

Such is *such*, and so is *so*

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1. Introduction

Larger question: What types of movement can be found in nominals?

The focus in this paper is on two etymologically related words used to express degree in three Germanic languages: *so* and *such* in English, *så* and *sådan* in Danish, and *so* and *solch* in German.

- | | | | | |
|-----|--------|-----------|-----------------|--------------|
| (1) | a. En. | <i>so</i> | <i>such</i> | |
| | b. Da. | <i>så</i> | (<i>slig</i>) | <i>sådan</i> |
| | c. No. | <i>så</i> | <i>slik</i> | |
| | d. Sw. | <i>så</i> | (<i>slik</i>) | <i>sån</i> |
| | e. Ge. | <i>so</i> | <i>solch</i> | |
| | f. Du. | <i>zo</i> | <i>zulk</i> | |

Syntax:	position (pre- or post- indefinite article)
Morphology:	agreement morphology (in Danish and German)
Semantics:	whether an AdjP or a DP/NP is modified

1.1 A note on etymology

In Germanic, the word *such/solch/slig* is a grammaticalised form of *so* formed from *swa*, 'so' + **līko*, 'body', 'form'. In Danish, *slig* (also from *swa* + **līko*) is archaic and is now superseded by *sådan*: *så* + *dan* from Low German *dôn* 'do' (cf. *hvordan* 'how': 'where' + *dan*).

The examples below from Søren Kierkegaard's diaries (1834-1846) show that *slig* was still used in the mid 19th century:

- (2) Da. Engang traf han paa slig-t et Sted sammen med en Reisende ...
Once met he in such.NEUT a.NEUT place up with a traveller
 'Once he met a traveller in such a place ...'
- (3) Da. Hver Gang en Slig Tanke falder mig ind ...
Every time a.COM such.COM thought falls me in
 'Every time such a thought occurs to me ...'

As may be seen here, Danish *slig* may occur both before and after the indefinite article. The same holds for Danish *sådan* and German *solch*. This is impossible in English, and has been since the 14th century (Wood 2003: 315):

- (4) ME þis kni3tes þoþte wonþer gret þat a such heiward ...
the knights thought wonder greatly that a such herdsman
 (c1290, St. Eustace 144 in S.E. Leg. 397)

1.2 Degree elements and the left periphery of nominals

More attention was paid to nominals following Abney's (1987) suggestion that noun phrases are preceded by a functional category, determiner phrase, and adjective phrases are preceded by a functional category degree phrase (1987:301-321). English expressions involving *so*, *too*, *as*, *how*, *this*, *that* plus an adjective are particularly interesting as these expressions may occur on the left periphery of nominals, preceding the indefinite article:

- (5) a. . . . which are so big a part of the present system
 b. . . . ??which are a so big part of the present system (COCA)

In the terms of Quirk et al. (1985:257), *such* is a "predeterminer". But it is a special predeterminer which, in English, may only precede the indefinite article and not the definite article:

- (6) a. ... which are a major part of the present system
 b. ... which are such a major part of the present system
- (7) a. ... which are the major part of the present system
 b. *... which are such the major part of the present system

Such is also a degree word and has a reading termed "intensifying" by Bolinger (1972:60). As soon as there is a gradable element in the context, either an adjective as in (8), or a gradable noun as in (9), *such* may have the meaning 'a reaction as violent as this reaction' or 'a person as foolish as this person'.

- (8) I did not expect such a violent reaction.
 (9) I did not expect to meet such a fool.

The syntax and semantics of *such* are complicated by the fact that it also has what we will refer to as a kind reading, a reading that Bolinger (1972:60) terms "identifying". In (10), *such a machine* means 'a machine of this kind' because there is no possibility of construing *machine* as a gradable noun:

(10) I have never seen such a lamp before.

In (10), the only possibility is for *such* to have a kind reading, but (8) and (9) are both ambiguous between kind and degree. Whereas English *such* may have both kind and degree readings, and sometimes be ambiguous between the two, English *so* (inside a nominal expression) is only a degree adverb, as in (5)a above.

Although Wood 2002 focussed on explaining the syntax of *such* in terms of kind and degree, the starting point in this paper will be on what is modified, the DP/NP, or the adjective phrase.

1.3 Overview of possible word orders

Shown below is a summary of the possible word order and agreement morphology in the three languages:

(11)

	pre-article	post-article
modifying the whole DP/NP	a	b
modifying only the AdjP	c	d

(12) **English**

	pre-article	post-article	pre-article	post-article
DP/NP	such	-	-	-
AdjP	-	-	so	%so

(13) **Danish**

	pre-article	post-article	pre-article	post-article
DP/NP	sådan(t)	sådan(t)	-	-
AdjP	-	-	så	så

(14) **German**

	pre-article	post-article	pre-article	post-article
DP/NP	solch	solches	so	-
AdjP	-	solch	-	so

English: Pre-article *such* modifies the DP (12)a:

(15) In education such a policy would improve performance indicators immediately
(BNC, *The Scotsman*)

English: Pre-article *so* modifies the AdjP (12)c:

(16) who was clearly unhappy at the arrival of so powerful a neighbour.
(BNC, *Richard III*. Horrox, Rosemary. Cambridge: CUP, 1992)

German: Post-article *solch* modifies the DP (14)b:

(17) Die Sache muß jedenfalls eine solche Dimension gehabt haben, daß Kohl und Boenisch schnell handeln wollten.
the case must at any rate a such dimension had have, that Kohl and Boenisch quickly act wanted


