

Theoretical and comparative linguistics

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I confess that I was in two minds about whether to use English or Danish for this lecture. I decided on English, not only because my department is the Dept. of English, but also because I think that this is the way to reach the highest number of the people present here today.

As you know, I am one of the five recently appointed professors "with special responsibilities" in the Faculty of Humanities. The area of my "special responsibility" is theoretical and comparative linguistics, and today I would like to tell you what this is all about.

1. Why comparative?

I'll begin with comparative linguistics. Although we may not always realise this, comparative linguistics is in a way already rather central in our faculty. When Danes are taught Italian pronunciation or German word order, comparison with Danish pronunciation or Danish word order is obviously useful, indeed sometimes even necessary.

Comparative linguistics tries to discover differences between various languages. This may of course be useful in itself, but I think that it should be taken one step further. In my opinion, comparative linguistics should strive to find out both which kinds of variation exist between languages, and also which kinds do not exist. In this way, it contributes to our knowledge about the powers and limitations of the human brain. An explicitly comparative angle also brings out more sharply the specific characteristics of each language than when each language is treated in isolation.

2. Why also theoretical?

I agree with Darwin that data is useless without a theory:

- (1) *About thirty years ago there was much talk that geologists ought only to observe and not theorise; [...] at this rate a man might as well go into a gravel-pit and count the pebbles and describe the colours. How odd it is that anyone should not see that all observation must be for or against some view if it is to be of any service.*

(Charles Darwin on Sept. 18, 1861, in a letter to Henry Fawcett,
quoted e.g. in Gould 1992 and in Shermer 2001)

Like other sciences, comparative linguistics is much more interesting and useful if it has a solid theoretical foundation. What this means is that comparative linguistics should not just go out and collect a lot of data from a lot of languages. Comparative linguistics should seek to account theoretically for as many actual differences as possible, by deriving them from as few general differences as possible.

An example of this could be the difference between Danish and Swedish concerning the position of a particle (Vikner 1987:262):

(2)

				object	particle
a.	Danish	Peter	smed	tæppet	ud
b.	Swedish	*Peter	kastade	mattan	bort

Peter threw the carpet away

(3)

				particle	object
a.	Danish	*Peter	smed	ud	tæppet
b.	Swedish	Peter	kastade	bort	mattan

Peter threw away the carpet

A different difference between the two languages concerns constructions with *let* (Vikner 1987:262):

(4)

				object	verb
a.	Danish	Peter	lod	tæppet	støvsuge
b.	Swedish	*Peter	lät	mattan	dammsuga

Peter let the carpet vacuum-clean

(5)

				verb	object
a.	Danish	*Peter	lod	støvsuge	tæppet
b.	Swedish	Peter	lät	dammsuga	mattan

Peter let vacuum-clean the carpet

These are two separate actual differences between Danish and Swedish. But isn't it obvious that these two should be considered as two instances of a single more general difference? Such a view further makes the prediction that also other languages should treat these two constructions in a parallel fashion. For instance, if a language should allow both (2) and (3), we would now also expect that language to allow both (4) and (5). This is precisely the correct prediction for Norwegian.

In this way it may be established which aspects of a given language are also found in other languages and which aspects are specific to this language. By comparing different languages (e.g. Danish vs. Swedish) or different stages of the same language (e.g. Old Danish vs. modern Danish), we can begin to map the ways in which languages differ and the ways in which they don't.

Such a typological perspective makes it possible not only to establish typological connections and predictions (e.g. of the kind "only languages which have X, also have Y"), but also to explain and justify these theoretically.

In linguistics today, two theoretical paradigms dominate, the formal paradigm and the functional paradigm. Both approaches have many adherents worldwide and also if we just look at the Nordic countries. In Denmark, however, the interest has to a very large extent been focussed on the functional approach until now.

It is my opinion that if Danish linguistics is to assert itself on the international level, then the functional approach, which is very competently represented in the University of Aarhus, needs a

formal opponent which is both qualified and constructive. I also believe that the formal approach needs to take the challenge posed by functional linguistics seriously, a challenge which is not always taken seriously in international formal linguistics at the moment.

