

# Formal and functional approaches to linguistics

Tuesday, December 15, 2020, 9:30-16:00

*Basis 1 – Introduction to linguistic research*

*PhD programme in Language, Linguistics, Communication and Cognition, Aarhus University*

**Sten Vikner**

Dept. of English, School of Communication & Culture,

Aarhus University, DK-8000 Århus C, Denmark

Room 330, Building 1481, Tel. 8716 2639

*sten.vikner@cc.au.dk • www.hum.au.dk/engelsk/engsv/ • http://au.dk/en/sten.vikner@cc*

## Contents

1.	Introduction: Form and function in linguistic analysis .....	1
2.	Formal and functional approaches in linguistic theory .....	2
3.	Areas where grammar-external considerations seem to play no role at all .....	3
3.1	The morpheme <i>-s</i> .....	3
3.2	<i>wh</i> -constructions .....	4
4.	Areas where grammar-external considerations seem to play a role .....	6
5.	Typology and the distinction between formal and functional linguistics.....	7
6.	Conclusion.....	10
	References.....	11

## 1. Introduction: Form and function in linguistic analysis

- (1) **FORM** is often contrasted with **FUNCTION**: One can study a unit such as the nominal from both formal and functional points of view (e.g. its internal syntactic structure versus its role as SUBJECT, OBJECT, etc., in a clause). (Crystal 2008, 194)

In other words, the **FUNCTION** of a nominal depends on **external factors**, as it depends on how it functions in a larger context, whereas the **FORM** of a nominal depends on **internal factors**, as it depends on what its internal structure is.

(2) En. [DP **The author**] surprised us. - **function**: SUBJECT **form**: DP

(3) En. [CP **That the author likes chocolate**] surprised us.  
- **function**: SUBJECT **form**: CP

(4) En. We know [DP **the author**]. - **function**: OBJECT **form**: DP

(5) En. We know [CP **that the author likes chocolate**].  
- **function**: OBJECT **form**: CP

As used here, **formal** vs. **functional** is more or less synonymous with "related to internal factors" vs. "related to external factors".

## 2. Formal and functional approaches in linguistic theory

What is functional about the functional approach to linguistics is that it puts the main emphasis on external factors, e.g. on non-linguistic effects caused by linguistic utterances:

(6) **Functional grammar:**

A linguistic theory which was devised in the 1970es as an alternative to the abstract formalized view of language presented by [generative] grammar, and relying instead on a pragmatic view of language as social interaction. The approach focuses on the rules which govern verbal interaction, seen as a form of co-operative activity, and on the rules which govern the linguistic expressions that are used as instruments of this activity. (Crystal 2008, 202)

(7) **Formal:**

Based on form rather than meaning. Thus a formal definition of word class might refer to the distributions of its members, while a semantic/notional definition might refer to a type of process, entity, etc. that they denote. (Matthews 1997, 132)

(Notice that generative linguistics is only one of several different formal approaches to linguistics.)

Although it is a rather strong simplification, the above can be boiled down to:

(8) a. **Formal approach to linguistics:** Linguistic form can be characterized independently of meaning and function.

b. **Functional approach to linguistics:** Meaning and function can determine linguistic form.

The extreme version of either view completely excludes the opposite view:

(9) a. **An extreme formal approach:** Meaning and function has no relevance whatsoever for the characterisation of linguistic form.

b. **An extreme functional approach:** No aspect of linguistic form can be characterized independently of meaning and function.

An extreme functional approach in general may be exemplified by the following quotation from B.F. Skinner (my emphasis):

(10) The practice of **looking inside the organism** for an explanation of behavior has tended to **obscure** the variables which are immediately available for **a scientific analysis**. These variables lie outside the organism, in its immediate environment and in its environmental history. (Skinner 1953, 31)

(in other words, science should not waste its time trying to find out what is going on inside the organism).

An extreme functional approach to linguistics may be exemplified by the following quotation from Joanna Nichols (my emphasis):

(11) [Functional grammar] analyzes grammatical structure, as do formal and structural grammar, but it also analyzes the entire communicative situation: the purpose of the speech event, its participants, its discourse context. Functionalists maintain that the communicative situation motivates, constrains, explains or otherwise determines grammatical structure and that **a structural or formal approach [...]** is **inadequate** even as a structural account.