(*Die Zeit*, 21.06.1985, www.zeit.de)

German: Post-article *solch* modifies the AdjP (14)d:

- (18) Auf ein Länderspiel wurde eine solch hohe Summe gesetzt, dass sich sogar Staatspräsident Saakaschwili einschaltete
On an international match was a such high amount bet that even president S. got involved
 (Die Zeit, 26.11.2009, www.zeit.de)

1.4 Possible derivations

With respect to the syntax, two possible derivations of pre-article *such* and *so* in English, have been suggested in the recent literature. In one derivation there is movement from the prototypical Germanic adjective position preceding the noun to a position preceding the indefinite article, as in (19):

- (19) [such / so bad]_j a t_j hotel
- 

The other suggestion is that *such* and *so* expressions originate as predicates in a small clause that has a DP subject as in (20):

- (20) [such / so bad]_k a hotel [ec t_k]
- 

We compare *so* and *such* to their equivalents in Danish, *så/sådan*, and in German, *so/solch*, in order to decide which of the two derivations above is most plausible.

German and Danish differ morphologically and syntactically from English.

- It is possible to find *så/sådan* and *so/solch* following as well as preceding the indefinite article.
- German and Danish have morphological agreement on adjectives.
- Danish: both predicative and attributive adjectives agree
- German: adjectives only agree when they are attributive.

- (21) a. Ge. Ein Bus ist grün_, die anderen sind gelb_
 b. Da. En bus er grøn_, de andre er gul_
- One bus.MASC/COM is green, the others.PL are yellow*

- (22) a. Ge. Ein Haus ist grün_, die anderen sind gelb_
 b. Da. Et hus er grønt_, de andre er gul_
- One house.NEUT is green the others.PL are yellow*

(Vikner 2001:399-400)

We will argue, on the basis of adjectival agreement morphology, that post-article expressions are represented by the base order of (19), *a so bad hotel* and pre-article ones are derived from predicate raising as in (20), from *a hotel so bad* to *so bad a hotel*.

2. *so* constructions in English, Danish and German

English degree adverbs: *so, how, as, too, this, that*.

Danish: *så, for, hvor*.

German *so, zu, wie*.

The tables below set out the logical possibilities in the three languages:

(23)

	pre-article	post-article
modifying the whole DP/NP	a	b
modifying only the AdjP	c	d

(24) **English**

	pre-article	post-article	
DP/NP	-	-	a. * <i>so a hotel</i>
AdjP	so	% so	b. * <i>a so hotel</i>
			c. <i>so bad a hotel</i>
			d. ?? <i>a SO bad hotel</i>

(25) **Danish**

	pre-article	post-article	
DP/NP	-	-	a. * <i>så et hotel</i>
AdjP	så	så	b. * <i>et så hotel</i>
			c. <i>så dårligt et hotel</i>
			d. <i>et så dårligt hotel</i>

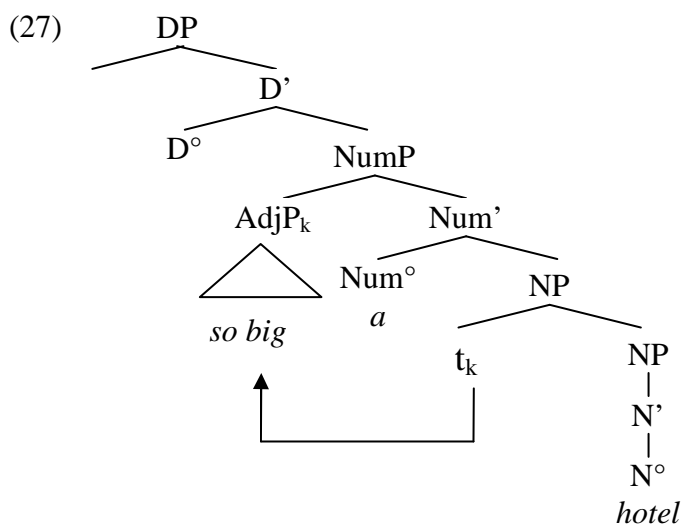
(26) **German**

	pre-article	post-article	
DP/NP	so	-	a. <i>so ein Hotel</i>
AdjP	-	so	b. * <i>ein so Hotel</i>
			c. * <i>so schlecht ein Hotel</i>
			d. <i>ein so schlechtes Hotel</i>

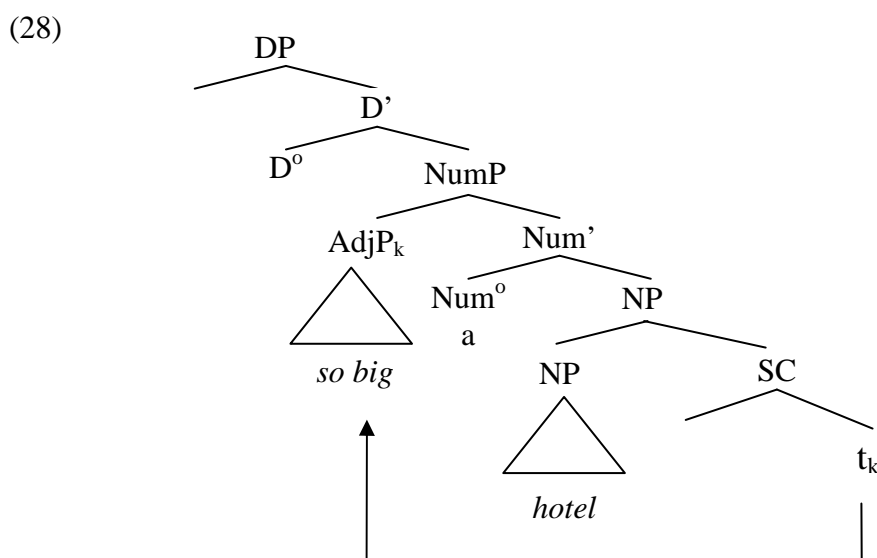
- English: if native speakers accept (24)d at all it is with heavy stress on *so*
- English and Danish: *so/så* only modifies an adjective phrase and has to be immediately adjacent to that phrase.
- German and Danish: *so/så* plus adjective may either precede or follow the indefinite article
- German and Danish: obligatory agreement between the adjective and the (neuter) noun.
- German: pre-article *so* is possible without a following adjective. This means that it is possible for *so* in German to modify the entire DP as well as the AdjP or NP. German *so* can be ambiguous between kind and degree unlike English and Danish *so* and *så* which only have degree readings.

