1. Introduction

It is often the case that parts of speech are analyzed as – or claimed to be equivalent to – syntactic categories of words.

⇒ Bergenholtz and Schaeder (1977); Aoun (1981); Emonds (1987); Bisang (2010)

⇒ Sasse (1993): “The analysis of syntactic categories was familiar to the traditional grammarians under the title part of speech.” (ibid.: 646) “In particular, there is a notorious confusion of lexical and syntactic categories, for instance the use of the term ‘syntactic categories’ for both, as in this article.” (ibid.: 247)

⇒ Haspelmath (2001): “the older term part of speech”; “a roughly equivalent term … in Chomskyan linguistics is ‘syntactic category’” (ibid.: 16539)

⇒ Croft (e.g. 1984, 1991): noun, verb, adjective = ‘syntactic categories’, renamed ‘parts of speech’ (e.g. 2000, 2005)

I claim, however, that the two are word categories of a different kind. They are defined on different grounds and they serve different purposes. This is what I will show in this talk, finally discussing English adverbs as an example.


2. Parts of Speech

Origin: the grammar of Dionysius Thrax, the Tékhnē grammatikē, written at the end of the second and the beginning of the first century BC

The Tékhnē grammatikē

- a grammar of classical Greek, a highly inflecting language
- the first comprehensive and systematic grammatical description published in the western world, summing up what was developed by philosophers and philologists before and at this time

The Tékhnē grammatikē starts with a general characterization of a grammar, followed by a list of its constituent parts:

Grammar is an experimental knowledge (…) of the usages of language as generally current among poets and prose writers. It is divided into six parts:

1. Trained reading with due regard to Prosody.
2. Explanation with respect to poetical figures.
4. Discovery of Etymology.
5. An accurate account of analogies.
6. Criticism of poetical constructions, which is the noblest part of grammatic art.
   (translated by T. Davidson 1874: 326f.)

⇒ The guiding grammatical principle is “an accurate account of analogies”.

Primary outcome of the ‘accurate account of analogies’: a list of eight parts of speech, characterized as follows:

1. A Noun is a declinable part of speech, signifying something either concrete or abstract (concrete, as stone; abstract, as education); common or proper (common, as man, horse; proper, as Socrates, Plato). It has five accidents: gender, species, forms, numbers, and cases. (ibid.: 331)
2. A Verb is an indeclinable word, indicating time, person and number, and showing activity or passivity. The verb has eight accidents: Moods, Dispositions (voices!), Species, Forms, Numbers, Tenses, Persons, Conjugations. (ibid.: 335)
3. A Participle is a word partaking of the nature both of nouns and verbs. It has all the accidents which belong to nouns as well as those which belong to verbs, except mood and person. (ibid.: 336)
4. An Article is a declinable part of speech prefixed or subjoined to the various cases of nouns… It has three accidents: Gender, Number and Case. (ibid.)
5. A Pronoun is a word assumed instead of a noun, and indicating definite persons. It has six accidents: Person, Gender, Number, Case, Form, and Species. (ibid.)
6. A Preposition is a word placed before any of the parts of speech, both in Composition and in Syntax. (ibid.: 337)
7. An Adverb is an indeclinable part of speech, said of a verb or added to a verb. Of the Adverbs, some are Simple, and others Compound—Some are indicative of time… Some indicate manner…; some, quality…; some quantity…; some, number…; some place… Some Adverbs signify a wish…; some express horror; some, denial or negation. (ibid.: 337f.)
8. A Conjunction is a word binding together a thought I order and filling up the hiatuses of speech. Of conjunctions, some are copulative, some disjunctive, some conjunctive, some präter-conjunctive, some causative, some dubitative, some conclusive, and some expletive. (ibid.: 338)

The recognizable ‘analogies’ that form the basis for the identification and description of the parts of speech:

- morphological, i.e. inflectional and derivational properties, supplemented by semantic properties; only exception: preposition
  ⇒ i.e. various recognizable shared properties of words
  ⇒ no syntactic properties, because syntax was unknown at that time

This shows that the following statement is at least misleading:

Dionysius Thrax in his *Techne Grammatike* (sic!) developed a theory in which eight different word-classes were distinguished. In order to make the relevant distinctions, a combination of morphological, syntactic and semantic criteria were applied. (Ansaldo, Don, Pfau 2010: 1)
The purpose of identifying and describing the parts of speech:

- The properties identified provided the basis for a further analysis of the words into paradigms of declension classes or conjugation classes.
- For a long time these paradigms formed the core of the so-called traditional grammar.