(Nichols 1984, 97)

Although there surely are also adherents of extreme formal approaches, it is worth noting that Chomsky and most other generative linguists are **NOT** among them.

- (12) **We will have only a partial understanding of syntax if we do not consider its role in the expression of thought, and other uses of language.** This much should arouse no controversy. (Chomsky 1975, 59)
- (13) The issue is not whether grammars have functional motivation, but **where and how much**, and the centrality of focusing on this motivation in one's research program. (Newmeyer 2005, 136)

Formal and functional accounts are thus complementary, and not (as extremists hold) incompatible.

In my opinion (cf. Vikner 2004), **it is ultimately an empirical question whether a given property of a language or a given difference between two languages is best accounted for with** (as in functional linguistics) **or without** (as in formal linguistics) **reference to meaning and function.** The word "ultimately", however, highlights that this matter is not necessarily particularly easy to decide. In some cases, it therefore becomes something close to a matter of personal taste whether one turns first to one side or first to the other when searching for an explanation for a newly discovered empirical linguistic fact.

### 3. Areas where grammar-external considerations seem to play no role at all

Below are two examples where one form is associated with several very different meanings/functions, and consequently the generalisations seem not to be determined by meaning/function. These areas, then, are

- (14) "evidence that knowledge of language consists in part of internalized generalizations about linguistic form. That is, that there are pervasive structural patterns that form part of our knowledge of language and that there are general form-based principles responsible for producing them." (Newmeyer 1998, 49)

#### 3.1 The morpheme *-s*

The English morpheme *-s* has three very different meanings/functions:

- a genitive ending
- a plural ending
- third person singular present tense ending

(Notice that the orthographical difference between the genitive *-s* and the plural and present tense *-s* is purely orthographical, and was only introduced in the 18th century, to distinguish genitive from plural, e.g. *dog's* vs. *dogs*, Crystal 2018, 215.)

The genitive *-s* has three different pronunciations:

- |                         |                    |                       |
|-------------------------|--------------------|-----------------------|
| (15) <i>Pete/Pete's</i> | <i>Fran/Fran's</i> | <i>Felix/Felix's</i>  |
| [pit]/[pɪts]            | [fræn]/[frænz]     | ['fɪlɪks]/['fɪlɪksɪz] |

The genitive *-s* is pronounced [-ɪz] after sibilants (in English, the sibilants are the six alveolar and post-alveolar fricatives and affricates, i.e. [s, z, ʃ, ʒ, tʃ, dʒ]), and it is pronounced [-s] after other voiceless sounds and [-z] after other voiced sounds.

The plural -s also has three different pronunciations:

- |                                |                         |                              |
|--------------------------------|-------------------------|------------------------------|
| (16) <i>one seat/two seats</i> | <i>one van/two vans</i> | <i>one affix/two affixes</i> |
| [sit]/[sɪts̩]                  | [væn]/[vænz̩]           | ['æfɪks]/['æfɪksɪz̩]         |

Also this ending is pronounced [-ɪz] after sibilants, [-s] after other voiceless sounds and [-z] after other voiced sounds.

The -s that signals third person singular present tense also has three different pronunciations:




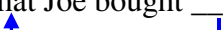
- |                               |                        |                         |
|-------------------------------|------------------------|-------------------------|
| (17) <i>to meet/she meets</i> | <i>to ban/she bans</i> | <i>to mix/she mixes</i> |
| [mit]/[mɪts̩]                 | [bæn]/[bænz̩]          | [mɪks]/[mɪksɪz̩]        |

It, too, is pronounced [-ɪz] after sibilants, [-s] after other voiceless sounds and [-z] after other voiced sounds.

In other words, the pronunciation of the -s morpheme seems not to be influenced by meaning/function, but only by factors internal to the grammar.

## 3.2 *wh*-constructions

(cf. Newmeyer 1998, 50–53). These English *wh*-constructions all have the "same" form, i.e. movement of a *wh*-element from the object position to the leftmost position in the clause (CP-spec):

- |   |                        |
|---|------------------------|
| (18) a. What did Joe buy ___?   | ( <i>wh</i> -QUESTION) |
|  |                        |
| b. the book which Joe bought ___  | (RELATIVE CLAUSE)      |
|  |                        |
| c. Fred will carry what(ever) Joe has bought ___.                                   | (FREE RELATIVE CLAUSE) |
|  |                        |
| d. What Joe bought ___ was a really old book.                                       | (PSEUDO-CLEFT)         |
|  |                        |