2.1 Deriving pre-article *so*

Two possible derivations: In one possible derivation of pre-article *so*, (which we will not be adopting) the adjective phrase *so bad* would be base-generated in the prototypical adjective position (i.e. following the article and preceding the noun) and then move into Spec-NumP, as was described in (19) above, shown in (27) below (Matushansky 2002; Wood 2002, 2004):



An alternative derivation (which we prefer) would be through predicate raising from the small clause, which has the same position that a relative clause would have, i.e. right-adjoined to the NP as in (20) above shown in (28) below: (e.g. Zamparelli 1995; Bennis, Corver and den Dikken 1998; Corver 1997; Wood 2002:106).



2.2 Support for the predicate raising analysis

Firstly, constructions with the surface word order of (28) are possible:

(29) She told me she never saw a man so pleased by a glass of wine. (BNC)

(30) It is rare to see a house so little altered. (BNC)

(31) Maybe he was a man so obsessed with hidden things that he simply couldn't see open criminality. (BNC)

(32) The imagination had become a power so terrible that he could not risk indulging it. (BNC)

These are possibly reduced relative clauses.

The second piece of evidence comes from the constructions below, from Zamparelli (1995: 132-33), and from COCA. Many dialects of English have an optional *of* in *so* + adjective constructions.

- (33) so tall (of) a man (that he had to lean on the basket)
 (34) I was so cold of a person at one time in my life; closed off all my own feelings (COCA)

This *of* is not a case-assigning preposition, nor a possessive *of* or a partitive *of*. It is similar to the meaningless element, Dutch *van*, argued by Bennis, Corver and den Dikken (1998:86) to be a functional head parallel to the clausal copula in examples such as the following:

- (35) The island is a jewel.
 (36) a jewel of an island
 (37) Statsministeren i tegneserien var en lille nar.
 Prime-minister-the in cartoon-the was a little fool
 (38) en lille nar af en statsminister
 a little fool of a prime-minister (KorpusDK)

A third piece of evidence is that in English, adjectives that are usually only predicative (e.g. *alike*, *awake*, *ashamed*, *upset*, *afloat*, *alike*, *alone*) appear to be better in these constructions than when they occur in the canonical attributive position. Comparing the (b) and (c) examples in (39) and (40) below it may be seen that the c examples are grammatical.

- (39) a. The shoplifter is ashamed.
 b. *the ashamed shoplifter
 c. the so ashamed shoplifter
 d. So ashamed a shoplifter have I never seen.
 (40) a. The twins are alike.
 b. *the alike twins
 c. the so alike twins

If the (c) examples are derived through predicate raising it would explain why they are grammatical, even though the (b) examples are not.

A fourth piece of evidence is provided by Lenerz and Lohnstein (2004:83), who point out that although (41)b is ungrammatical, native speakers nevertheless have clear intuitions of what the form should be, not only uninflected (as predicate adjectives are in German, see e.g. Vikner 2001) but also in the predicate form, *hoch*. Therefore, although both are ungrammatical, (41)b is better than (41)a.

- (41) a. *so *hoh- ein Haus
 so high-ATTR a house
 b. *so hoch ein Haus
 so high-PRED a house

We argued above that the predicate raising analysis is the preferred analysis for expressions involving pre-article *so*, *så* and *so*. Below we argue that also for pre-article *such*, *sådan* and *solch* expressions, the predicate raising analysis is preferred over fronting from attributive position.

3. *such* constructions in English, Danish and German

Also for *such/sådan/solch* there are four possible combinations of word order and modification. *Such* obligatorily precedes the article in present-day English (although, as pointed out in Wood 2004:315, in earlier English and in some dialects post-article *such* is found). However, in both Danish and German, both pre- and post-article orders are found:

(42)

	pre-article	post-article
modifying the whole DP/NP	a	b
modifying only the AdjP	c	d

(43) **English**

	pre-article	post-article
DP/NP	such	-
AdjP	-	-

- a. *such a hotel*
- b. **a such hotel*
- c. **such bad a hotel*
- d. **a such bad hotel*

(44) **Danish**

	pre-article	post-article
DP/NP	sådan(t)	sådan<u>t</u>
AdjP	-	-

- a. *sådan(t) et hotel*
- b. *et sådan hotel*
- c. **sådan(t) dårligt et hotel*
- d. **et sådan(t) dårligt hotel*

(45) **German**

	pre-article	post-article
DP/NP	solch	solch<u>es</u>
AdjP	-	solch

- a. *solch ein Hotel*
- b. *ein solches Hotel*
- c. **solch(es) schlecht(es) ein Hotel*
- d. *ein solch schlechtes Hotel*

- English: is the most restrictive because *such* must precede the article, (43)a.
- English, German and Danish: pre-article *such* modifies the entire DP; it cannot just modify an adjective.
- Danish allows both a pre-article *sådan*, which modifies the DP, (44)a, and a post-article *sådan*, (44)b, which modifies the NP. Post-article *sådan* is always inflected, whereas pre-article *sådan* may or may not be inflected.
- German: Like English and Danish, it has a pre-article *solch*, which modifies the DP, (45)a, but in addition, it has two different forms of post-article *solch*. Inflected post-article *solch* modifies the NP, (45)b, whereas uninflected post-article *solch* modifies an AdjP, (45)d.

