	Nouns (including adjectives)
Those with tense inflection	Verbs
Those with case and tense inflection	Participles
Those with neither	Adverbs

The inflectional abilities correlated with particular syntactic and semantic functions: nouns named, verbs made statements, adverbs supported and participles joined.

Other Latin grammarians were less original than Varro and took over the Greek system except that they compensated for the lack of a definite article in Latin by establishing a separate class of interjections. Previously (e.g. in *Téchnē grammatikē*) interjections were treated as a subclass of adverbs (even though they are syntactically independent as opposed to adverbs which depend on verbs). In Priscian's grammar of Latin eight word classes were distinguished:

1. Noun (including adjectives): the property of the noun is to indicate a substance and a quality, and it assigns a common or a particular quality to every body or thing
2. Verb: the property of a verb is to indicate an action or a being acted on; it has tense and mood forms, but is not case inflected
3. Participle: a class of words always derivationally referable to verbs, sharing the categories of verbs and nouns (tenses and cases), and therefore distinct from both
4. Pronoun: the property of the pronoun is its substitutability for proper nouns and its specifiability as to person (first, second, third)
5. Adverb: the property of the adverb is to be used in construction with a verb, to which it is syntactically and semantically subordinate
6. Preposition: the property of the preposition is to be used as a separate word before case-inflected words and in composition before both case-inflected and non-case-inflected words (Priscian identified prefixes in e.g. *proconsul* and *intercurrere* 'to mingle with' as prepositions)
7. Interjection: a class of words syntactically independent of verbs, and indicating a feeling or a state of mind
8. Conjunction: the property of conjunctions is to join syntactically two or more members of any other word class, indicating a relationship between them

0.6. A summary: from Plato to Priscian

We have seen that the development of the word class system in European tradition involved going from simple distinctions to complex ones involving more criteria. First, a bipartite division was made into subject and predicate. Then it was noticed that words performing these two functions were associated with their own morphology (case for nouns, tense for verbs). It appears that the notional criteria were the last to enter the stage when Dionysius Thrax explicitly incorporated in his definition of word classes an observation that formal distinctions are accompanied by particular meanings. This development can be summarized as in the table below.

Plato	Aristotle	Stoics	Dionysius	Varro	Priscian
1. Noun	1. Noun	1. Noun: incl. Adjective	1. Noun	1. Noun: incl. Adjective	1. Noun: incl. Adjective
2. Verb	2. Verb: incl. Adjective	2. Verb	2. Verb	2. Verb	2. Verb
	3. Conjunctions: conjunctions, pronouns and the article	3. Inflected articles: pronouns and articles	3. Articles		
			4. Pronouns		3. Pronouns
		4. Uninflected conjunctions: prepositions and conjunctions	5. Prepositions	3. Invariable words	4. Prepositions
			6. Conjunctions		5. Conjunctions
		5. Adverbs	7. Adverbs	4. Adverbs	6. Adverbs
			8. Participles	5. Participles	7. Participles
					8. Interjections
Based on which criteria					
Synt.	Synt. Sem.: time reference	Morph. Synt. Sem.	Morph. Synt. Sem.	Morph. Synt. Sem.	Morph. Synt. Sem.

0.7. Further historical developments

During the Middle Ages scholastic philosophers working on linguistic topics (known as ‘speculative’ grammarians or the Modistae) took over Priscianic categories which they assumed to be valid for all languages although in accordance with their ideals of science as a search for universal causes they devoted a great deal of attention to the logical motivation of Priscian’s word class divisions. According to the modistae a word represented the thing it signified as existing in a particular mode: there were several modes (e.g. the mode of stability and permanence, the mode of temporal process, etc.). These modes were connected with particular parts of speech: thus, a noun was a part of speech signifying by means of the mode of stability and permanence whereas a verb was a part of speech signifying through the mode of temporal process, detached from the substance (of which it is predicated). The modistae understood meaning broadly enough to include formal syntactic relations: this was necessary since it was the only way to ascribe a class meaning to indeclinable word classes. Hence, a conjunction was a part of speech signifying through the mode of joining two other terms and a preposition signified through the mode of syntactic construction with a case inflected word, linking and relating it to an action.

The ideals of ‘speculative’ grammar somewhat neglected during the early stages of the Renaissance were later brought back to life by the Port Royal grammarians who believed that the same general logical and rational system

underlay different languages. Nine classical word classes were distinguished: noun, article, pronoun, participle, preposition, adverb, verb, conjunction and interjection. The first six relate to 'the objects' of our thoughts and the last three to the 'form or manner' of our thought. The explanation of the noun/verb difference was modistic in spirit, based on the categories of permanence/transience.

An interesting proposal was made by Petrus Ramus (murdered in the massacre of St. Bartholomew): since case inflection had largely disappeared from modern languages of his time, he proposed instead to rely on number inflection. This was an influential proposal and it was followed by some writers of English grammars.

An important turning point is presented in Beauzée's *Grammaire générale* (1767) where the adjective is taken as a separate class.

Next, a very original contribution to the development of the European parts-of-speech system can be found in Horne Tooke's *Winged words, or the diversions of Purley* (1786, 1805) which recognized only two parts of speech, nouns and verbs: other word classes were 'abbreviated' from these two in order to make a language run smoothly.

In the 19th and 20th centuries linguists have been mostly concerned with trying to find a balance between different criteria: reordering their successive application, ignoring some, focusing others. E.g. descriptive structuralists classify stems on the basis of their inflectional and syntactical behaviour and deny the role of meaning in identifying parts of speech (hence their term 'form-class', cf. Bloomfield 1933, Hockett 1958).