Furthermore, I am convinced that if linguistics is to be able to cooperate with and contribute to other areas of science, e.g. neurology, psychology and computer science (including artificial intelligence and computational linguistics), then it is absolutely unavoidable that it has to concern itself with its own theoretical foundations to a much larger extent than so far.

3. Theoretical linguistics needs comparative linguistics: The finite verb in *yes/no*-questions

Another reason why my area is defined as "theoretical and comparative linguistics" is that I am convinced that theoretical linguistics and comparative linguistics need each other. I would like first give an example of the relevance of comparative evidence for theoretical linguistics.

Consider the position of the finite verb in Danish *yes/no*-questions. *Yes/no*-questions are questions that may typically be answered by a *yes* or a *no*, and in Danish they begin with the finite verb:

- (6) Havde han kun drukket hvidvin i går?
Had he only drunk white wine yesterday?

First a tiny bit of theory about positions in the clause: Main clauses in Danish have two positions to the left of the subject position. In the second position, we find the finite verb in both (7a,b). In the first position, we find a time adverbial in (7a) and the object in (7b):

(7)	①	②				
a.	I går	havde	han	kun	drukke	hvidvin
b.	Hvidvin	havde	han	kun	drukke	i går
	<i>Yesterday</i>	<i>had</i>	<i>he</i>	<i>only</i>	<i>drunk</i>	<i>white wine</i>
	<i>White wine</i>	<i>had</i>	<i>he</i>	<i>only</i>	<i>drunk</i>	<i>yesterday</i>

The theoretical question now is whether to analyse *yes/no*-questions like (6) in such a way that the finite verb is seen as being in the first of these two positions, (8a), or as being in the second position, (8b):

(8)	①	②				
a.	Havde		han	kun	drukke	hvidvin i går?
b.		Havde	han	kun	drukke	hvidvin i går?

Most treatments recommend the analysis in (8b), e.g. Diderichsen (1962:193), Allan et al. (1995:494), Vikner (1995:49), and Jørgensen (2000:73). Hansen (1980:46) directly says "we could also say that the finite verb is in [the first position], but it is preferable to agree once and for all that the finite verb is always in [the second position]".

At least two linguists (both from this university) would seem to be of a different opinion. Arndt (2003:244) says about Danish clause structure that "we can put almost anything into the first position (... though finite verbs can be there only in questions, and these could also be seen as

sentences which lack the first position)". In other words, he advocates (8a), but he does mention (8b) as an alternative.

Togebly (2003:56, 58) also prefers (8a), although he says that (8b) would make the analysis "easier". As a reason for preferring (8a), he says (2003:58, fn 1) that only with (8a) can a difference be made between a *yes/no*-question like (6) on one hand and a subjectless clause of the type that may be found in diary contexts on the other:

- (9) Har aldrig skrevet dagbog før
Have never written (a) diary before

Togebly here says that if we take the verb in a *yes/no*-question to be in the first position, (8a), we can make a distinction between the *yes/no*-question and the diary example. Given that the diary example, (9), has to be analysed as having an **empty** first position (the place where the subject ought to have been), Togebly argues that it can only be different from a *yes/no*-question if the latter has **the finite verb** in the first position.

I would like to suggest, however, that a *yes/no*-question like (6) and a diary example like (9) are **alike** in that **they both** have an empty first position. Whereas I agree with Togebly (2003:58) that the first position in the diary example contains a silent subject, I also think that the first position in a *yes/no*-question contains a silent element, namely an empty question element, indicated by *Q* in (10b). (This idea goes back at least to Chomsky 1977).

(10)	①	②		
a.	[_{subj}]	Har	aldrig skrevet dagbog før	= (9)
b.	[_Q]	Havde	han kun drukket hvidvin i går?	= (6)

Analysing the two clause types along parallel lines is supported by the comparative evidence. Only this view of *yes/no*-questions can account for the links noted in Greenberg's (1963:82-83) "Universal 11":

- (11) **UNIVERSAL 11.**
Inversion of statement order so that verb precedes subject occurs only in languages where the question word or phrase is normally initial. This same inversion occurs in yes-no questions only if it also occurs in interrogative word questions.