3.1 German post-article *solch*

For (45)d, there might seem to be two possibilities, as *solch* could also have been inflected in this position (i.e. following an article and preceding an adjective -- *ein solch_ schlechtes Hotel* and *ein solches schlechtes Hotel*). However, when *solch* is inflected in this position, it modifies the NP, and so this would really be a subcase of (45)b (i.e. *ein solches Hotel*). Therefore (45)d, where *solch* in the post-article position modifying an AdjP, only exists in one version, uninflected, where we suggest that *solch* is an adverb, not an adjective (see below). In other words, when post-article *solch* modifies the NP, it inflects like an adjective:

- (46) . . . was ein solcher Künstler für eine Gage bekommt
what a such artist receives for a fee

However, when post-article *solch* modifies an adjective, it is never inflected:

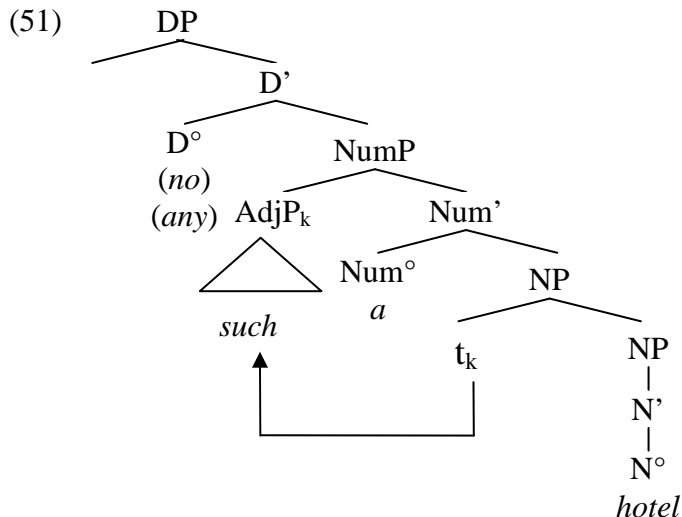
- (47) . . . mit einem solch großen Aufwand
with a.DAT such big.DAT effort (Fabricius-Hansen et al. 2005:330)
- (48) Selten hat ein solch dickes Buch meine Aufmerksamkeit mehr gefesselt als dieses.
Seldom has a.NOM such thick.NOM book captured my attention more than this.
(Fabricius-Hansen et al. 2005:332)

This difference is parallel to the difference between attributive adjectives (inflected) and adverbs (uninflected) in German:

- (49) Ein unglaubliches Buch
An incredible.NEUT book
- (50) Ein unglaublich_ gutes Buch
An incredibly good book

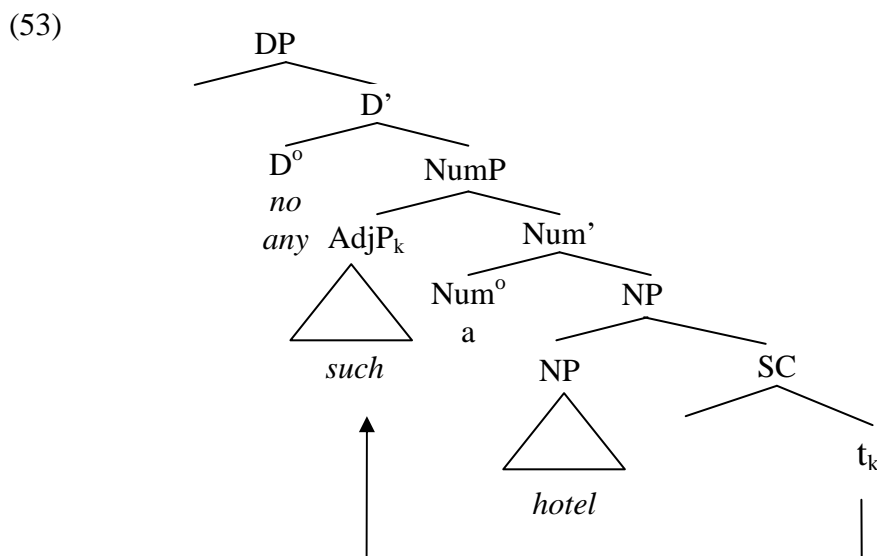
3.2 Deriving pre-article *such*

One possible derivation of pre-article *such* is for it to be base-generated in the prototypical adjective position (i.e. following the article and preceding the noun) and then moved to a position preceding the indefinite article. One implementation based on Ritter (1991) was suggested by Wood (2002) (see also Matushansky 2002:48). Here, *such* moves from the prototypical attributive adjective position¹, which is left-adjoined to the NP:



Another possible derivation is predicate raising, as in Wood (2002:112), who takes the idea from Zamparelli (1995) and from Bennis, Corver & den Dikken's (1998) derivation of *wat voor* constructions. The main idea is that *such* originates as a predicate in a verbless clause (a so-called small clause). This small clause has the same position that a relative clause would have, i.e. right-adjoined to the NP.

