1. Introduction.

1.1 Clause structure in tree analyses and in field analyses

A fundamental difference between various approaches to clause structure is the one between

- **tree analyses** like the generative analyses that Torben and I both work with (Thrane 1999, 2003, 2008, 2009, ..., Vikner 1995, 1999a,b, 2007, ...) and

- **field analyses** like the sætningsskema analyses of Danish of Diderichsen (1946, 1964) and many others or like the topologische Modell analyses of German of Drach (1937) and many others.

The difference is to which extent the various parts of the clause are seen

as boxes inside other boxes or as pearls on a string, one after the other.
It is a question of extent, as neither of the two can be 0% or 100%: Even to Diderichsen (1946), some constituents are inside other constituents (e.g. the object or N is part of the content field), and even in the generative analyses some constituents follow other constituents (otherwise trees would only contain mothers and daughters but no sisters).

The generative **tree structure** in (2)a is compared to the (simplified) Diderichsen **field model** of constituent order in modern Danish, Norwegian and Swedish, as illustrated in (2)b for main clauses and in (2)c for embedded clauses:

(2)  

a. 

b. 

<table>
<thead>
<tr>
<th>Found.</th>
<th>Nexus field</th>
<th>Content field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nu</td>
<td>har Peter igen</td>
<td>poleret bilen med ståluld.</td>
</tr>
<tr>
<td>Now</td>
<td>has Peter again</td>
<td>polished car-the with steel wool</td>
</tr>
</tbody>
</table>

c. 

<table>
<thead>
<tr>
<th>Conj. field</th>
<th>Nexus field</th>
<th>Content field</th>
</tr>
</thead>
<tbody>
<tr>
<td>om Peter igen har</td>
<td>poleret bilen med ståluld.</td>
<td></td>
</tr>
<tr>
<td>if Peter again has</td>
<td>polished car-the with steel wool</td>
<td></td>
</tr>
</tbody>
</table>

**One difference** is that in (2)b,c the number of levels and the kinds of constituents that can occur on each level are fixed: There are three levels containing three different kinds of constituents, namely clause – fields – slots / sætning – felter – pladser. In other words, the only possible sister of a field is another field, and the only possible sister of a slot is another slot. In (2)a, on the other hand, this is not the case at all. It is perfectly possible to have a head (X°) and a phrase (XP) as sisters.

**Another difference** is that (2)a is based on constituents, as supported by constituency tests. In (2)b,c, however, this is not always the case, as constituency tests will show e.g. that part of V may form a constituent together with N.
Please notice that the difference in (2), between tree analyses and field analyses is **NOT** one of notation. The tree in (2)a can also be expressed by means of boxes or (or at least square brackets) as in (3)a, and the boxes in (2)b can also be illustrated by means of a tree structure as in (3)b:

(3) a. \[ \text{CP} \left[ \text{AdvP Nu} \right] \left[ \text{C° har} \right] \left[ \text{IP} \left[ \text{DP Peter} \right] \left[ \text{VP} \left[ \text{AdvP igen} \right] \left[ \text{VP} \left[ \text{V° poleret} \right] \left[ \text{DP bilen} \right] \left[ \text{PP med ståluld} \right] \right] \right] \right] \]

b. 

```
<table>
<thead>
<tr>
<th>Foundation field</th>
<th>Clause</th>
<th>Content field</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>v n a</td>
<td>V N A</td>
</tr>
<tr>
<td>Nu</td>
<td>har</td>
<td>Peter igen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>poleret bilen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>med ståluld</td>
</tr>
</tbody>
</table>
```

Although I prefer a tree analysis along the lines of (2)a, I willingly admit that field based models like (2)b,c may have e.g. pedagogical use, as in Conrad et al. (1980:182). Cf. also that it is used in a comparison of Danish and English word order by Davidsen-Nielsen & Harder (2000).

Collapsing the Diderichsen model for the main clause with the one for the embedded clause, as in (2)b,c, was not done by Diderichsen himself but by Platzack (1985:71, fn 5) and Heltoft (1986:108). For more details and many more references, see Bjerre, Engels, Jørgensen & Vikner (2008).