The grammatical approach of the Tēkhnē grammatikē and with it the identification and characterization of parts of speech was first transferred to Latin and then to other European languages.

Latin, like classical Greek a highly inflecting language

- same basis of identification
- eight parts of speech, with interjections replacing articles, which do not occur in Latin

Romance languages (Italian, Spanish, Portuguese, Provençal and Walachian), Grammatik der romanischen Sprachen (Diez 1836-1839)

- nine parts of speech subdivided into three groups
  1. subject to inflection: substantive, adjective, numeral, pronoun
  2. subject to conjugation: verb
  3. subject to neither: adverb, preposition, conjunction, interjection
- article, comprising forms that accompany substantives, is added
- if at all, semantic properties are mentioned only in passing

German, German Grammar (Wittich 1842)

- description of declension forms: articles, substantives, adjectives, numerals, pronouns
- description of conjugation forms: verbs
- adverbs: in German not marked by a special marker like -ly; form comparatives and superlatives
- prepositions: some coalesce with the definite article (zum, am)
- conjunctions: divided into copulative, combinative and connective ones
- except for conjunctions, no semantic properties are mentioned
- exactly the same set as that identified by Diez

English, Englische Grammatik (Mätzner 1880)

- same set identified as by Diez and Wittich
- same subdivision as by Diez
- however: semantic properties are mentioned first, only then morphological properties are discussed
- inflectional properties often justified only considering Modern English as a successor of Old English or Anglo-Saxon
  - gender: three genders of Anglo-Saxon nouns preserved in Modern English but recognizable only through the anaphoric use of the pronouns he, she and it (1880: 263ff.)
  - number: not always expressed by the inflectional marker -s because there are, for example, collective nouns that occur in the singular but have a plural meaning, such as fish and fowl (ibid.: 254)
- adjectives: strong and weak case, gender and number markers of Anglo-Saxon
  are discussed before turning to comparative and superlative markers of Modern
  English adjectives (ibid.: 286ff.)

What this shows:

- Inflection in Modern English cannot provide the basis for identifying parts of speech.
  In this language, they are first and foremost identified on semantic grounds.

Definitions of the parts of speech in a traditional grammar of English of the beginning of the
20th century based only on semantic properties (Curme 1935):

A noun, or substantive, is a word used as the name of a living being or lifeless thing:
*Mary, John, horse, cow, dog; hat, house, tree; London Chicago; virtue.* (ibid.: 1)

A pronoun is a word used instead of a noun. (ibid.: 7)

An adjective is a word that modifies a noun or pronoun, i.e. a word that is used with a
noun or pronoun to describe or point out the living being of lifeless thing designated
by the noun or pronoun: a *little* boy, *that* boy, *this* boy, a *little* house. (ibid.: 42)

The verb is that part of speech that predicates, assists in predication, asks a question,
or expresses a command: ‘The wind *blows.*’ ‘He *is* blind.’ ‘*Did* he do it?’ ‘*Hurry!*’
(ibid.: 63)

An adverb is a word that modifies a verb, an adjective, or another adverb. An
adverbial modifier may assume the form of an adverb, a prepositional phrase, or a
conjunctural clause: ‘He entered *quietly.*’ ‘Polish it *well.*’ He entered *in haste*
(prepositional phrase). ‘I could see the bird’s loaded beak *from where I stood*’
(prepositional clause). (ibid.: 71)

A preposition is a word that indicates a relation between the noun or pronoun it
governs and another word, which may be a verb, an adjective, or another noun or
pronoun: ‘I live *in this house.*’ (ibid.: 87)