(52) [Small Clause [SC-subject teachers] [SC-predicate such as these]] is what every student fears.



¹ We are abstracting away from the internal structure of the adjective phrase (see e.g. Bresnan 1973, Corver 1997, Wood 2002).

3.3 Support for the predicate raising analysis

3.3.1 Morphology and German pre-article *solch*

Deriving German pre-article *solch* from a predicate as illustrated in (53) would account for why it is never inflected (similar to German *manch ein* 'many a' and *welch ein* 'what a') given that predicate adjectives are never inflected in German, as opposed to Danish, cf. e.g. Vikner (2001):²

- (54) Dann wird es klar, wie klug und peinlich genau solch ein Künstler wie Wagner war.
Then it becomes clear how intelligent and pedantically exact such an artist as Wagner was.

(Fabricius-Hansen et al. 2005:331).

- (55) Ge. a. Wo findet man *solch* ein Hotel ?
b. *Wo findet man *solches* ein Hotel ?
Where finds one such a hotel

- (56) a. Ge. Ein Bus ist grün_, die anderen sind gelb_
b. Da. En bus er grøn_, de andre er gule_
One bus.MASC/COM is green, the others.PL are yellow

- (57) a. Ge. Ein Haus ist grün_, die anderen sind gelb_
b. Da. Et hus er grønt_, de andre er gule_
One house.NEUT is green the others.PL are yellow

3.3.2 Morphology and Danish pre-article *sådan*

The derivation of Danish pre-article *sådan* from a predicate as illustrated in (53) is at first glance less obvious than the parallel derivation for German pre-article *solch*. We need to explain the agreement morphology of *sådan*.

- Danish predicative adjectives always agree as in (57)b
- Danish predicative *sådan* does not behave as a prototypical adjective because agreement is an option, not obligatory.
- Danish pre-article *sådan*, derived from a predicate, may be inflected, but most often is not, (44)a.
- Despite the optional morphology we still argue for the predicate derivation because pre-article *sådan* were derived from an attributive it would be expected to always inflect.

The predicate derivation analysis receives further support from the following corpus data.

² As pointed out by Harry Perridon (p.c.), German may leave pre-article *all* uninflected. This is not possible in Danish, where inflection on *alle* is obligatory.

- (i) a. mit all diesen Büchern GERMAN
b. *med al disse bøger DANISH
with all_ these books
- (ii) a. mit allen diesen Büchern GERMAN
b. med alle disse bøger DANISH
with all.PL these books

Although the possibility of leaving *all* uninflected in German is reminiscent of pre-article *solch*, it is not clear to us whether (ia) could or should be derived from a predicative structure, given that *all* is not a very likely candidate for a predicate.

First, consider the following figures for pre-article *sådan* in Danish (KorpusDK, November 2009):

- Pre-article *sådan* always modifies a DP, regardless of whether this DP contains an unmodified noun (58) or also an AdjP, (59)
- Inflection of prearticle *sådan* is possible, but clearly not preferred (the b-figures are very much bigger than the a-figures).

(58) a.	<i>sådan</i> <u>t</u> <i>et</i> + NOUN	52	(such.NTR a.NTR + NOUN)
b.	<i>sådan</i> <u>_</u> <i>et</i> + NOUN	1460	(such.COM a.NTR + NOUN)
c.	<i>sådan</i> <u>t</u> <i>en</i> + NOUN	0	(such.NTR a.COM + NOUN)
d.	<i>sådan</i> <u>_</u> <i>en</i> + NOUN	3400	(such.COM a.COM + NOUN)

(59) a.	<i>sådan</i> <u>t</u> <i>et</i> + ADJ + NOUN	9	(such.NTR a.NTR + ADJ + NOUN)
b.	<i>sådan</i> <u>_</u> <i>et</i> + ADJ + NOUN	227	(such.COM a.NTR + ADJ + NOUN)
c.	<i>sådan</i> <u>t</u> <i>en</i> + ADJ + NOUN	0	(such.NTR a.COM + ADJ + NOUN)
d.	<i>sådan</i> <u>_</u> <i>en</i> + ADJ + NOUN	600	(such.COM a.COM + ADJ + NOUN)

Compare these figures to the following figures from a search³ of *Infomedia*, a newspaper database, of Danish *sådan* as a predicate (these strings are not sufficiently frequent to show up in KorpusDK):

(60) a.	<i>det</i> <i>er</i> <i>sådan</i> <u>t</u> <i>at</i> ..	3	(it.NTR is such.NTR that ...)
b.	<i>det</i> <i>er</i> <i>sådan</i> <u>_</u> <i>at</i> ..	1462	(it.NTR is such.COM that ...)
c.	<i>den</i> <u>t</u> <i>er</i> <i>sådan</i> <u>t</u> <i>at</i> ..	0	(it.COM is such.NTR that ...)
d.	<i>den</i> <u>t</u> <i>er</i> <i>sådan</i> <u>_</u> <i>at</i> ..	9	(it.COM is such.COM that ...)

