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What's to the left of the indefinite article?

– Et sådan et spørgsmål er svært at svare på

Johanna Wood & Sten Vikner
Aarhus University

1 Introduction

One approach to research into the syntax of nominals focuses on parallels between nominals and clauses.¹ Within the generative tradition, the structure of the left periphery of the clause has been well documented, as a position for e.g. *wh*-words and topic and focus (see e.g. Rizzi 1997), whereas the left periphery of the nominal has received much less attention. One of the more challenging areas of research within the nominal is the analysis of elements that can occur before the indefinite article, e.g. *such* and *so interesting* in (1) below:

- (1) En. We never suspected that this would be such an interesting topic.
We never suspected that this would be so interesting a topic.

Another recently studied phenomenon, often taken to be linked to (1), is indefinite determiner doubling, i.e. nominal expressions which appear to contain two instances of the indefinite article:

- (2) Da. Det modsatte er, at du er en sådan en smart fyr, der er meget ude om natten.
The opposite is that you are a such a smart guy who is much out at night
(KorpusDK, novel, 1999)

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Indefinite determiner doubling appears to belong to the same group of phenomena as e.g. double definiteness in Swedish and multiple negation in English, cases of doubling that are seemingly not needed for the semantics, as one instance of the element should suffice. As Barbiers (2008:30-31) points out, there are several relevant questions to be addressed in relation to syntactic doubling in general. Among these questions are whether it has a purely syntactic function, whether it has a semantic or pragmatic function, whether it occurs only in colloquial and non-standard speech, and on a more fundamental level, how the repetition of a particular element is compatible with the view that languages are efficient systems. The first to draw attention to indefinite determiner doubling in Scandinavian was Lars-Olof Delsing (1993:142-145) with examples from northern varieties of Swedish and Norwegian. Such doubling has also been reported in varieties of German (Weber 1948:203ff, Merkle 1975:89, Lindauer 1991, cited in Alexiadou 2010, Plank 2003, Kallulli & Rothmayr 2008) and English (Wood 2002, 2012).

In this paper we would like to add to the discussion regarding both pre-indefinite article *so* and *such* expressions and indefinite determiner doubling by showing where Danish fits in. Although we are (hopefully) long past the days when complaints could be heard that generative syntactic research focused exclusively on English and ignored other languages, generative research on Danish syntax is still much less common than e.g. functional research on Danish or generative research on English. In addition, it has become more and more apparent that in many respects English is the "odd one out" in comparison with the other Germanic languages.

In section 2 below, we will further investigate the distribution of indefinite determiner doubling. Although earlier reports have focused on non-standard varieties, we will make it clear that the indefinite determiner doubling construction is less "exotic" than first reported. We will show additional data from Danish and English produced by standard speakers.

Secondly, in section 3, we will consider the interpretation of expressions with two indefinite articles. The consensus in the literature would seem to be that doubling is only permitted with certain degree adverbs. According to e.g. Kallulli & Rothmayr (2008: 108), it occurs only with degree adverbs that in German are not required to appear adjacent to the adjective they modify. Additionally, it is claimed to be associated with an intensifying function (Alexiadou 2010:12) and with

focus (Corver & van Koppen 2009:19-22). Our Danish and English data show that neither the intensifying claim nor the adjacency claim can be sustained.

Finally, in section 4, we will discuss the structure and the derivation of pre-indefinite article *so* and *such* expressions and of doubled indefinite articles.

2. Indefinite determiner doubling and distribution

Within the Germanic languages, indefinite determiner doubling has been reported mainly from non-standard varieties, e.g. northern varieties of Swedish and Norwegian, varieties of German such as Swiss German and Bavarian German, and also, finally, one English dialect:

- (3) NSw. En ful en kar
a ugly a guy (= 'an ugly guy')
(Northern Swedish, Delsing 1993:143)

- (4) SGe. Mer wöisched en rächt en gueten Apitit.
We wish a real a good appetite.
(Zürich German, Weber 1948:203)

- (5) Ba. A so a groða Bua
a so a big boy (= 'such a big boy')
(Bavarian, Kallulli & Rothmayr 2008:97, (2a))

- (6) LEn. I had a such a gurry on me as if I hadn't eaten nothink of a fortnit.
(*Oxford English Dictionary* (OED) online, December 2012. Dictionary entry *gurry*, 1881 S. Evans *Evans's Leicestershire Words*. Cited in Wood 2002:109)

The Swedish and German data are from dialects which clearly differ from the standard language. According to Kallulli & Rothmayr (2008:97), Bavarian speakers strongly prefer the doubling construction, whereas only some speakers of Standard German² optionally accept an extra article, as in (7) below, while others find it ungrammatical:

² The German speakers we consulted found the expression unacceptable, perhaps biased by the fact that the word *Bub* is dialectal. This is compatible with what Plank (2003:367) writes, viz. that in standard German, such examples "may now and then be encountered as slips of the tongue or perhaps even the pen".

- (7) Ge. Ein so ein großer Bub
 a so a big boy (= 'such a big boy')
 (Kallulli & Rothmayr 2008:97, (2b))

When Danish and English speakers are asked, they often do not accept examples right away with doubling of the indefinite article. However, it is well known that native speakers may have a blind spot with respect to constructions that they believe to be incorrect, i.e. they may not realise that they employ them. For this reason, corpus searches are a useful supplement to native speaker judgements. The availability of corpus material and more advanced search tools (cf. e.g. Davies 2004, 2008, 2010) has already revealed that indefinite article doubling is nevertheless found in English. Wood (2002:109) reports several examples with *a such a* from the spoken part of the *British National Corpus* (BNC), e.g.