The motivations for the movement suggested by functional linguists are very different however:

- (19) a. For **questions** the motivation is: **focussing**
- b. For **relative clauses** the motivation is **iconicity** of distance  
 (Part of the “proximity principle” of Givon 1991, 89, says: “Functional operators will be placed closest, temporally or spatially at the code level, to the conceptual unit to which they are most relevant”) (as cited in Engberg-Pedersen 1996, 459).
- c. For **free relative clauses**: a relic of **iconicity** of distance, because these constructions supposedly stem from “normal” relative clauses, e.g. (18)b. *what(ever)* needs to be close to the position where *the books* used to be (Givon 2001, 206) (see also Newmeyer 1998, 51).
- d. For **pseudo-clefts**, the motivation is to direct attention to the focussed element (*a really old book*) at the end of the clause.

The idea that something, here a free relative clause, can have a functional motivation which is no longer a real functional motivation but only a relic of one, as in (19)c would seem to be generally recognised within the functional framework:

- (20) Diachronic development frequently causes linguistic expressions to lose the motivations which they had at an earlier point, and as in the case of vestigial organs in animals, components may hang on for a long time even after they are no longer functionally motivated. (Harder 1996, 450)

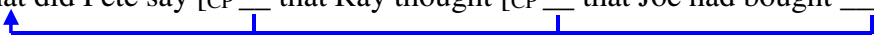
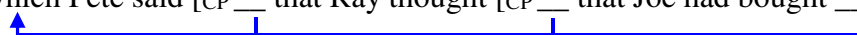
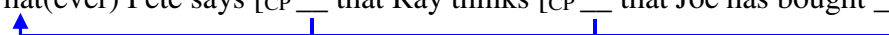
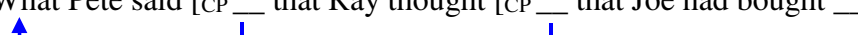
As far as I can see, this ought to be highly problematic within a functional framework, because it shows that the grammar is **not** always directly functionally driven.

In spite of the very different meanings/functions in (19), the four *wh*-constructions in (18) all have the same syntax.



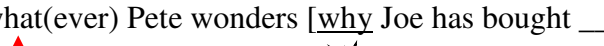
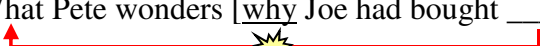
- (21) In short, we have a one-many relationship between form and function. And crucially [...], the formal principles involved in *wh*-fronting interact with **other** formal principles involved in other types of constructions. That is, not only do *wh*-constructions have an internal formal consistency, but they behave consistently within the broader structural system of English syntax. (Newmeyer 1998, 51)

Not only do they all have movement of a *wh*-element from the object position to the leftmost position in the clause (CP-spec), but this movement may in all cases ...

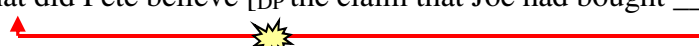
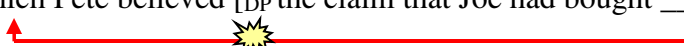
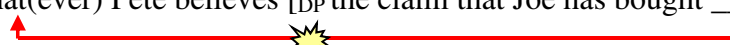
- **be a long distance movement** (move across more than one clause):

- (22) a. What did Pete say [CP \_\_ that Ray thought [CP \_\_ that Joe had bought \_\_ ] ] ?  
  
 b. the book which Pete said [CP \_\_ that Ray thought [CP \_\_ that Joe had bought \_\_ ]].  
  
 c. Fred will carry what(ever) Pete says [CP \_\_ that Ray thinks [CP \_\_ that Joe has bought \_\_ ]].  
  
 d. What Pete said [CP \_\_ that Ray thought [CP \_\_ that Joe had bought \_\_ ] ] was a really old book.  


- **not move across other *wh*-expressions:**

- (23) a. \*What did Pete wonder [why Joe had bought \_\_ ] ?  
  
 b. \*the book which Pete wondered [why Joe had bought \_\_ ].  
  
 c. \*Fred will carry what(ever) Pete wonders [why Joe has bought \_\_ ].  
  
 d. \*What Pete wonders [why Joe had bought \_\_ ] was a really old book.  