Finally, in (4), there is a parallel illustration for **German**, which is just like Danish in that both tree analyses and field analyses of German have a considerable number of advocates.

A generative **tree structure** of German is found in (4)a, followed by the simplified **field model** / topological model analyses of German main and embedded clauses in (4)b,c. For more details and more references, see Wöllstein-Leisten, Heilmann, Stepan & Vikner (1997) or any of the recent editions of the *Duden* grammars (e.g. Fabricius-Hansen et al. 2005:879).

(4) a. 

```
<table>
<thead>
<tr>
<th>Vorfeld</th>
<th>Linke Satzklammer</th>
<th>Mittelfeld</th>
<th>Rechte Satzklammer</th>
<th>Nachfeld</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>Vielleicht hat</td>
<td>Peter nie</td>
<td>ein Auto poliert.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perhaps has</td>
<td>Peter never</td>
<td>a car</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>ob</td>
<td>Peter nie</td>
<td>ein Auto poliert hat.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>if</td>
<td>Peter never</td>
<td>a car</td>
<td>polished has</td>
</tr>
</tbody>
</table>
```

**Vikner: Trees & Fields & NPIs, 28.01.2011, p. 3 of 16**
1.2 C-command
In the tree analyses of generative grammar, frequent reference is made to the relation "C-command":

(5) **C-command**: X c-commands Y if and only if
   a. all constituents that contain X also contain Y,
   b. neither X nor Y dominates the other.

In other words: if you can get from X to Y in the tree by taking one step upwards and then climbing downwards the rest of the way, then X c-commands Y.

C-command may be used to make a number of different generalisations, e.g. concerning where reflexive pronouns may and may not be used -- as described e.g. in my MA-dissertation, which was supervised, incidentally, by a certain T. Thrane (Vikner 1985).

C-command is also crucial to generalisations of the following apparently universal type:
A pronoun and a DP may not be coreferential if the pronoun c-commands the DP.

(6) En. a. **Tim** thinks **he** is intelligent.  
     b. **He** thinks **Tim** is intelligent.

Such generalisations would seem much more difficult to formulate within field model analyses. In a Diderichsen model, (2)b,c, (3)b, the subject would only c-command other elements inside the nexus field, but it would not c-command the object itself, (23), nor any elements inside an object clause, (7).

I want to show, with illustrations from the area of negation and negative polarity items, that the generative version of c-command illustrated in (5)- (7) is very useful and that e.g. a purely linear rule would not be able to make the right distinctions.

First, however, we need to consider negative polarity items in detail.
2. Negative polarity items (NPIs)

2.1 Assertive vs. nonassertive vs. negative items

Quirk et al. (1985:782) gives the following list of items that fall into one of three groups that they call assertive, nonassertive or negative items.

<table>
<thead>
<tr>
<th>Assertive</th>
<th>Nonassertive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>some</td>
<td>any</td>
<td>no / none</td>
</tr>
<tr>
<td>something</td>
<td>anything</td>
<td>nothing</td>
</tr>
<tr>
<td>somebody</td>
<td>anybody</td>
<td>nobody</td>
</tr>
<tr>
<td>someone</td>
<td>anyone</td>
<td>no one</td>
</tr>
<tr>
<td>somewhere</td>
<td>anywhere</td>
<td>nowhere</td>
</tr>
<tr>
<td>sometimes</td>
<td>ever</td>
<td>never</td>
</tr>
<tr>
<td>already</td>
<td>yet</td>
<td></td>
</tr>
<tr>
<td>still</td>
<td>any more / any longer</td>
<td>no more / no longer</td>
</tr>
<tr>
<td>too</td>
<td>either</td>
<td>neither</td>
</tr>
<tr>
<td>to some extent</td>
<td>at all</td>
<td>not at all</td>
</tr>
</tbody>
</table>

Assertive items do not change the polarity of a clause (i.e. whether a clause is negative or positive). This can be shown by means of tag questions: If a clause is negative, its tag question has to be positive, and vice versa:

(9) En. a. Torben just bought "Pride and Prejudice", didn't he?
    b. * Torben just bought "Pride and Prejudice", did he?