- (8) En. My rules are to cut down drinking, control my temper if I am drinking, not to drink in a such a large group and not to waste much money.
 (BNC, written, 1991; Wood 2002:109)

2.1 Indefinite determiner doubling in Danish

The unexpected occurrence of indefinite article doubling expressions in the BNC prompted us to search Danish corpora. Here we found that, surprisingly, the double indefinite article construction turns up in written Danish as well. A search in *KorpusDK* revealed five examples of *en sådan en*, the common gender version of 'a such a', and two examples of *et sådan et*, the neuter version of 'a such a', e.g.

- (9) Da. Det modsatte er, at du er en sådan en smart fyr, der er meget ude om natten.
The opposite is that you are a such a smart guy who is much out at night
 (KorpusDK, novel, 1999)

- (10) Da. Som tidligere ansvarshavende chefredaktør på ugebladet *Se og Hør*, ved han
As former executive editor of magazine-the Se og Hør, knows he
 hvordan et sådan et blad skal skrues sammen.
how a.NEUT such a.NEUT magazine should be-put together.
 (KorpusDK, newspaper, 1997)

We also found three examples of *en så ADJ en* and two of *et så ADJ et*, common and neuter versions of 'a so ADJ a', e.g.:

- (11) Da. Men et så stort et projekt i byens hjerte kræver selvsagt
But a.NEUT so big.NEUT a.NEUT project in town-the's heart demands of-course
en langt højere informationsgrad.
a far higher information-degree.

(KorpusDK, newspaper, 2001)

- (12) Da. Og jeg vil gerne også kunne lave en så let en film som Frisørens
And I will like to also could make a so light a film as the-female-hairdresser's
mand, hvis jeg har lyst til det.
husband, if I have desire to that.

(KorpusDK, newspaper, 1991)

In addition to this handful of examples in corpora we also found numerous other examples, e.g. in newspaper databases and in internet searches, including one from 1839 which is also cited in *Ordbog over det Danske sprog* (ODS), the Danish counterpart to the *Oxford English Dictionary* (OED):

- (13) Da. Vel er jeg kun en lille David mod en saadan en Goliath, som I,
Admittedly am I only a little David against a such a Goliath as you,
men jeg er rask, er jeg.
but I am fast, am I. (

Christian Winther: *Hesteprangeren*, first published 1839, here cited from *Samlede Digtninger*, vol 8, p. 53, published 1860)

Although some of the internet examples from Danish are colloquial as in (14), which is from a comments section on a newspaper website, it is evident from examples like (15), which is from a legal periodical, that not all of these examples are colloquial:

- (14) Da. Nu er der jo altid 2 parter i en sådan en sag ...
Now are there indeed always 2 parties in a such a case ...
(<http://newz.dk/cowi-skal-betale-en-halv-mio-i-bod>, 02.04.2013)

- (15) Da. Man kunne håbe på, at Justitsministeriet i det mindste kunne
One could hope on that the-Ministry-of-Justice in the least could
 komme til en sådan en konklusion, at ...
come to a such a conclusion that ...
 (from the legal periodical *Juristen*, June 30, 2010, p. 153)

2.2 Indefinite determiner doubling in English

Extending our English searches beyond the BNC to other corpora, spoken and written: *Corpus of Contemporary American English* (COCA); *Corpus of Historical American English* (COHA); and the *Oxford English Dictionary* (OED) we found numerous examples of *a such a* and *a quite a* and a handful of *a rather a*, *a still a*, and *a many a*, a selection of which are shown below.

- (16) En. During our interview, he ticks off what he believes the daily life of a such a worker would have been like.
 (COCA, written, 2010)

Most of the spoken examples are from the Public Broadcasting Service. In (17) below the speaker is Sir Leon Brittan, educated at Trinity College Cambridge and former Member of the British Parliament:

- (17) En. If you are able to break a logjam that's existed for two or three years and achieve agreement on a such a complex detail but important matter as a single market in securities, that says that we're still in business.
 (COCA, TV, 1992)
- (18) En. There is a quite a telling mysticism in the wise men of the east, who are astrologising – studying the heavens – on their mountain, and first behold the wondrous star.
 (OED online, December 2012. Dictionary entry *astrologize*, 1883 L. Scott' *Renaissance of Art in Italy*)
- (19) En. You realise that accountability is a rather a hot and fashionable word in education these days.
 (BNC, radio, around 1990)
- (20) En. ... but there is a still a long uphill battle to go for the cleanup and containment of this stuff.
 (COCA, TV, 2010)

Although we have not found the English equivalent of *en så ADJ en* with *so*, a very similar doubling was found with English *too*:

- (21) En. They're [...] worried that it's going to be a too harsh a treatment of business
that will kill the goose that laid the golden egg
(COCA, TV, 2002)

Although it might have seemed from previous reports that the construction is confined to regional dialects (Northern Swedish, Southern German and Leicestershire English), we have shown above that it also occurs in what we take to be the standardised languages, and that it is not confined to a particular style or register of Standard Danish or English.

2.3 One article or two; does it make any difference?

A question that immediately follows, after noting the presence of doubled indefinite articles, is how they should be interpreted. Speakers seem completely unaware of the phenomenon; there is no normative pressure to avoid it, and it is not mentioned in style guides. This has led to the suggestion from reviewers and colleagues that the Danish and English examples are errors.³ We would like to contend, however, that the data are too plentiful and also – at least after some reflection – too acceptable to native speakers to be mere errors.