- **not move out of a DP:**

- (24) a. \*What did Pete believe [DP the claim that Joe had bought \_\_ ]?  
  
 b. \*the book which Pete believed [DP the claim that Joe had bought \_\_ ].  
  
 c. \*Fred will carry what(ever) Pete believes [DP the claim that Joe has bought \_\_ ].  


d. \*What Pete believes [DP the claim that Joe had bought \_\_\_\_ ] was a really old book.



- preserve the case of the *wh*-element:

(25) a. Whom did Joe meet \_\_\_\_ ?



b. the linguist whom Joe met \_\_\_\_.



c. Fred will like whom(ever) Joe has met \_\_\_\_.



(26) In short, the principles involved in *wh*-constructions are part and parcel of a structural system, a system that interfaces with functional principles, but demands a statement in its own terms.  
(Newmeyer 1998, 53)

## 4. Areas where grammar-external considerations seem to play a role

(27) It has long seemed reasonable to many generative grammarians that certain features of the grammar arise to allow parsing to take place rapidly and efficiently. That is, the demands of real-time language processing may have 'left their mark' on grammars, in the sense that some grammatical features can be attributed to an accommodation of the grammar to the parser.  
(Newmeyer 1998, 106)

Both the generative analysis in Pinker (1994, 201–10) and the functional analysis in Hawkins (1994; 2014)(cf. Newmeyer 1998, 108–14) suggest that the unacceptability (or at least near-unacceptability) of center-embeddings are not due to the properties of the grammar itself, but to difficulties in parsing: The more constituents that the parser has to keep track of at the same time (i.e. the more difficulties the parser has), the more unacceptable the example is:

(28) En. a. ?? The dog [that the stick [that the fire burned] beat] bit the cat.  
b. ?? The malt [that the rat [that the cat killed] ate] lay in the house. (Pinker 1994, 207)

When the parser reaches the word *fire* in (28)a or the word *cat* in (28)b, there are three clauses which still need lexical material in order to be finished.

Compare the following:

(29) En. a. The dog [that was beaten by the stick [which was burned by the fire]] bit the cat.  
b. The malt [that the rat ate [that was killed by the cat]] lay in the house.

When processing (29), at no point does the parser need lexical material to finish more than two clauses.

## 5. Typology and the distinction between formal and functional linguistics

Let us finally turn to another branch of linguistics: **Linguistic typology**. This branch is often associated with functionalists but there are also many formal linguists who consider their work to be typological.

Originally, the possibility of typological language classification was suggested in the 19<sup>th</sup> century as an alternative to the traditional genetic language classification (cf. lectures 1 & 2 of the lectures on the History of the English Language, spring 2018).

(30) A **GENETIC** classification of the Germanic languages (cf. (31) & (32))