A conjunction is a word that joins together sentences or parts of a sentence: ‘Sweep
the floor *and* dust the furniture.’ ‘He waited *until* I came.’ (ibid.: 92)

An interjection is an outcry to express pain, surprise, anger, pleasure, or some other
emotion, as *Ouch!* *Oh!* *Alas!* *Why!* (ibid.: 105)

Conclusions:

- Parts of speech are originally defined as a small set of morpho-semantic categories of
  words of a highly inflecting language.
- Following the grammatical principle of analogy, they were grammatical categories
  that served as the basis for identifying paradigms of words, the core of traditional
  grammars.
- As a side effect, they served the structuring of the vocabulary of a language.
- If languages are poor in inflection, parts of speech loose their grammatical function.
3. **Syntactic Categories** (of words)

What do we mean by “syntax”?

- Since structuralism syntax is concerned with the structures of the sentences of a given language (initiated by Boas 1911).
- The basic concept is that sentences exhibit a hierarchical structure of linearly ordered items.

Syntactic categories in this context:

- Syntactic categories are form-classes or distribution classes.

  “All the forms which can fill a given position thereby constitute a *form-class.*”
  (Bloomfield 1933: 185)

  “The DISTRIBUTION of an element is the total of all environments in which it occurs, e.g. the sum of all the (different) positions (or occurrences) of an element relative to the occurrence of other elements.” (Harris 1951: 15f.)

Syntactic categories of words:

- Syntactic categories of words are sets of words that may occur in the same positions of the structures of the sentences of a given language, i.e. which have the same distribution.

Sample descriptions of syntactic categories of words in selected post-structuralism linguistic approaches:

**The Standard Theory of Generative Grammar** (Chomsky 1965)

**Lexical entries**

* (sincerity, [+N, +Det—, –Count, +Abstract, …])

* (frighten, [+V, + –NP, +[+Abstract], Aux — Det [+Animate], +Object-deletion, …])

(Chomsky 1965: 107)

**Phrase structure rules** (selection)

S → NP Predicate Phrase

NP → (Det) N (S’)

N → CS

 [+Det—] → [±Count]

 [+Count] → [±Animate]

 [-Common] → [±Animate]

 [+Animate] → [±Human]

 [-Count] → [±Abstract]  (Chomsky 1965: 106f.)

**Revision of contextual properties** (Chomsky 1970)

NP → N Comp

Comp → NP, S, NP S, NP Prep-P, Prep-P Prep-P, etc. (ibid.: 195)
The Theory of Principles and Parameters (e.g. Chomsky 1981, 1986)

Lexical entries
boy: [+N, -V], [N—]
die: [-N, +V], [v—], <Patient>
give: [-N, +V]; [v—NP PP], <Agent, Theme, Goal>

Syntactic principles
projection principle, X-bar theory, 0-theory, Case theory, Move α (e.g. Chomsky 1981, 1986)

Head-Driven Phrase-Structure Grammar (Pollard and Sag 1987, 1994)

Lexical entry

Syntactic principles, schemata and rules
Head Feature Principle comparable to the X-bar Theory, the Valence Principle (which replaces the earlier Subcategorization Principle), the Argument Realization Principle and schemata representing the HeadSpecifier Rule, the Head-Complement Rule, the Head-Modifier Rule and finally linearity rules.


Linguistic categories of words are “grammatical classes established on the basis of either intrinsic or extrinsic properties” (Langacker 1991: 520); intrinsic: “semantic properties (pertaining to the nature of the profile)”; extrinsic: “Elements are categorized extrinsically by their occurrence in particular structural frames; since an element tends to activate the frame in which it frequently occurs, those frames can be thought of as part of its characterization”. (ibid.: 521)

Result:

- Syntactic categories of words are described on the basis of shared inherent and contextual syntactic or syntactically relevant properties.
- They serve the purpose of determining which words may occur in which positions in the structures of the sentences of a given language.
- Their number by far exceeds the number of the parts of speech.
Comparing parts of speech and syntactic categories of words:

- They are both categories of words.
- They are identified on different grounds.
- They serve different purposes.
- Their number differs considerably.

In sum, parts of speech and syntactic categories of words are categories of very different kinds, and should therefore be kept apart.