Having said that doubled indefinite articles are not just errors, we have to admit that, in our own judgments for Danish and English, they do not contribute anything to the meaning of the sentences they occur in. In all of the doubling examples in the two previous subsections, i.e. examples (9)-(21), the first of the two indefinite articles can be left out without any change of meaning whatsoever. The same would appear to be the case for both Standard German (Kallulli & Rothmayr 2008:97) and for at least some of the Swiss German examples (including (4) above, Weber 1948:203, Penner & Schönenberger 1995:342).⁴

³ As noted in footnote 2, Plank (2003:367) classifies similar examples from standard German as "slips of the tongue".

⁴ The observation that the first of a pair of a doubled indefinite articles can be left out without any consequences for the interpretation might seem to lead to a conclusion that the first of the two articles is "spurious" (a notion introduced by Bennis, Corver & Dikken 1998). Two facts have been suggested as arguing against this: One is that only the second of two doubled articles in Northern Swedish has special properties that it shares with an article that can only be used with non-arguments (Delsing 1993:144). The other is that in Austrian German and Swiss German, sometimes the first and sometimes the second

3. The interpretation of doubled expressions

As was mentioned in the introduction, in this section we will argue against claims that doubling is only permitted with degree adverbs that are not required to appear adjacent to the adjective they modify showing that Kallulli & Rothmayr's (2008:108) claims for German cannot be extended to Danish and English. Doubling examples from Danish and English involving Danish *sådan* and English *such*, which in both languages has two readings, 'intensifying' (degree) and, 'identifying' (kind), show that doubling occurs with both readings (contra Wood 2002:109, where, on the basis of data available at the time, it is argued that *a such a* only results in intensifying readings).

3.1 Indefinite article doubling and "intensifying" expressions

Corver & van Koppen (2009:19-22) give examples such as the following from Kruiningen Dutch. The *-en* affix is a degree marker and has the same form as the indefinite article. They analyse the *-en* affix as an additional indefinite article in some varieties of Dutch.

- (22) Du. Zo 'n lief-en oma!
such -a sweet.DEG grandmother (= 'such a sweet grandmother!')
 (Kruiningen Dutch, Corver & van Koppen 2009: 20, (52))

Corver & van Koppen (2009:20) notice that indefinite article doubling often co-occurs with intensifying *such*, and they go on to make the assumption (2009:23) that *such* is the overt realization of a degree-operator in Spec-FocusP. Additionally, Kallulli & Rothmayr (2008:95) claim that "indefinite determiner doubling is restricted to structures containing a quantificational element" and Alexiadou (2010:12) argues that Germanic indefinite determiner doubling constructions are "only possible with gradable and predicative adjectives" and "seem to have an intensifying function as to the adjectives they apply to". We show that these conditions are too restrictive. In our data, doubling certainly does occur in the presence of a gradable adjective (and/or a gradable noun), but it also occurs with *sådan* and *such* when the interpretation is kind, not degree, in the absence of any gradable adjectives or nouns. The following section explains these two different interpretations of *sådan* and *such*.

of two doubled articles can take on a special weak and non-agreeing form (Kallulli & Rothmayr 2008:127).

3.1.1 Two interpretations of *sådan/such*

As was first observed by Bolinger (1972) for English, there are semantically two *such*'s, originally called intensifying and identifying by Bolinger (1972). A different and less confusing way of referring to them is as in Bresnan (1973): degree *such* and kind *such*. There are syntactic differences associated with the different interpretations as shown in the table below:

The following table summarises the syntactic, semantic and register differences between kind *such* and degree *such*:

(23)

KIND	DEGREE
Referential—requires a defining referent in the context, (28)-(31)	Degree—requires a gradable element in its noun phrase, (24)-(26)
Paraphrased by 'of that kind' or 'like that' (28)-(31)	Paraphrased by 'so' + adj. (24)-(26)
Correlative clause is restrictive.	Correlative clause is comparative or resultative. (27)
May follow a quantifier, (34)	Never follows a quantifier

(adapted from Wood 2002:97)

A gradable adjective is not necessary for the degree reading; as long as the noun itself is gradable, the degree reading is available. These expressions are ambiguous as to whether the interpretation is kind or degree. So, for example *brevpukkel* 'surge of letters' in (26) and *effort* in (27) could have had a kind reading as well, i.e. 'a particular kind of surge of letters' or 'a particular kind of effort'.

Examples of **degree** *sådan/such*:

(24) Da. Du gør sådan et sympatisk indtryk på mig.

You make such a pleasant impression on me

(KorpusDK, newspaper, 1990)

(25) En. I trust that your journey on such a pleasant morning was a really good one.

(BNC, spoken, around 1990)

(26) Da. Jeg har fundet ud af, hvorfor der er sådan en brevpukkel på postterminalen ...

I have found out of why there is such a letter-surge at sorting-office-the ...