a. **North Germanic (= Scandinavian)**

Danish, Faroese, Icelandic, Norwegian, Swedish

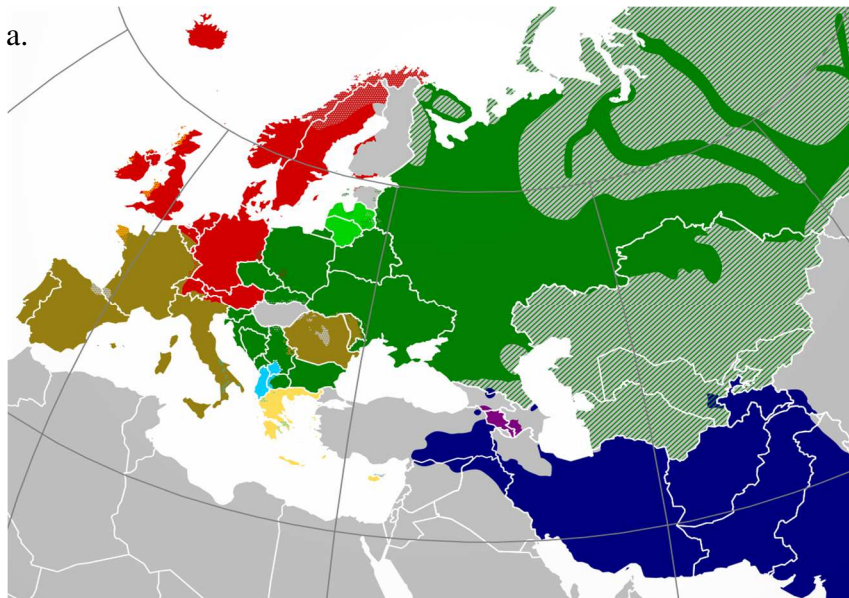
b. **West Germanic**

Dutch, Frisian, German, Yiddish, English

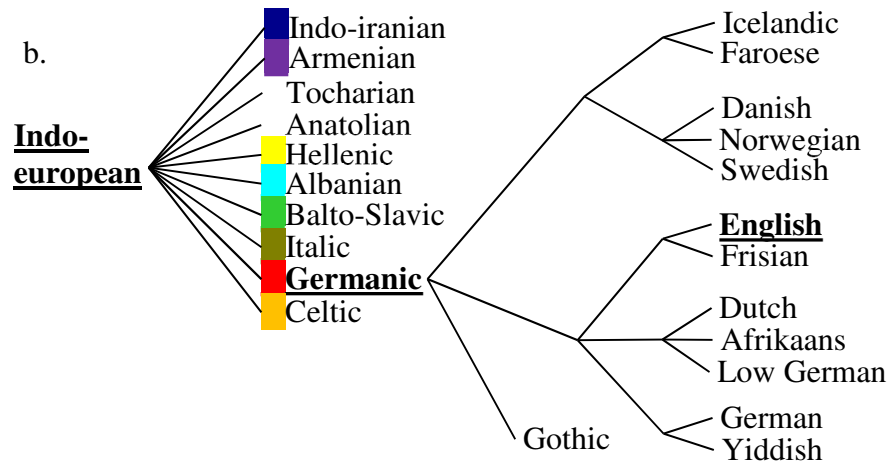
Where a **genetic** classification of languages is based on shared properties due to a common origin, a **typological** classification of languages is based on shared properties not due to a common origin (or not necessarily due to a common origin).

Interest in the relationship between languages blossomed at the beginning of the 19<sup>th</sup> century and languages were classified according to their historic relationship to one another. The object was to work backwards to reconstruct the “parent” language in the family tree:

(31)



[https://commons.wikimedia.org/wiki/File:Indo-European\\_branches\\_map.png](https://commons.wikimedia.org/wiki/File:Indo-European_branches_map.png)



(32)

<b><u>Germanic</u></b>	North Germanic (= Scandinavian)	Western Scandinavian	Icelandic Faroese "Nynorsk"
		Eastern Scandinavian	Danish Norwegian Swedish
			<b><u>English</u></b> Frisian
	<b><u>West Germanic</u></b>	<b><u>Low West Germanic</u></b>	Dutch Flemish Afrikaans
			Low German
		High West Germanic	German Yiddish
		East Germanic	Gothic †

(33) A **TYPOLOGICAL** classification of the Germanic languages (cf. (34) & (35))

a. **V2 (verb second) languages**

Danish, Faroese, Icelandic, Norwegian, Swedish Dutch, Frisian, German, Yiddish

b. **Non-V2 languages**

English

	<b><u>CP-spec</u></b>	<b><u>C°</u></b>	<b><u>IP-spec</u></b>	
(34) Da. a.	Den her bog	har	Peter læst.	
Ic. b.	Þessa bók	hefur	Pétur lesið.	
Ge. c.	Dieses Buch	hat	Peter gelesen.	
En. d.	* This book	has	Peter read.	

	<b><u>CP-spec</u></b>	<b><u>C°</u></b>	<b><u>IP-spec</u></b>	
(35) Da. a.	Nu	har	Peter læst	den her bog.
Ic. b.	Nú	hefur	Pétur lesið	þessa bók.
Ge. c.	Jetzt	hat	Peter	dieses Buch gelesen.
En. d.	* Now	has	Peter read	this book.



(36) Another **TYPOLOGICAL** classification of the Germanic languages (cf. session B1 earlier)

a. **Verb-Object languages (VO)**

Danish, Faroese, Icelandic, Norwegian, Swedish, Yiddish, English

b. **Object-Verb languages (OV)**

Dutch, Frisian, German,

		<u>verb</u>	<u>object</u>
(37)	Da. a.	Jeg har læst	bogen.
	Ic. b.	Ég hef lesið	bókina.
	En. c.	I have read	the book.
	Yi. d.	Ikh hob geleyent	dos bukh.

		<u>object</u>	<u>verb</u>
(38)	Du. a.	Ik heb het boek	gelezen.
	Fri. b.	Ik ha it boekje	lêzen.
	Ge. c.	Ich habe das Buch	gelesen.