The first clause of (11) says that only those languages where the question element is normally initial, also have subject-verb inversion in the same questions. This is the case e.g. in Danish:

- (12) Hvad købte Harry?
What bought Harry?

with both an initial question element *hvad* and subject-verb inversion (the verb *købte* precedes the subject *Harry*). The opposite case is found e.g. in Chinese (example from Cheng & Rooryck 2000:2):

- (13) Hufei mai-le shenme?
Hufei bought what?

where the question element *shenme* is not initial and where there is no subject-verb inversion (the verb follows the subject).

The second clause of Greenberg's universal, (11), says that only those languages which have subject-verb inversion in questions with question elements also have subject-verb inversion in *yes/no*-questions.

In other words, Greenberg (1963:82-83) establishes a link between having question elements at the beginning of a question and having subject-verb inversion in *yes/no*-questions.

Now, why should there be such a link? Well, if we follow the analysis of *yes/no*-questions in (10b), it is rather straightforward. Then the two cases, verb-initial *yes/no*-questions and questions with initial question elements, would have exactly the same structure, (10b): a question element in the first position, a finite verb in the second position, and only then come the subject and the rest of the clause. If we analyse *yes/no*-questions as having a silent question element in the first position and the finite verb in the second position, it is not a surprise that *yes/no*-questions with this word order occur only in languages that also have their visible question elements in the first position.

In other words, including the comparative evidence in our considerations puts us in a better qualified position to make the theoretical choice between the two analyses in (8a) and (8b).

4. Comparative linguistics needs theoretical linguistics: Is German an SVO-language?

Greenberg's above-mentioned article from 1963 is one of the absolute classics of descriptive comparative linguistics. His (1963:109) discussion of "basic word order" will serve here as an example of how comparative linguistics also sometimes needs a helping hand from theoretical linguistics.

By "basic word order", Greenberg means the order of the **subject**, the **verb** and the **object**. Establishing the basic word order of a particular language is not as easy as it may sound. Danish e.g. allows at least four different orders:

- | | | |
|---------|--|---|
| (14) a. | Hvis <u>Harry købte den her billet</u> ... | <i>If Harry bought this ticket ...</i> |
| | S V O | |
| b. | <u>Den her billet købte Harry</u> | <i>This ticket Harry bought</i> |
| | O V S | |
| c. | <u>Købte Harry den her billet?</u> | <i>Did Harry buy this ticket?</i> |
| | V S O | |
| d. | Jeg ved ikke <u>hvad for en billet Harry købte</u> | <i>I don't know which ticket Harry bought</i> |
| | O S V | |

Now the question is which of these four should be chosen as the basic order of Danish. Here I agree with Greenberg (1963:109) that the basic order of Danish is **S**ubject-**V**erb-**O**bject, as in (14a). Although Greenberg and I agree on what the basic order is, we do not agree on why this should be so.

Greenberg (1963:109) puts **all** the Germanic languages into the same group, i.e. **SVO**. I find it more promising to classify only Scandinavian and English as **SVO**, (15), and to take the basic order of German, Dutch and Frisian to have the object before the verb, i.e. to classify these three languages as **S**ubject-**O**bject-**V**erb, **SOV**, (16):

(15) SVO			verb	object
a.	Danish	Jeg har	læst	bogen
b.	Icelandic	Ég hef	lesið	bókina
c.	English	I have	read	the book

(16) SOV			object	verb
a.	Dutch	Ik heb	het boek	gelezen
b.	Frisian	Ik ha	it boekje	lêzen
c.	German	Ich habe	das Buch	gelesen

I have the book read

(The analysis of Dutch, Frisian and German as SOV-languages goes back to Bach 1962, Bierwisch 1963, and Koster 1975).