4. **English Adverbs**

What is an adverb? On which basis are adverbs identified?

A look at reference grammars shows that two approaches can be distinguished:

1. Definitions are provided which however do not match with the set of items which subsequently are discussed as examples of adverbs. (cf. e.g. Curme 1935, see above).
2. Grammarians start their discussion of adverbs without any definition or characterization, instead pointing out their ‘great heterogeneity’ and remarking that they are the ‘least satisfactory’ or the ‘most nebulous and puzzling’ of the parts of speech (Quirk et al. 1972: 267, 1985: 438).

How do we know what is an adverb?

- by extensional definitions, i.e. whatever has been discussed as an adverb in a grammar that we have been exposed to is accepted as a member of this part of speech

Do adverbs form a category? If so, what kind of category is it and what purpose does it serve?

**My claim:**

- English adverbs form two different kinds of categories:
  1. various syntactic categories
  2. one lexical part-of-speech category

**ad 1. Syntactic categories of English adverbs**

Gleason (1963: 129ff.), based on their distribution, excludes from the part of speech adverb:

- intensifiers (e.g. very, extremely) modify adjectives or adverbs;
- limiters (e.g. only, just, even) modify phrases of all types;
- sentence introducers/connectors (e.g. nevertheless, however, furthermore);
- forms like not, there (as in There once was a man) and the (as in the more the merrier).
Definition of the remaining set:

“Adverbs modify verbs, predicates, or whole sentences, but verbs can be considered as heads of predicates and sentences.” (ibid.: 131).

In addition, he claims, there are “adverbs” that modify nouns and “typically follow the noun immediately: The man downstairs, a junior year abroad, a desire within.” (ibid.)

**Jackendoff (1973)**, based on their distribution shared with PPs, identifies a considerable amount of items of the part of speech adverb as **intransitive prepositions**.

- Gleason’s and Jackendoff’s suggestions reduce the set of items called ‘adverb’.

What is analyzed in more recent approaches is mostly the remaining set.


**Haumann (2007)**, basically following Cinque, describes adverbs as specifiers of functional heads in three layers:

**Complementizer Layer**: ForceP > TopP > EvalP > TopP > EvidP > SceneP > FocP > TopP > SoP > TopP > PromP

**Inflectional Layer**: FinP > AgrsP > EpiP > NegP > TP > PrtP > ModP > ReltP > AspP_{hab.} > AspP_{rep.} > AspP_{freq.} > AspP_{ant.} > AspP_{term.} > AspP_{cont.} > AspP_{(in)perf.} > AspP_{ret.} > AspP_{prox.} > AspP_{dur.} > AspP_{pros.} > AttP > PerfP > ProgP > AuxP > beP

**Lexical Layer**: vP > SpaceP > TelP > AgrsP > AgroP > AgentP > DomP > μP > DegPerfP > MeansP > FreqP > RepP > Asp_{completive} > RestP > V (ibid.: 411)

- ForceP: illocutionary adverbs
- EvalP: evaluative adverbs
- EvidP: evidential adverbs
- SceneP: scene-setting adverbs
- SoP: subject-oriented adverbs
- EpiP: epistemic adverbs
- NegP: sentence-oriented adverbs
- ReltP: temporal adverbs
- AspP*: aspectual adverbs
- AttP: subject-attitude adverbs
- SpaceP: spatial adverbs
- AgentP: agent-oriented adverbs
- DomP: pure domain adverbs
- μP: manner adverbs
- DegPerfP: degree of perfection adverbs
- MeansP: means-domain adverbs
- FreqP: frequency adverbs
- RepP: adverbs of repetition
- AspP_{compl.}: completion adverbs
- RestP: restitutive again
AspP*: habitual > repetitive > frequentative > celerative > anterior > terminative >
continuative > (im)perfective > retrospective > proximative > durative > prospective (ibid.
411f.)