(39) We might look for the structural features that all or most languages have in common; or we might focus our attention on the features that differentiate them. In the former case, we are searching for language **universals**, in the latter case, we are involving ourselves in language **typology**. In principle, the two approaches are complementary, but sometimes they are associated with different theoretical conceptions of the nature of linguistic enquiry.

(Crystal 2010, 86)

In this sense a lot of generative research is definitely typological, as it attempts to uncover exactly how e.g. the Germanic languages (including English) differ from each other, and, just as important, what such differences may be correlated with.

An example of such a correlation is the one between the difference verb-object vs. object-verb, and the difference finite verb before VP (verb phrase) vs. VP before finite verb. It turns out that Germanic VO-languages always put the finite auxiliary verb, *have*, to the left of the verb phrase in embedded clauses, (40), whereas Germanic SOV-languages most often (but not exclusively) put the finite auxiliary verb to the right of the verb phrase in embedded clauses, (41):

(40)	<b>SVO</b>			<u>aux</u>	<u>verb phrase</u>
a.	Danish	... fordi	jeg	har	læst bogen.
b.	Icelandic	... af því að	ég	hef	lesið bókina.
c.	English	... because	I	have	read the book.

(41)	<b>SOV</b>			<u>verb phrase</u>	<u>aux</u>
a.	Dutch	... omdat	ik	het boek gelezen	heb.
b.	Frisian	... om't	ik	it boekje lêzen	ha.
c.	German	... weil	ich	das Buch gelesen	habe.
		... because	I	the book read	have

However, there is a tendency for the word "typological" to be mainly used about relatively superficial comparisons of a great number of languages, or, to put it more diplomatically:

- (42) Typologists typically study a wide range of languages as part of their enquiry, and tend to make generalizations that deal with the more observable aspects of structure, such as word order, word classes, and types of sound. (Crystal 2010, 87)

This kind of 'more superficial' typology tends to be associated with functional frameworks, rather than with formal frameworks like generative linguistics.

A good example of the problems of superficial comparison is Greenberg (1963), and another one is *WALS*, i.e. the *World Atlas of Linguistic Structures Online*, <<http://wals.info>>, Dryer & Haspelmath (2011). In Greenberg (1963, 109–10) and in Whaley (1997, 106), **ALL** the Germanic languages discussed are classified as **SVO**-languages, i.e. not only Danish, English, Icelandic, Norwegian, Swedish but also **German and Dutch**. Presumably this is based on examples like:

- (43) Da. a. Peter læste den her bog i går.  
En. b. Peter read this book yesterday.  
Ge. c. Peter las dieses Buch gestern.

In my opinion, more detailed studies (both generative and functional, see Vikner 2007, 474–79; 2019) of these languages have shown that although the order in (43)c is SVO just like in (43)a,b, it is much preferable to characterise German (and Dutch and Frisian) as **SOV languages with V2**, (33) & (36).

The "SOV with V2" characterisation that I recommend accounts for the fact that only finite verbs in main clauses may precede the object in German (and Dutch and Frisian), whereas all other verbs occur after the object, cf. e.g. (38) and (41). Simply characterising German (and Dutch and Frisian) as "**SVO**" as in Greenberg (1963, 109–10) and in Whaley (1997, 106) would predict these languages to be very much like English and Danish, not just in (43), but also in (37)/(38) and (40)/(41), which is clearly not the case.

In other words, although there is a tendency for the word "typological" to be associated with functional linguistics, this only covers a certain kind of typological research. In actual fact, there is a large amount of formal linguistics that is also typological.

## 6. Conclusion

Formal approaches to linguistics are inclined towards explanations of linguistic phenomena in terms of grammar-internal properties. Functional approaches to linguistics are inclined towards explanations of linguistic phenomena in terms of grammar-external properties.

Ultimately, it should be an empirical question whether a given property of a language or a given difference between two languages is best accounted for with (as in functional linguistics) or without (as in formal linguistics) reference to meaning and function (i.e. grammar-external properties).

Formal and functional approaches to linguistics do not have to exclude each other. Thus advocates of a non-extreme formal approach should not wish to exclude grammar-external explanations, and advocates of a non-extreme functional approach should not wish to exclude grammar-internal explanations.

All linguists are interested in the same thing: explaining language data. No doubt we can learn from each other, and none of us can afford to ignore the results reached within 'the opposite camp'.