Why does Greenberg (1963) categorise German (and Dutch) as SVO? He does not himself go into any great detail, but simply talks about the “dominant word order” (1963:76, 109).

Whaley (1997:106), a textbook in descriptive comparative linguistics, is more explicit about why she follows Greenberg (1963) in taking SVO to be the “basic constituent order” of German. She takes an order to be the basic constituent order if it tends to be “strongly felt to be the basic order by native speakers”, if it tends to be “the most frequent order”, “the least marked order”, or the “pragmatically most neutral order”. The reference is thus to tendency rather than to theory.

The classification of German as SOV that I (and many others) prefer has a theoretical basis: If we declare one order to be the basic order, then all other possible orders have to be explained in relation to the basic order. The question then is how easy and simple it is to derive the various other orders from the basic order.

Consider therefore first how complicated it would be to derive the various orders if we follow Greenberg’s (1963:109) and Whaley’s (1997:103) claim that the basic order is SVO:

(17) Main clauses (subject-initial)

a.	Sie <u>erzählte</u> gestern eine Geschichte <i>She told yesterday a story</i>	no movement required
b.	Sie hat ___ gestern eine Geschichte <u>erzählt</u> <i>She has yesterday a story told</i>	past participle moved to the right
c.	Sie wird ___ morgen eine Geschichte <u>erzählen</u> <i>She will tomorrow yesterday a story tell</i>	infinitive moved to the right
d.	Sie wird ___ ___morgen eine Geschichte <u>erzählt haben</u> <i>She will tomorrow a story told have</i>	past participle + infinitive moved to the right
e.	Sie ___las gestern eine Geschichte <u>vor</u> <i>She read yesterday a story out</i>	separable prefix moved to the right
f.	Sie wird ___ morgen eine Geschichte <u>vorlesen</u> <i>She will tomorrow a story out-read</i>	separable prefix + infinitive moved to the right

(18) Embedded clauses

a.	... dass sie ___ gestern eine Geschichte <u>erzählte</u> <i>... that she yesterday a story told</i>	finite verb moved to the right
b.	... dass sie ___ ___ gestern eine Geschichte <u>erzählt hat</u> <i>... that she yesterday a story told has</i>	past participle + finite verb moved to the right
c.	... dass sie ___ ___morgen eine Geschichte <u>erzählen wird</u> <i>... that she tomorrow a story tell will</i>	infinitive + finite verb moved to the right
d.	... dass sie ___ ___ ___ morgen eine Geschichte <u>erzählt haben</u> <i>... that she tomorrow a story told have will</i> <u>wird</u>	past participle + infinitive + finite verb moved to the right
e.	... dass sie ___ gestern eine Geschichte <u>vorlas</u> <i>... that she yesterday a story out-read</i>	separable prefix + finite verb moved to the right
f.	... dass sie ___ ___ morgen eine Geschichte <u>vorlesen wird</u> <i>... that she tomorrow a story out-read will</i>	separable prefix + infinitive + finite verb moved to the right

(19) Main clauses (but not subject-initial)

a.	<u>Gestern hat</u> sie ___ ___ ___eine Geschichte <u>erzählt</u> <i>Yesterday has she a story told</i>	adverbial moved to the left + finite verb moved to the left + past participle moved to the right
b.	<u>Eine Geschichte hat</u> sie ___ ___ gestern ___ <u>erzählt</u> <i>A story has she yesterday told</i>	object moved to the left + finite verb moved to the left + past participle moved to the right

To get from a basic SVO order to the various word orders actually found in German, a considerable number of different movements would have to be assumed. Notice e.g. that although the basic order has the verb before the object, it is necessary to assume not only a movement that moves a finite verb to the right, (18a), but also one that moves a finite verb to the left, (19a,b).