(KorpusDK, magazine, 1992)

- (27) En. It's such an effort and yet I enjoy it so much.
(BNC, spoken, 1991)

Examples of **kind** *sådan/such*:

- (28) Da. Det vanskelige ved sådan et forbud er ...
The problem with such a ban is ...
(KorpusDK, newspaper, 1991)
- (29) En. Do the Tories really expect a responsible Council to take part in such a scheme?
(BNC, spoken, 1991)
- (30) Da. En betjent fra Zusmarshausen kender sådan en amerikansk luksusvogn
A constable from Zusmarshausen knows such an American luxury-car
- en Chevrolet Blazer, sølvmetalfarvet.
- a Chevrolet Blazer, silver-metallic-coloured.
(KorpusDK, magazine, 1983)
- (31) En. Union support for such an industrial policy was a central plank of the social contract,
(BNC, written, 1984)

As the examples below show, kind *such* may co-occur with a quantifier (such as *ethvert* and *intet* in Danish or *no* and *any* in English) indicating that it is not a quantifier:

- (32) Da. Ethvert sådan et forsøg vil blot få ens stemmer fjernet.
Each such an attempt will only get one's votes removed.
(www.gratis-ting.dk/ny/forum/viewtopic.php?p=739884, 02.04.2013)
- (33) Da. Danmark er ikke et perfekt sted at være, intet sådan et sted findes
no such a place exists
på plan[e]ten jorden.
on plan[e]t-the Earth.
(www.24.dk/group/udsyn/forum/thread/2167500/, 02.02.2011)
- (34) En. For the time being at least, no such a change in Congressional attitudes would occur.
(BNC, written, 1990, Wood 2002:110, (90))
- (35) En. ... on the basis of any such a proposal or application form ...
(BNC, written, 1992)

3.1.2 Doubling with kind *sådan* and *such*

The following examples show that doubling does not occur only in degree nominals, (i.e. those often referred to as 'intensifying' in the literature), it also occurs when *sådan* and *such* have a kind reading. The data on kind *sådan* is well-attested and, as well as corpus examples, many examples may be found in newspapers; see the example below, where the reading is very clearly a kind reading, since the following relative clause defines which type of song is being discussed:

- (36) Da. ... at ens børn kan blive forskånet for en sådan en sang,
 ... that one's children can be spared from a such a song
 der ikke kun var snavset, den var sjofel.
 which not only was dirty, it was obscene.
 (KorpusDK, newspaper, 1990)

It turns out not to be difficult to find parallel examples of determiner doubling with kind *such* in English:

- (37) En. But erm they are built in a such a way that they should cater for the largest vehicle that is likely to use that road.
 (BNC, spoken, 1993)

An advanced text search in the OED even reveals 9 examples of 'a *such a* N' in the text of definitions (unlike (6) above, which is an actual example of a lexical entry). For example, the following has a kind reading; the noun 'process' cannot be graded:

- (38) En. produced or obtained by a such a process, and therefore unpredictable in detail.
 (OED online, December 2012. Dictionary entry *random*, definition C.1.b).

The previous section has shown that doubled indefinite articles, as well as occurring with gradable adjectives (see e.g. (17)), also occur with gradable nouns (13), and in contexts lacking both gradable adjectives and gradable nouns, (14) and (15). This shows that suggestions that doubling occurs only in the presence of a quantifier, or in the presence of a gradable adjective, or has an intensifying meaning are too restrictive.

3.2 Adjacency to the AdjP

In Standard German and Bavarian, certain degree words like *so* 'so' and *ganz* 'quite' occur with doubling, whereas other quantifying expressions like *sehr* 'very' and *irrsinnig* 'insanely' do not allow for determiner doubling. In order to explain this difference, Kallulli & Rothmayr (2008:98) claim that doubling occurs only with elements that do not have to be adjacent to an AdjP. Their point is that *so* and *ganz* can modify an AdjP even when they are separated from this AdjP by an indefinite article, as shown by (39)b and (40)b. This then is what allows for doubling, as in (39)c and (40)c:

- (39) Ge. a. ein so großer Bub
 b. so ein großer Bub
 c. ein so ein großer Bub
 a so a big boy
 (Kallulli & Rothmayr 2008:97-98, (4a), (7a), (2b))

- (40) Ge. a. ein ganz blöder Fehler
 b. ganz ein blöder Fehler
 c. ein ganz ein blöder Fehler
 a quite a stupid mistake
 (Kallulli & Rothmayr 2008:97-98, (4b), (7b), (3b))

sehr and *irrsinnig*, on the other hand, can only modify an AdjP if they are adjacent to it, as shown by (41)a,b and (42)a,b. This fact is then claimed to be what blocks determiner doubling, as in (41)c and (42)c:

- (41) Ge. a. ein sehr großer Bub
 d. * sehr ein großer Bub
 c. * ein sehr ein großer Bub
 a very a big boy
 (Kallulli & Rothmayr 2008:98, (5a), (8a), (6a))

- (42) Ge. a. ein irrsinnig blöder Fehler
 b. * irrsinnig ein blöder Fehler
 c. * ein irrsinnig ein blöder Fehler
 a insanely a stupid mistake
 (Kallulli & Rothmayr 2008:98, (5b), (8b), (6c))

However, according to this hypothesis, we would not expect doubling with those degree words that cannot be separated from the AdjP that they modify. This is exactly the difference between *så* and *sådan* in Danish and between *so* and *such* in English:

- (43) En. a. ... which are such a big part of the present system.
 b. ... which are so big a part of the present system.
 (COCA, TV, 1992)
 (adapted from Wood & Vikner 2011:90, (4b), (1a))

These data have been discussed in detail by Wood & Vikner (2011:94). The tables below set out the logical possibilities for word order and modification for Danish *så* and English *so*, followed by the logical possibilities for Danish *sådan* and English *such*:

(44)

	pre-article	post-article
a:	immediately preceding the whole DP/NP	b: modifying the whole DP/NP
c:	immediately preceding the AdjP	d: modifying the AdjP

(45) **Danish *så***⁵

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

(46) **English *so***

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

⁵ The following points should be noted for Danish and English *så/so*:
Danish and English: *so/så* only modifies an adjective phrase and has to be immediately adjacent to that phrase.
Danish: *so/så* plus adjective phrase may either precede or follow the indefinite article; both orders are grammatical, but the post-indefinite article construction is judged to belong to a more formal register.
Danish: obligatory agreement between the adjective and the (neuter) noun.
English: if native speakers accept (46)d at all, it is with heavy stress on *so*.