Ernst (2002, etc.), based on their distribution and their semantic scope, distinguishes (more or
less) the following (distributional) classes of adverbs/adverbials:

**Predicational adverbs in the Low Range (L-syntax; event internal):** manner, measure, restitutive again, means-domain, PPP (participant PP)

**Predicational adverbs in the Comp- or AuxRange (event external):** subject-oriented, speaker-oriented (evidential), speaker-oriented (modal/evaluative), speaker-oriented (speech-
act), (pure) domain, exocomparative

**Functional adverbs in the Comp- or AuxRange (event external):** negation, focusing/clausal degree, time related (location-time, duration, aspectual), quantificational (frequency, habitual, additive), clausal functional adjuncts (purpose, causal, conditional, concessive, etc.) (cf. e.g. 2002: 333ff.)

- The description of adverbs in all these approaches identifies them as a forming various
distributional classes, i.e. syntactic categories.
- These categories serve the determination of the possible positions of the adverbs in the
structures of the sentences of a language, independent of their semantics (Gleason,
Jackendoff), including their semantics (Haumann) or focusing on their semantics
(Ernst).
- Adverbs that represent a particular syntactic category are lexically specified for their
particular categoryhood.
  - Specifier-based approaches: (semantically transparent) syntactic features that
form the basis for Spec-Head Agreement;
  - Ernst: lexico-semantic selectional features that determine which Fact-Event-
Object (FE0) is selected and in addition features like [+Heavy]/[+Lite] (cf.
Ernst 2004a) and those that specify for ‘strong’/’week’ or
‘subjective’/’objective’ (SpOAs, Ernst 2009), for example.

**ad 2: English adverbs as a lexical part-of-speech category**

- Adverbs are characterized on the basis of a heterogeneous set of properties
  - “said of or being added to a verb” (Dionysius)
  - modify categories other than nouns (Curme and others)
  - are derived from adjectives by -ly

⇒ Not every English adverb exhibits all these properties.

- English adverbs form a category with a prototypical structure, with the prototype
representing the central member and with other members related to the prototype or to
members related to the prototype by family resemblances. (Ramat and Ricca 1994)
- The prototype of this category in English is a form with the following morphological,
functional and semantic properties, respectively: it is a -ly-form, it is a Verb Phrase
modifier and it expresses Manner. (cf. ibid.: 310)
- Other members of the category are related to the prototype by sharing one or more of
these properties or they may occupy positions that may also be occupied by -ly-
adverbs.
Examples of English adverbs used in the context of sentences:

1. I only wanted to see you.
2. She is only nice, not intelligent.
3. Only John passed the exam.
4. Even/only John arrived on time.
5. She carefully cleaned the table.
6. They worked hard/quietly.
7. He behaved well/strangely.
8. The girl is improving remarkably.
9. The girl is improving remarkably fast.
10. She is very/extremely pretty.
11. I talked to him yesterday/recently.
12. He walked almost/nearly five miles.
13. She almost/practically always wins.
14. He opened the door again/repeatedly.
15. I arrived soon/shortly after it happened.
16. I never/often/frequently do such things.
17. Fortunately, they did not ask.
18. You perhaps/possibly underrate my ability.
19. I honestly do not like dogs.
20. He briefly talked about the event.
21. They evidently did not win.
22. Nevertheless/Consequently, they did not lie.

- The category of English adverbs as characterized above is a lexical part-of-speech category which is related to and yet different from the traditional parts of speech.
- In contrast to the traditional parts of speech it is not a grammatical category, it does not serve grammatical purposes.
- Like the traditional parts of speech – and together with other part-of-speech categories – it serves the structuring of the vocabulary.

5. Conclusion

English adverbs – supposedly like adverbs of other languages – are categorized in two different ways:

1. They form various syntactic categories which serve the determination of the possible positions of adverbs in the structures of the sentences of the language. In this case, the category structure necessarily must be the classical Aristotelian one.

2. They form a lexical part-of-speech category which together with other part-of-speech categories serves the structuring of the vocabulary of a language. This category has a prototypical structure.

- The relationship between the two types of categories is not one of subcategorization, because a subcategory must be of the same type as the category it subcategorizes.
General final remarks:

- It should always be clear why categories are formed and what purpose they serve.
- Categories that do not serve an explicit purpose are useless.

References