Consider now how much more easily things fall into place if the basic order of German is SOV (adapted from Wöllstein-Leisten 1997:28-32, see also 2001:87-124 & Vikner 2005):

(20) same data as (17)

a.	Sie <u>erzählte</u> gestern eine Geschichte ____ <i>She told yesterday a story</i>	finite verb moved to the left
b.	Sie <u>hat</u> gestern eine Geschichte erzählt ____ <i>She has yesterday a story told</i>	finite verb moved to the left
c.	Sie <u>wird</u> morgen eine Geschichte erzählen ____ <i>She will tomorrow yesterday a story tell</i>	finite verb moved to the left
d.	Sie <u>wird</u> morgen eine Geschichte erzählt haben ____ <i>She will tomorrow a story told have</i>	finite verb moved to the left
e.	Sie <u>las</u> gestern eine Geschichte vor ____ <i>She read yesterday a story out</i>	finite verb moved to the left
f.	Sie <u>wird</u> morgen eine Geschichte vorlesen ____ <i>She will tomorrow a story out-read</i>	finite verb moved to the left

(21) same data as (18)

a.	... dass sie gestern eine Geschichte <u>erzählte</u> <i>... that she yesterday a story told</i>	no movement required
b.	... dass sie gestern eine Geschichte erzählt <u>hat</u> <i>... that she yesterday a story told has</i>	no movement required
c.	... dass sie morgen eine Geschichte erzählen <u>wird</u> <i>... that she tomorrow a story tell will</i>	no movement required
d.	... dass sie morgen eine Geschichte erzählt haben <u>wird</u> <i>... that she tomorrow a story told have will</i>	no movement required
e.	... dass sie gestern eine Geschichte <u>vorlas</u> <i>... that she yesterday a story out-read</i>	no movement required
f.	... dass sie morgen eine Geschichte vorlesen <u>wird</u> <i>... that she tomorrow a story out-read will</i>	no movement required

(22) same data as (19)

a.	<u>Gestern</u> <u>hat</u> sie ____ eine Geschichte erzählt ____ <i>Yesterday has she a story told</i>	adverbial moved to the left + finite verb moved to the left
b.	<u>Eine Geschichte</u> <u>hat</u> sie gestern ____ erzählt ____ <i>A story has she yesterday told</i>	object moved to the left + finite verb moved to the left

To get from a basic SOV-order to the various word orders actually found in German, a relatively small number of different movements will have to be assumed. Notice e.g. that a finite verb is only ever moved to the left, (20) and (22), never to the right.

This concludes my demonstration of the theoretical reasoning that leads me (and many others) to think that German (and Dutch and Frisian) are SOV-languages, not SVO.

The advantage of making a distinction between Scandinavian and English as **SVO** and Dutch, Frisian and German as **SOV** is that it allows further generalisations to be made. One such generalisation is that Germanic SVO languages always put the finite auxiliary verb, *have*, to the left of the verb phrase in embedded clauses, (23), whereas Germanic SOV languages most often put the finite auxiliary verb to the right of the verb phrase in embedded clauses, (24):

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

(24) SOV			verb phrase	aux
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

This can be formulated as follows:

(25) SVO languages only have **aux-VP**, whereas only SOV languages can have **VP-aux**.

From this we can e.g. derive the prediction that if a Germanic language has **VO** order as in English (i.e. *read* before *the book*), it will **not** have **VP-aux** order (i.e. *read the book* before *have*). In other words, we predict that no Germanic language can have the order ... *because I read the book have*.

One potential problem with this difference in base order between German and Danish is that these two languages may now seem much more different than they "really are". However, although this analysis says that they have different basic orders (German is SOV, Danish SVO), they still have some central properties in common, e.g. concerning the two first positions in main clauses. As shown in (7) for Danish (repeated here as (26)) and in (20) for German (repeated here as (22)), in main clauses in both languages the finite verb moves into the second position and e.g. the object or an adverbial (or indeed the subject) moves into the first position.