(47) **Danish *sådan***⁶

	pre-article	post-article	
DP/NP	sådan(t)	sådant	a. <i>sådan(t) et hotel</i>
AdjP	-	-	b. <i>et sådant hotel</i>
			c. <i>*sådan(t) dårligt et hotel</i>
			d. <i>*et sådan(t) dårligt hotel</i>

(48) **English *such***⁷

	pre-article	post-article	
DP/NP	such	-	a. <i>such a hotel</i>
AdjP	-	-	b. <i>*a such hotel</i>
			c. <i>*such bad a hotel</i>
			d. <i>*a such bad hotel</i>

In order for Kallulli & Rothmayr's (2008:98) adjacency claim to hold, we would not expect doubling in Danish and English with *så* and *so*. However, in Danish we found three examples of *en så ADJ en N* and two of *et så ADJ et N*. In these examples, the article agrees with the noun in gender and the adjective shows agreement morphology with the neuter noun (e.g. *et så stort et N*).

⁶ The following points should be noted for Danish and English *sådan/such*:

Danish and **English**: pre-article *such* modifies the entire DP; it cannot just modify an adjective.

Danish allows both a pre-article *sådan*, which modifies the DP, (47)a, and a post-indefinite article *sådan*, (47)b, which modifies the NP (but not just the adjective as signalled by the * in (47)d). Post-indefinite article *sådan* is always inflected, whereas pre-article *sådan* may or may not be inflected. The post-indefinite article construction is judged to belong to a more formal register.

English: is the most restrictive because *such* must precede the article, (48)a.

⁷ As pointed out by two reviewers, examples can be found of the type (48)d, *a such bad hotel*; in fact Wood (2002:108) comments on two examples found in BNC, and there are also 5 in COCA. This is perhaps not surprising, since the construction is to be found historically in English and is grammatical in a closely related language (Danish). There are no BNC examples of the type (48)c, *such bad a hotel*, but COCA has two. These are so infrequent that we judge them to be slips of the tongue. Notice also that our analysis of the indefinite article doubling construction in section 4 below does not actually predict the existence or nonexistence of (48)c,d.

- (49) Da. Men detektivarbejdet har været en så stor en succes, at ...
But detective-work-the has been a so big a success that ...
(KorpusDK, newspaper, 2001)
- (50) Da. Men et så stort et projekt i byens hjerte kræver selvsagt
But a.NEUT so big.NEUT a.NEUT project in town-the's heart demands of-course
en langt højere informationsgrad.
a far higher information-degree
(KorpusDK, newspaper, 2001 repeated from (11) above)
- (51) Da. Det var første gang, at den kommunistiske ledelse på så markant en plads
That was first time that the communist leadership in so prominent a place
tillod kritik af et så kontroversielt et projekt.
permitted criticism of a.NEUT so controversial.NEUT a.NEUT project.
(KorpusDK, newspaper, 1997)

The Danish data above show that the adjacency claim does not hold: doubling occurs even with those degree elements that do have to be adjacent to an AdjP (like Danish *så*).

Searches in the above mentioned English corpora failed to find any examples of *a so ADJ a*. We did find, as mentioned above, examples with *too*, (21), and also web examples of *a so ADJ a* as in (52) below:

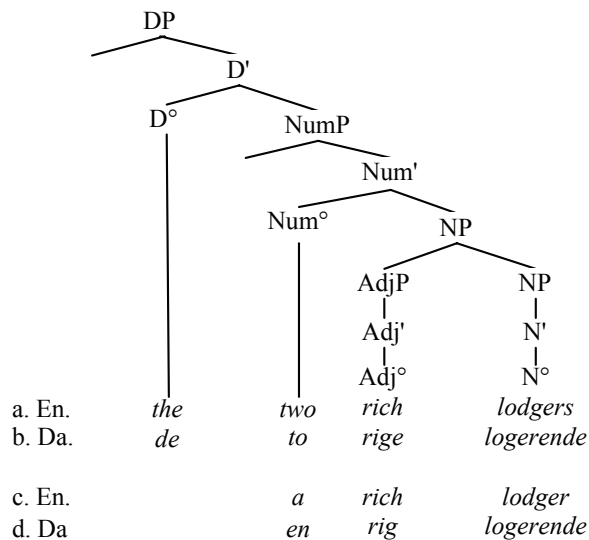
- (52) En. However, in a so long a process, the genetic variability, knowledge and know-how determine the vital capacity for genetic improvement in the future.
(www.actahort.org/books)

The section above has argued that doubling is not confined to those degree words that do not appear adjacent to the adjective, as claimed by Kallulli & Rothmayr (2008). We have also shown, by exploiting a particular characteristic of Danish *sådan* and English *such*, viz. the ability to have a non-degree reading, that doubling does not only occur with quantifiers and is not confined to intensifying environments.