- Predicative *sådan* may be inflected, but like pre-article *sådan*, the non-inflected form, (60)b, is very much more frequent than the inflected one, (60)a.
- Predicative *sådan* inflects following the same pattern as pre-article *sådan*.
- There is a sharp contrast with the figures for post-article *sådan*, (KorpusDK, November 2009):

(61) a.	<i>et</i> <i>sådan</i> <u>t</u> + NOUN	1639	(a.NTR such.NTR + NOUN)
b.	<i>et</i> <i>sådan</i> <u>_</u> + NOUN	116	(a.NTR such.COM + NOUN)
c.	<i>en</i> <u>t</u> <i>sådan</i> <u>t</u> + NOUN	7	(a.COM such.NTR + NOUN)
d.	<i>en</i> <u>t</u> <i>sådan</i> <u>_</u> + NOUN	5207	(a.COM such.COM + NOUN)

(62) a.	<i>et</i> <i>sådan</i> <u>t</u> + ADJ + NOUN	102	(a.NTR such.NTR + ADJ + NOUN)
b.	<i>et</i> <i>sådan</i> <u>_</u> + ADJ + NOUN	7	(a.NTR such.COM + ADJ + NOUN)
c.	<i>en</i> <u>t</u> <i>sådan</i> <u>t</u> + ADJ + NOUN	0	(a.COM such.NTR + ADJ + NOUN)
d.	<i>en</i> <u>t</u> <i>sådan</i> <u>_</u> + ADJ + NOUN	399	(a.COM such.COM + ADJ + NOUN)

These figures show that inflection of post-article *sådan* is not only possible, but clearly also preferred (the b-figures are very much smaller than the a-figures).

The figures cited here support our analysis that pre-article *sådan* is derived from a small clause predicate (both are only inflected in a small minority of the total cases) and not from post-article *sådan* (which is inflected in a large majority of the total cases).

³ The search was carried out in July 2010. The results were checked for mistakes and repetitions. For (60)b, the figures have been estimated based on the first 100 returns. Note that a Google search (July 2010) returned 6,030 cases for (60)a (compared to the 488,000 cases returned by (60)b). This is support for the 3 occurrences in (60)a representing a real option.

4. Summary of the derivations

Shown below is a summary of the possible word order and agreement morphology in the three languages:

(63)

	pre-article	post-article
modifying the whole DP/NP	a	b
modifying only the AdjP	c	d

(64) **English**

	pre-article	post-article	pre-article	post-article
DP/NP	such	-	-	-
AdjP	-	-	so	%so

(65) **Danish**

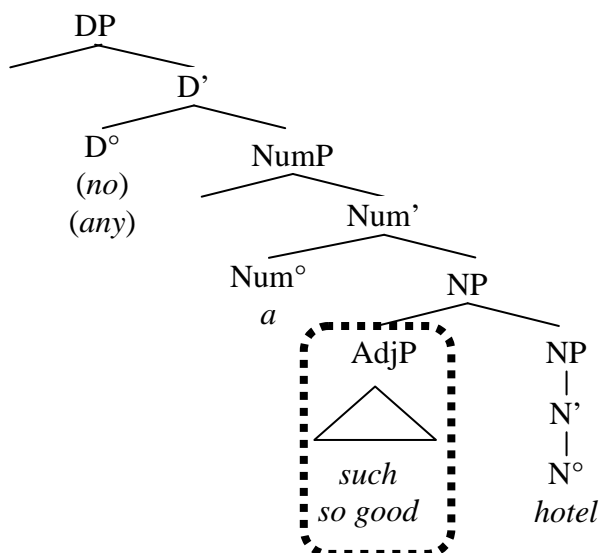
	pre-article	post-article	pre-article	post-article
DP/NP	sådan(t)	sådan	-	-
AdjP	-	-	så	så

(66) **German**

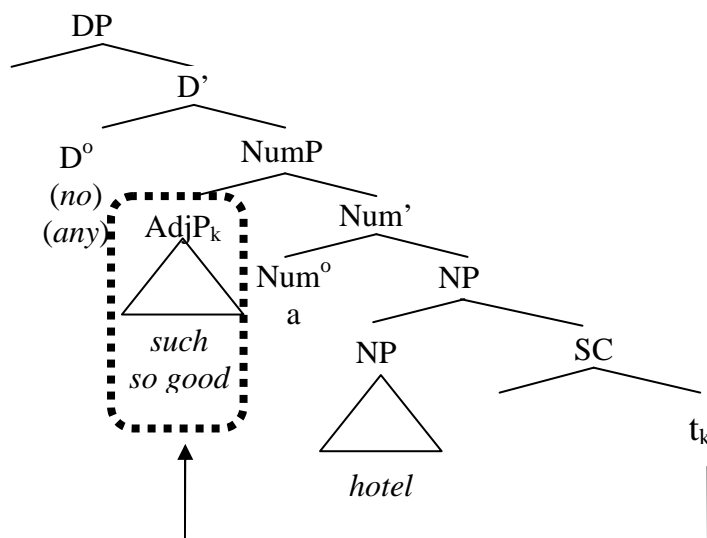
	pre-article	post-article	pre-article	post-article
DP/NP	solch	solches	so	-
AdjP	-	solch	-	so

In the post-article versions the *so*, *så*, *so* and *such*, *sådan*, *solch* expressions are generated as attributives as in (67) and in the pre-nominal ones they are generated as predicates as in (68).