(26)	①	②		
a.	<u>I går</u>	<u>havde</u>	han kun drukket hvidvin ____	adverbial to ① + finite verb to ②
b.	<u>Hvidvin</u>	<u>havde</u>	han kun drukket ____ i går	object to ① + finite verb to ②

(27)	①	②		
a.	<u>Gestern</u>	<u>hat</u>	sie ____ eine Geschichte erzählt ____	adverbial to ① + finite verb to ②
b.	<u>Eine Geschichte</u>	<u>hat</u>	sie gestern ____ erzählt ____	object to ① + finite verb to ②

My typological classification would therefore be that both Danish and German are "verb-second" even though Danish is SVO and German SOV. Danish and English on the other hand have in common that both are SVO, but English is not "verb-second" as seen by the fact that the English version of e.g. (26a) would not have the verb in the second position before the subject, but in the third position after the subject:

(28) Yesterday he had only drunk white wine

I thus hope to have shown that it is not just theoretical linguistics that may benefit from comparative assistance, comparative linguistics can also benefit very much from theoretical considerations, to the extent of making clear typological predictions possible, like the link between **SVO** and **aux-VP** discussed immediately above.

Before we can get to the refreshments this afternoon, however, there is one more thing I want to talk about, namely ...

5. Perspectives

From what I have said so far, you will probably not be at all surprised to hear that the overall objective of my "special responsibilities"-professorship is to help strengthen both the research and the teaching of theoretical and comparative linguistics, not only in the Institute of Language, Literature & Culture but also in the rest of the Faculty of Humanities.

I will work for -

- more externally financed research projects with local researchers as principal investigators and with post doc.s as research assistants.

E.g. Henrik Jørgensen's and my project on object positions,
www.hum.au.dk/engelsk/engsv/objectpositions/.

- more international cooperations and networks.

E.g. the network on syntactic variation in Scandinavian dialects, *ScanDiaSyn*, (<http://uit.no/scandiasyn>). *ScanDiaSyn* also forms the basis of the *Nordic Center of Excellence in Microcomparative Syntax*, <http://norms.uit.no/>, which among other things will be financing post.doc. stays of 2-3 semesters in the other Scandinavian countries.

- more cooperation between departments and also between faculties.

E.g. the research focus area *Cognition, Communication and Culture*, <http://www.pet.au.dk/~andreas/cccl/>. The entire focus area is coordinated by Andreas Roepstorff from the local centre for neuroscience, and it involves all five faculties. I am the coordinator for one of the five thematic groups, the one on linguistics.

- more cooperation with neighbouring disciplines.

An example, which was also one of the first results of the focus area on cognition, was the cooperation concerning Ken Ramshøj Christensen's ph.d. on syntax and neuroscience, which Ken successfully defended in September 2005.

- more projects involving electronic corpora of linguistically analysed texts.

E.g. *ACOD - University of Aarhus Corpus of Old Danish*, www.hum.au.dk/nordisk/norhrafn/acod, which was set up by Gunnar Hrafn Hrafnbjargarson and Henrik Jørgensen in 2004, along the same lines as the *Pennsylvania Corpus of Middle English*, making more direct comparisons possible between Old Danish and Middle English.

- more international conferences and Ph.D. courses.

E.g. the Ph.D. course on Object Positions and Clause Structure, which will take place at Sandbjerg, June 14-17, 2006, and which sponsored by the project on object positions mentioned above, and by the *Sprogvidenskabelig Forskerskole Nord*.

- more cooperation concerning supervision of both Ph.D. dissertations and M.A. dissertations.
I am involved in Johannes Kizach's Ph.D. project which compares Russian, English and Danish, and I am also involved in various M.A. dissertation projects on English, Danish, German, and French.

- more cooperation on teaching comparative courses between the neighbouring disciplines and departments.

This is not always so easy, however. I have more than once taught a course on the comparative syntax of English and Danish. Although I was hoping to attract students of Danish, this hardly ever happened, as the course regulations for Danish did not allow B.A. students any benefits from taking a course in the English Department. It would seem, however, that such institutional obstacles will soon be a thing of the past. A course in comparative Romance linguistics for students of the different Romance languages is taking place this semester, coordinated by Alexandra Kratschmer, and hopefully it will set an example that others will wish to follow.