4. Structural analysis

In our analysis. nominals are seen as DPs, with structures like the following:

(53)



As can be seen, we take indefinite articles to be placed in the same position as the numerals rather than in the same position as the definite article. This allows us to place expressions like *such* and *so rich* in NumP-spec, which is a position that precedes the indefinite article but not the definite article, which is exactly what characterises these expressions, they may precede the indefinite but not the definite article:

- (54) Da. a. *en* *så* *rig* *logerende*
 b. *så* *rig* *en* *logerende*
 (*so rich*) *a* (*so rich*) *lodger*


- (55) Da. a. *den* *så* *rige* *logerende*
 b. * *så* *rige* *den* *logerende*
 c. * *så* *rig* *den* *logerende*
 (*so rich*) *the* (*so rich*) *lodger*

- (56) Da. a. *sådan* *en* *logerende*
 b. * *sådan* *den* *logerende*
 such *a/the* *lodger*

There have been a number of proposals regarding the syntactic derivation of nominals of the type *en/a så/so ADJ en/a N*. They fall into two basic groups, those that argue for the pre-indefinite article adjectives to be attributive, including Kennedy & Merchant (2000), Lilley (2001), Matushansky (2002), and those that argue for a predicative derivation along the lines of Bennis, Corver & den Dikken (1998), including Troseth (2009) and Wood & Vikner (2011).


In order to derive the pre-indefinite article constructions under discussion from an attributive position, there would have to be movement from the prototypical Germanic adjective position preceding the noun to a position which also precedes the indefinite article, as in (57):

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

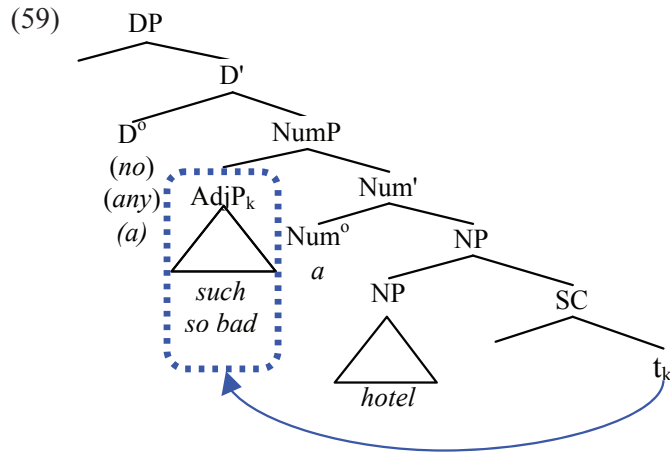


On the other hand, the predicative derivation proposes that *such-* and *so-*expressions originate as predicates in a verbless clause that has an invisible subject (comparable to a relative clause), as in (58):

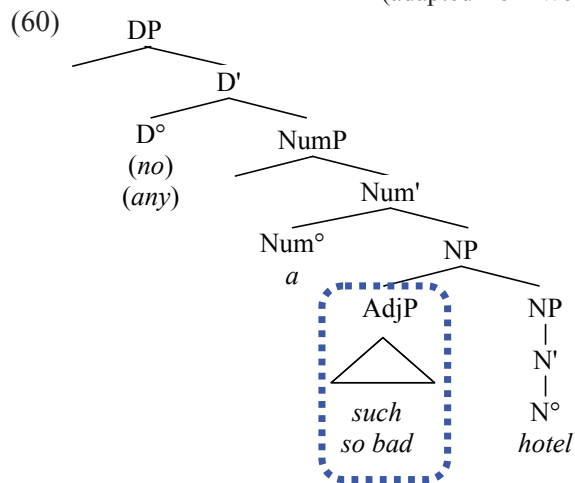
(58) [such / so bad]_k a hotel [t_k]



In this section we draw on Wood & Vikner 2011, and show that Danish and English provide evidence that pre-indefinite article expressions of the type *så/so* type and of the *sådan/such* type are derived from a predicate position. We also show that Danish has an advantage over English in that it provides morphological evidence to support pre-indefinite article *sådan* expressions being derived from a predicate position and post-indefinite article expressions generated with the base order *et/en sådant/sådan*. The derivation that we will argue for is shown in (59) below. In section 4.1 below, we first provide evidence that pre-indefinite article *so/så* expressions are derived by raising them from a predicate position as in (58) and (59), from *a hotel so bad* to *so bad a hotel*. In section 4.2, we follow this by arguing, on the basis of adjectival agreement morphology, that pre-indefinite article *such/sådan* expressions are also derived by raising them from a predicate position, whereas post-indefinite article ones (only grammatical in Danish) are represented by the base order, as shown in (60).



(adapted from Wood & Vikner 2011:104, (68))



(Wood & Vikner 2011:104, (67))

4.1 Evidence for the predicate raising derivation of pre-indefinite article *så/so* expressions

The evidence for the predicate raising analysis of *så/so* expressions is firstly that constructions with the surface word order of pre-movement of (58) are possible:

- (61) Da. Hvordan kan det være, at en forelskelse så stærk og vidunderlig som vores
How can it be that a love as strong and wonderful as ours
er endt i næsten åben krig?
is ended in almost open war?
(KorpusDK, magazine, 1990)

- (62) Da. Kong Gustav krævede en krigsskat så høj som ingen dansk konge
King Gustav imposed a war-tax so high as no Danish king
havde vovet at opkræve den.
had dared to demand it.
(KorpusDK, written, 1987)

- (63) En. I said I've never seen a star so bright way down there.
(BNC, spoken, 1988)

- (64) En. It is rare to see a house so little altered.
(BNC, written, 1991)

Additional evidence is that the Danish expression *ked af det*, 'sad of it' (which just means 'sad'), can be used predicatively, but not attributively, and nevertheless it is found to be grammatical when used in a *so*-construction.