(67)



(68)



- As (67) shows, (63)b,d (i.e. post-article *so/such*) are base-generated in situ, and inflected as are all attributive adjectives in most Germanic languages.
- As (68) shows, we derive (63)a/c (i.e. pre-article *so/such*) by movement out of a postnominal predicate position, which is why pre-article *so/such* are inflected only in languages where predicative adjectives are inflected.
- The reason why German pre-article *solch/so*-phrases (i.e. (63)a/c) are never inflected is that they are derived from a predicate.
- The reason why the post-article *solch* that modifies an AdjP (i.e. (63)d) is not inflected is that it is an adverb, not an adjective.
- In Danish, there is no post-article *sådan* that modifies an adjective (i.e. (63)d).
- Danish pre-article *sådan* (i.e. (63)a/c) is peculiar in that it may, but most often doesn't, show agreement with the NP. This is completely in line with it being derived from a predicate, because also with predicative *sådan* agreement is only a rarely used option, not a must.
- The structure in (68) is fully compatible with complicated examples such as (69), where *such* follows *any* but precedes *a*, as *any* is in D° and *a* is in Num°:

(69) on the basis of any such a proposal or application form

5. Appendix: Language change

- Bolinger (1972:92) noted that for English, the direction of change is from kind to degree.
- As will be shown below, the significant factor is syntactic, whether or not an element can modify the DP/NP (as with German *so*) and whether or not it can modify an adjective phrase.
- The kind and degree readings then fall out from whether the modified nouns and adjectives are gradable, as seen below.

5.1 German *so* and grammaticalisation

- German is the only one of the three languages in which *so* may precede the indefinite article without an adjective, i.e. *so ein Hotel* in (26)a.
- German is also the only one of the languages in which *so* may have a kind reading as well as a degree reading.

As long as the noun is not gradable, (70)a, or the noun plus adjective is not gradable (71)b, the kind reading is the only one available.

- (70) a. Mit so einem Ergebnis hat niemand von uns gerechnet
With so a result has no one of us counted
(*Die Zeit*, 08.03.2010, www.zeit.de)

- b. Jetzt steht so ein medizinisches Großgerät zur Untersuchung von Patienten
in fast jeder größeren Klinik.
*Now stands such a medical large-instrument for the examination of patients
in almost every larger clinic*
(*Die Zeit*, 02.05.2002, www.zeit.de)

However, as soon as there is a gradable noun, (71)a or a gradable adjective, (71)b, in the DP/NP, it is possible for the reading to be ambiguous between kind and degree.

- (71) a. Es ist so eine Verschwendung.
It is such a waste
(*Die Zeit*, 16.07.1998, www.zeit.de)
- b. So ein breites Repertoire finde ich nicht in jeder Epoche.
So a wide selection find I not in every period
(*Die Zeit*, 02.02.2010, www.zeit.de)

- A change has taken place in German in which *so* has added to its functions.
- The grammaticalisation of German *so* to a cliticised determiner is evident from the observation that (72)b is even possible in the plural, so that as *ein* becomes more grammaticalised, it loses its singular feature (Hole & Klump 2000, Lenerz & Lohnstein 2004).

- (72) a. So'n Buch würde ich nie lesen
So-a.SG book would I never read
- b. So'ne Bücher würde ich nie lesen
So-a.PL books would I never read

Although in (24) above, we have indicated that pre-article *so*, (24)a is ungrammatical in English, it may be acceptable in colloquial PDE as seen in (73) and (74). Although both examples involve a gradable adjective, the position of *so* makes a kind reading possible⁴.

(73) I am delighted that there has been *so a good response* to the park and ride scheme in its first week.
(<http://www.carmarthenshire.gov.uk/English/news>)

(74) And that's why Hulu has been so a huge success.
(http://blog.brandexperiencelab.org/experience_manifesto/2009/01/)

Something similar with pre-article *so* may be seen in Middle English:

(75) Ther roose so a grete torment in the see.
There arose such a great torment in the sea
(OED: 1471 Caxton *The Recuyell Of The Historyes Of Troy*)

The change that appears to be happening with German *so* (and marginally in colloquial English) is from a degree adverb to a cliticised determiner, resulting in a kind reading as well as degree.

This is the not the direction of change predicted by Bolinger but it is completely in line with recent theories of grammaticalisation within the generative framework in which grammaticalised elements move "up the tree", i.e. widen their scope (van Gelderen 2004:29). In addition, if further investigation of the Middle English data reveals that earlier stages of the language permitted modification of the entire DP, we could be looking at a cyclic change (cf. van Gelderen 2009).

5.2 German *solch* and grammaticalisation

In addition to the changes affecting German *so*, German *solch* is also changing. According to Zifonun et al. (1997: 1936), *solch* is changing from a determiner to an adjective. In German, the morphology gives an indication of the word class, and the fact that *solch* can be followed by a weak adjective indicates that it is a determiner, whereas the fact that it can also be followed by a strong adjective indicates that it may be an adjective:

- (76) a. für solche neuen Wege
 for such.STR new.WK approaches
 b. für solche neue Wege
 for such.STR new.STR approaches

(Fabricius-Hansen et al. 2005:330)

A second change affecting German *solch* involves pre-article *solch*. Recall that pre-article *solch* is modifies the entire DP and is not inflected as in (54) repeated below:

- (77) Dann wird es klar, wie klug und peinlich genau solch ein Künstler wie Wagner war.
 Then it becomes clear how intelligent and pedantically exact such an artist as Wagner was.

(Fabricius-Hansen et al. 2005:331).

This use of *solch* is archaic, and is being replaced in more colloquial registers by *so* and *so'n*, cf. (72)a and (72)b above. However, this is not the only place where *solch* is being replaced by *so*. In

⁴ It must be admitted that these examples are from the internet and perhaps not the most solid of data.

examples such as (45)d, post-article *solch* in *ein solch schlechtes Hotel*, i.e. the adverb use of *solch* is giving way to (26)d, *ein so schlechtes Hotel*, the degree adverb *so* i.e. here also *solch* is being replaced by *so*.