I hope to have shown not only how attractive theoretical and comparative linguistics is from an intellectual and research strategic point of view, but also how it can be carried out and how this may have a number of positive effects and perspectives for the Institute of Language, Literature & Culture and for the Faculty of Humanities.

References

- Allan, Robin, Philip Holmes, & Tom Lundskær-Nielsen (1995) *Danish, a Comprehensive Grammar*. London: Routledge.
- Arndt, Hans (2003): *Sproget: Hverdagens Mirakel*. Aarhus University Press
- Bach, Emmon, (1962): "The Order of Elements in a Transformational Grammar of German" in *Language* **38**, 263-269.
- Bierwisch, Manfred: 1963, *Grammatik des Deutschen Verbs*, Akademie-Verlag, Berlin.
- Cheng, Lisa & Johan Rooryck (2000): "Licensing Wh- in situ", *Syntax* **3.1**, 1-19.
- Chomsky, Noam: 1977, "On Wh-Movement" in Peter Culicover, Thomas Wasow, & Adrian Akmajian (eds.), *Formal Syntax*, Academic Press, New York, pp.-71-132.
- Christensen, Ken Ramshøj (2005): *Interfaces: Negation - Syntax - Brain*. PhD dissertation, Department of English, University of Aarhus.
- Diderichsen, Paul (1962), *Elementær Dansk Grammatik*. København: Gyldendal. (First published 1946).
- Gould, Steven J. (1992): "Dinosaurs in the haystack", *Natural History* **101.3**, pp. 2-13.
- Greenberg, Joseph: 1963, "Some universals of grammar with particular reference to the order of meaningful elements" in Joseph Greenberg (ed.): *Universals of Language*, MIT Press, Cambridge MA, pp. 73-113.
- Hansen, Erik (1980) *Dæmonernes Port*. København: Hans Reitzel.
- Hrafnbjargarson, Gunnar Hrafn & Henrik Jørgensen (2004) *The Aarhus Corpus of Tagged Old Danish Texts*, Nordisk Institut, Aarhus Universitet.
<www.hum.au.dk/nordisk/norhrafn/acod>
- Jørgensen, Henrik (2000) *Indføring i Dansk Syntaks*. Nordisk Institut, Aarhus Universitet.
<<http://www.hum.au.dk/nordisk/lokal/pdf/syaug00.pdf>>
- Koster, Jan (1975): "Dutch as an SOV Language" in *Linguistic Analysis* **1**, 111-136.
- Shermer, Michael (2001): "Colorful Pebbles and Darwin's Dictum", *Scientific American* **284.4**, p. 38.

- Togeby, Ole (2003) *Fungerer denne sætning? - Funktionel dansk sproglære*. København: Gads Forlag.
- Vikner, Sten (1987): "Case Assignment Differences Between Danish and Swedish". Robin Allan & Michael P. Barnes (eds.), *Proceedings of the Seventh Biennial Conference of Teachers of Scandinavian Studies in Great Britain and Northern Ireland*, University College London, London, pp. 262-281. <www.hum.au.dk/engelsk/engsv/papers/vikn87a.pdf>
- Vikner, Sten (1995): *Verb Movement and Expletive Subjects in the Germanic Languages*. New York: Oxford University Press.
- Vikner, Sten (2001), *Verb Movement Variation in Germanic and Optimality Theory*, "Habilitationsschrift", University of Tübingen. <www.hum.au.dk/engelsk/engsv/papers/viknhabi.pdf>.
- Vikner, Sten (2005): "Immobile Complex Verbs in Germanic", *Journal of Comparative Germanic Linguistics* **8.1-2**, 83-115. <www.hum.au.dk/engelsk/engsv/papers/vikn05b.pdf>
- Whaley, Lindsay (1997): *Introduction to typology: The unity and diversity of language*. Thousand Oaks, CA: Sage Publications.
- Wöllstein-Leisten, Angelika, Axel Heilmann, Peter Stepan & Sten Vikner (1997): *Deutsche Satzstruktur*, Stauffenburg, Tübingen.