## References

- Chomsky, Noam. 1975. *Reflections on Language*. New York: Pantheon.
- Crystal, David. 2008. *A Dictionary of Linguistics and Phonetics*. 6th ed. Oxford: Blackwell Publishers.
- . 2010. *The Cambridge Encyclopedia of Language*. 3rd ed. Cambridge: Cambridge University Press.
- . 2018. *The Cambridge Encyclopedia of the English Language*. 3rd ed. Cambridge: Cambridge University Press.
- Dryer, Matthew S., and Martin Haspelmath, eds. 2011. *The World Atlas of Language Structures Online*. München: Max Planck Digital Library. <https://wals.info/>.
- Engberg-Pedersen, Elisabeth. 1996. "Iconicity and Arbitrariness." In *Content, Expression and Structure - Studies in Danish Functional Grammar*, edited by Elisabeth Engberg-Pedersen, Michael Fortescue, Peter Harder, Lars Heltoft, and Lisbeth Falster Jakobsen, 29:453–68. Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/slcs.29.18eng>.
- Givón, Talmy. 1991. "Isomorphism in the Grammatical Code: Cognitive and Biological Considerations." *Studies in Language* 15 (1): 85–114. <https://doi.org/10.1075/sl.15.1.04giv>.
- . 2001. *Syntax: An Introduction. Volume II*. Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/z.syn2>.
- Greenberg, Joseph H. 1963. "Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements." In *Universals of Language*, edited by Joseph H. Greenberg, 73–113. Cambridge, Massachusetts: MIT Press.
- Harder, Peter. 1996. "Linguistic Structure in a Functional Grammar." In *Content, Expression and Structure - Studies in Danish Functional Grammar*, edited by Elisabeth Engberg-Pedersen, Michael Fortescue, Peter Harder, Lars Heltoft, and Lisbeth Falster Jakobsen, 29:423–51. Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/slcs.29.17har>.
- Hawkins, John A. 1994. *A Performance Theory of Order and Constituency*. Cambridge Studies in Linguistics 73. Cambridge ; New York: Cambridge University Press.
- . 2014. *Cross-Linguistic Variation and Efficiency*. First edition. Oxford Linguistics. Oxford, UK: Oxford University Press.
- Matthews, Peter H. 1997. *The Concise Oxford Dictionary of Linguistics*. Oxford: Oxford University Press.
- Newmeyer, Frederick J. 1998. *Language Form and Language Function*. Cambridge, Mass.: MIT Press.
- . 2005. *Possible and Probable Languages: A Generative Perspective on Linguistic Typology*. New York: Oxford University Press.
- Nichols, Johanna. 1984. "Functional Theories of Grammar." *Annual Review of Anthropology* 13: 97–117. <https://www.jstor.org/stable/2155663>.
- Pinker, Steven. 1994. *The Language Instinct: The New Science of Language and Mind*. New York: Penguin.
- Skinner, Burrhus Frederic. 1953. *Science and Human Behavior*. Simon and Schuster.
- Vikner, Sten. 2004. "Nødvendigheden Af En Formel Tilgang Til Sprogvidenskab." *Humaniora* 2004 (2): 12–16. <http://www.hum.au.dk/engelsk/engsv/papers/vikn04a.pdf>.
- . 2007. "Teoretisk Og Komparativ Syntaks." In *Det Bedre Argument - Festskrift Til Ole Togeby 07.03.2007*, edited by Henrik Jørgensen and Peter Widell, 469–80. Århus: Wessel og Huitfeldt. <http://www.hum.au.dk/engelsk/engsv/papers/vikn07a.pdf>.
- . 2019. "Why German Is Not an SVO-Language but an SOV-Language with V2." In *A Sound Approach to Language Matters – In Honour of Ocke-Schwen Bohn*, edited by Anne Mette Nyvad, 437–47. Aarhus: Dept. of English, School of Communication & Culture, Aarhus University. <https://ebooks.au.dk/aul/catalog/view/322/218/983-1>, [www.hum.au.dk/engelsk/engsv/papers/vikn19c.pdf](http://www.hum.au.dk/engelsk/engsv/papers/vikn19c.pdf).
- Whaley, Lindsay J. 1997. *Introduction to Typology: The Unity and Diversity of Language*. Thousand Oaks, Calif: Sage Publications.