A widely accepted fact regarding language change is that change starts in colloquial registers and more formal registers are the most resistant to change.

In German, it is apparent that both the pre-article adjective *solch* and the post-article adverb *solch* are used in more formal registers and *so* is used in colloquial registers indicating the replacement of *solch* by *so*. A similar observation is made regarding English *such*. Both Bolinger (1973:62) and Altenberg (1994:238-9) point out that English *such* with a kind reading is more archaic than *such* with a degree reading.

The above discussion reveals that changes involving these two words are interdependent and Bolinger's observation that kind readings tend to change to degree readings is only a small part of the story. Further investigations into grammaticalisation and the interaction between these two words are likely to be informative in the investigation of possible directions and processes in language change.

Sources

British National Corpus (BNC)

<http://corpus.byu.edu/bnc/>

Corpus of Contemporary American English (COCA)

www.american Corpus.org/

korpusDK

<http://ordnet.dk/korpusdk>

Søren Kierkegaard: *Dagbøger i udvalg 1834-1846 (Selected Diaries 1834-1846)*, ed. Jørgen Dehs, assisted by Niels Jørgen Cappelørn. Det Danske Sprog- og Litteraturselskab DSL/Borgen, Copenhagen, 1992. (Electronic version accessed at www.adl.dk).

References

- Abney, Stephen. 1987. *The English Noun Phrase in its Sentential Aspect*. Ph.D. dissertation. MIT.
- Alexiadou, Artemis, Lilianne Haegeman & Melita Stavrou. 2007. *Noun Phrase in the Generative Perspective*. Berlin: Mouton de Gruyter.
- Altenberg, Bengt. 1994. On the functions of *such* in spoken and written English. *Corpus based research into language*. ed N. Oostdijk. & P. de Haan, 223-240. Amsterdam: Rodopi.
- Bennis, Hans, Norbert Corver, & Marcel den Dikken. 1998. "Predication in Nominal Phrases". *Journal of Comparative Germanic Linguistics* 1, 85-117.
- Bolinger, Dwight. 1972. *Degree Words*. The Hague: Mouton.
- Bresnan, Joan. 1973. "Syntax of the Comparative Clause Construction". *Linguistic Inquiry* 4.3, 273-349.
- Corver, Norbert. 1997a. "Much support as a Last Resort". *Linguistic Inquiry*, 28, 119-164.
- Corver, Norbert. 1997b. "The internal syntax of the Dutch Extended Adjectival Projection". *Natural Language and Linguistic Theory*, 15, 289-368.
- Fabricsius-Hansen, Cathrine, Peter Gallmann, Peter Eisenberg, Reinhard Fiehler, Jörg Peters, Damaris Nübling, Irmhild Barz, & Thomas A. Fritz. 2005. *Grammatik der deutschen Gegenwartssprache*, Duden vol. 4, 7th edition, Bibliographisches Institut, Mannheim.
- Gelderen, Elly van 2004. *Grammaticalisation as Economy*. Amsterdam: Benjamins.
- Gelderen, Elly van 2009. *Cyclical Change*. Amsterdam: Benjamins.
- Haegeman, Liliane & Jacqueline Guéron. 1999. *English grammar: a generative perspective*. Oxford: Blackwell.
- Hole, Daniel & Gerson Klumpp. 2000. "Definite Type and Indefinite Token: The Article *son* in Colloquial German". *Linguistische Berichte*. 182. 231-144.
- Kennedy, Chris. and Jason Merchant 2000. "Attributive Comparative Deletion". *Natural Language and Linguistic Theory* 18, 89-146.
- Lernerz, Jürgen & Horst Lohnstein 2004. „Nur *so*—Strukturaspekte der Vergleichskonstruktion". In Franz Josef d'Avis (ed.), *Deutsche Syntax: Empirie und Theorie*. Symposium Göteborg, 13-15 Mai 2004. Acta Universitatis Gothoburgensis. 81-103.
- Matushansky, Ora (2002). *Movement of Degree/Degree of Movement*. Doctoral dissertation, MIT. OED. 2nd Ed.
- Quirk, Randolph., Greenbaum. Sidney., Leech, Geoffrey, & Svartvik, Jan. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Ritter, Elizabeth. 1992. Cross-linguistic Evidence for Number Phrase. *Canadian Journal of Linguistics* 37, 197-218.
- Vikner, Sten. 2001. "Predicative Adjective Agreement". In Kirsten Adamzik & Helen Christen (eds.). *Sprachkontakt, Sprachvergleich, Sprachvariation: Festschrift für Gottfried Kolde*. Niemeyer, Tübingen, 399-414. (<http://www.hum.au.dk/engelsk/engsv/papers/vikn01b.pdf>)
- Wood, Johanna L. 2002. "Much about *such*". *Studia Linguistica*, 56, 91-115.
- Wood, Johanna L. 2004. "Number Phrase and Fronted Pre-modifiers in Middle English". *Proceedings of the 32nd Western Conference on Linguistics*. Fresno, CA: Dept of Linguistics, CSU, Fresno. 305-318.
- Zamparelli, Roberto. 1995 *Layers in the Determiner Phrase*. Ph.D. Dissertation, U of Rochester, New York.
- Zifonun, Gisela, Ludger Hoffmann, & Bruno Strecker (eds.). 1997. *Grammatik der Deutschen Sprache*, de Gruyter, Berlin.