- (65) Da. a. Eleven var ked af det.
Pupil-the was sad of it. (= 'The pupil was sad')
- b. * Det er ikke ofte at jeg møder en ked af det elev.
c. Det er ikke ofte at jeg møder så ked af det en elev.
It is not often that I meet also sad of it (a) pupil

A similar argument may be made for the English data below; adjectives that are usually only predicative (e.g. *alike, awake, ashamed, upset, afloat, alone*) are considerably better in *so*-constructions than when they occur in the canonical attributive position. Comparing (66)b,c,d and (67)b,c below, it may be seen that only (66)c,d and (67)c are grammatical.

- (66) En. a. The shoplifter is ashamed.
b. * The ashamed shoplifter was taken to the police station.
c. The so ashamed shoplifter was taken to the police station.
d. So ashamed a shoplifter have I never seen.

- (67) En. a. The twins are alike.
 b. * The alike twins had their picture taken.
 c. The so alike twins had their picture taken.

If (66)c,d and (67)c are derived through predicate raising it would explain why they are grammatical, even though (66)b and (67)b are not.

It should perhaps be mentioned that Kim and Sells (2011:345, (42)) argue against our predicate raising analysis (as presented in Wood & Vikner 2011) on the basis of the following example:

- (68) En. Without so much as a waving-line in them, it becomes [so wooden a form].

We agree that the example is grammatical, but we would like to suggest that this is a metaphorical use of *wooden*: Here it is a quality adjective rather than a classifying adjective (and it is only the classifying one which is impossible as a predicate). This is also why it is gradable, it is perfectly possible to say that one artist's style is more wooden than another.⁸

In this subsection, we have argued that the analysis involving raising from a predicate position is to be preferred for expressions involving pre-indefinite article *så* and *so*.⁹ Below we argue that also for pre-indefinite article *such* and *sådan* expressions, the predicate raising analysis is preferred over fronting from an attributive position.

4.2 Support for the predicate raising derivation of pre-indefinite article *sådan/such* expressions

First, note one of the interesting differences between German and Danish, namely that in Danish, both predicative and attributive adjectives agree with the noun they modify whereas in German, only attributive adjectives agree:

⁸ It is also worth pointing out that this example is from the British painter William Hogarth (1697-1764). Kim & Sells (2011:345) give two further examples (also from at least 100 years ago), involving *so inner a matter* and *so mere a child*, both of which we find ungrammatical.

⁹ In Wood & Vikner (2011:96-97) we give two further arguments in favour of the predicate raising analysis: One is based on the possibility in English of examples like *He is so tall of a man that ...*, where *of* denotes an inverse predicate relation, parallel to a jewel of an island (the two examples are related to *the man was so tall* and *the island was a jewel*).

The other argument is based on intuitions of speakers of German reported by Lenerz and Lohnstein (2004:83) concerning the relative acceptability of *hoh-* (attributive form of high) and *hoch* (predicative form of high) in such constructions.

- (69) 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

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

(Vikner 2001:399-400)

In German and Danish (and English) *solch* and *sådan* modify the entire nominal when they precede the indefinite article. The relevant difference between German *solch* and Danish *sådan* is, however, that German pre-indefinite article *solch* is never inflected, whereas in Danish pre-indefinite article *sådan* is sometimes inflected. This difference, we argue, arises from the agreement differences between predicative adjectives noted above.

First, consider the data below for German, *solch*. If German pre-indefinite article *solch* is derived from a predicate as illustrated in (59), this would account for why it is never inflected:

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

(Fabricius-Hansen et al. 2005:331)

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

In contrast, when *sådan* and *solch* follow the indefinite article (possible in Danish and German but not in English) and modify the entire nominal, in other words when they are attributive adjectives, they are inflected in both languages, i.e. they show typical attributive adjective morphology (*ein solches Hotel* and *et sådant hotel*).¹⁰ For this

¹⁰ It is possible for post-indefinite article *solch* to be uninflected (*ein solch schlechtes Hotel* 'such a bad hotel') but in this case *solch* is an adverb, not an adjective, and therefore it occurs in its base form, as do all German adverbs derived from adjectives.)

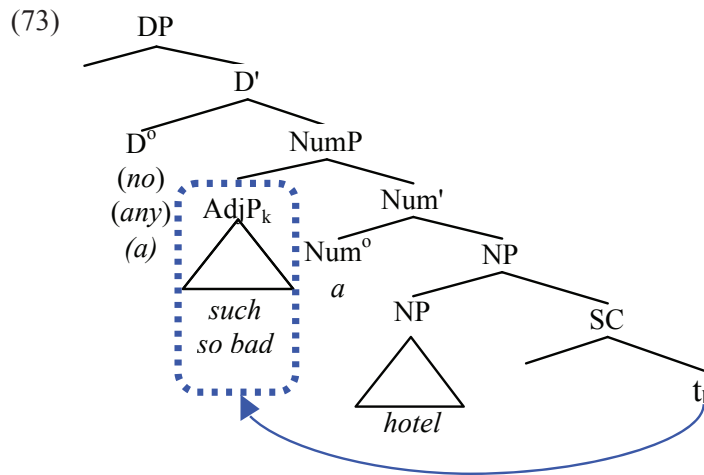
reason we suggest a base-generated analysis for the pre-indefinite article constructions as in (60).

The derivation of Danish pre-indefinite article *sådan* from a predicate is at first glance less obvious than the parallel derivation for German pre-indefinite article *solch*, and in this case the unusual agreement morphology of *sådån* needs some further comments. As has already been emphasised, normally Danish predicative adjectives show agreement. Danish predicative *sådån*, however, does not behave as a prototypical adjective, as agreement is only an option, not obligatory. If pre-indefinite article *sådån* had been derived from an attributive, it would be expected to always show agreement. This point is elaborated in Wood & Vikner (2011:101-102), where we show that post-indefinite article *sådan* shows agreement far more frequently than pre-indefinite article *sådan*, supporting our analysis that pre-indefinite article *sådan* is raised from a predicate position (both pre-indefinite article *sådan* and predicative *sådan* are only inflected in a small minority of the total cases) and not from the attributive position (as post-indefinite article *sådan* is inflected in a large majority of the total cases).

4.3 Doubled indefinite articles and structure

With respect to the syntactic structure of nominals containing doubled indefinite articles, there are basically two different approaches. In one approach, each article is considered to be the head of its own DP and the structure therefore contains more than one DP. Analyses along these lines include Delsing (1993), Lilley (2001) and Kallulli & Rothmayr (2008). An alternative approach is that there is only one DP and the two indefinite articles are accommodated within it, which means that at most one of the two articles can be in D°. Our approach belongs in this latter group, as do other approaches based on some type of DP-internal movement along the lines of the Bennis, Corver & den Dikken (1997) analysis. Our reasons for doing so is that this analysis, repeated here as (73), is more economical (uses fewer XPs), that it is fully compatible with our derivation of *så/so* and *sådan/such* constructions (Wood & Vikner 2011:104), and that it is supported by the agreement morphology in Danish, see (74)-(76) below.¹¹

¹¹ Note that the analysis of Scandinavian double definiteness in e.g. Delsing (1993:127) or Julien (2005:11) accommodates both definiteness markers in one DP.



(adapted from Wood & Vikner 2011:104, (68))

As was shown above, Wood & Vikner (2011:104) derive pre-indefinite article *sådan* and *such* from a predicate raising construction as in (73). Post-indefinite article *sådan*, on the other hand, is base-generated as in (60). The arguments are based on adjectival agreement morphology in Danish (and German). Post-indefinite article base-generated *sådan* always shows agreement with the (neuter) noun. Pre-indefinite article *sådan* on the other hand rarely shows agreement with the (neuter) noun. Additionally, the derivation in (73) allows for the inclusion of a double article. The prediction is that indefinite determiner doubling constructions derived from (73) are not likely to have agreement on *sådan*. Although the data are sparse, this is borne out, as seen in the following, repeated from (32), (10) and (51) above:

(74) Da. Ethvert sådan et forsøg vil blot få ens stemmer fjernet.
 Each such an attempt will only get one's votes removed.
 (www.gratis-ting.dk/ny/forum/viewtopic.php?p=739884, 02.04.2013)

(75) Da. Som tidligere ansvarshavende chefredaktør på ugebladet, Se og Hør, ved han
 As former executive editor of magazine-the, Se og Hør, knows he
 hvordan et sådan et blad skal skrues sammen.
 how a.NEUT such a.NEUT magazine should be-put together.
 (KorpusDK, newspaper, 1997)

- (76) Da. Psykologen benyttede lejligheden til at undersøge hvad det egentlig er
Psychologist took opportunity-the to to examin what it actually is
 der får folk til at protestere imod et sådan et projekt.
that makes people to to protest against a.NEUT such a.NEUT project
 (KorpusDK, newspaper, 1997)

One of the basic problems with the type of analysis that advocates two DPs, is why exactly two DPs, why not three or even four? Once the door is open to recursion, i.e. that there is a larger DP containing the original DP, why should there not be an even larger DP containing the large one, and why not an even larger one again, and so on. Given recursion, any limit to two articles would have to be stipulated. Kallulli & Rothmayr (2008:116) even use the term 'recursive DP', i.e. there is no upper bound, but then in their footnote 35, they arbitrarily limit this "to mean that there are two D-projections in the structure,[...] and not that the DP can iterate at will". Our approach will thus account for why almost all of the doubling examples are precisely that, doubling examples. However, we would have to say that the very few tripling examples that there are in the literature (e.g. Delsing 1993:143 or Kallulli & Rothmayr 2008:116) should then receive a different analysis.

5. Conclusion

In this paper we have focused on what Danish has to contribute to the comparative syntactic analysis of the left periphery of nominals. We claim that Danish and English both have indefinite determiner doubling (like e.g. southern varieties of German), and we have presented indefinite determiner doubling data from various styles and registers of spoken and written Danish and English, showing that the data are compatible with the analyses suggested in Wood & Vikner (2011:104). Some of the characteristics of indefinite determiner doubling were identified, and we have argued that it occurs in environments that do not necessarily include a quantifier or are not interpreted as intensifying or degree. We have also argued against the claim that indefinite determiner doubling is only possible with degree adverbs that do not occur adjacent to the adjective they modify.

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