(10) En. a. Torben just bought some books, didn't he?
     b. * Torben just bought some books, did he?

Negative items turn a positive sentence into a negative one:

(11) En. a. * Torben didn't buy "Pride and Prejudice", didn't he?
     b. Torben didn't buy "Pride and Prejudice", did he?

(12) En. a. * Torben bought no books this week, didn't he?
     b. Torben bought no books this week, did he?

Nonassertive items do not change the polarity of a sentence either, but they require the sentence to be negative (certain other contexts work as well: questions, conditional clauses, comparatives, superlatives, ...):

(13) En. a. * Torben bought any books this week, didn't he?
     b. Torben didn't buy any books this week, did he?

Quirk et al.'s (1985:782) nonassertive items in (8) are part of what is otherwise known as "negative polarity items" (NPIs).
2.2 Negative polarity items are not just idiomatic expressions
The adverbial expression En. at all / Da. overhovedet / Ge. überhaupt is a negative polarity item (NPI), as it would seem to need a negative element to be possible (or a question/conditional/comparative ...). However, at first glance one might simply think this dependence on negation comes from at all being part of the idiomatic expression not ... at all:

(14) En. a. * Torben understands Icelandic at all.
   b. Torben does not understand Icelandic at all.

   d. Torben forstår ikke islandsk overhovedet.

Ge. e. * Torben versteht überhaupt Isländisch.
   f. Torben versteht überhaupt nicht Isländisch.

But this would predict the following to be ungrammatical, as there is no not:

(15) En. a. * Some students in this class understand Icelandic at all.
   b. No students in this class understand Icelandic at all.

Da. c. * Nogle studerende på det her hold forstår islandsk overhovedet.
   d. Ingen studerende på det her hold forstår islandsk overhovedet.

Ge. e. * Einige Studenten in diesem Seminar verstehen überhaupt Isländisch.
   f. Keine Studenten in diesem Seminar verstehen überhaupt Isländisch.

(16) En. a. * Torben understands one one of the Scandinavian languages at all.
   b. Torben understands none one of the Scandinavian languages at all.

   d. Torben forstår ingen af de skandinaviske sprog overhovedet.

Ge. e. * Torben versteht überhaupt eine von den skandinavischen Sprachen.
   f. Torben versteht überhaupt keine von den skandinavischen Sprachen.

(17) En. a. * Torben sometimes speaks German at all.
   b. Torben never speaks German at all.

   d. Torben taler aldrig tysk overhovedet.

Ge. e. * Torben spricht überhaupt ab und zu Deutsch.
   f. Torben spricht überhaupt nie Deutsch.

The idiomatic expression hypothesis would run into even bigger problems with examples that are not negative in any way at all, like yes/no-questions:

(18) En. a. Does Torben understand Icelandic at all?
   b. Does Torben not understand Icelandic at all?

Da. c. Forstår Torben overhovedet islandsk?
   d. Forstår Torben overhovedet ikke islandsk?

Ge. e. Versteht Torben überhaupt Isländisch?
   f. Versteht Torben überhaupt nicht Isländisch?
2.3 English and Danish NPIs
Here are a few English NPIs (in addition to the nonassertive items from (8) above):

(19)  
all that + adj/adv
a red cent
stand (as verb)
bat an eyelid
bother to do something
budge an inch
do a thing about something
drink a drop
give a damn about something
hold a candle to someone
move a muscle
say a word about something
see a living soul
sleep a wink

Here are two lists, (20) and (21), of negative polarity items in Danish -- the result of a quick check of the electronic version of NuDansk Ordbog (Appel et al. 2002). In the first list, (20), the NPIs can be used both in negated clauses and in questions:

(20) a. **Arguments**
    nogetsomhelst
    skyggen af noget
    en snus / spor / en stavelse / et suk
    (money only) en hvid / en klink / en rød reje / en rød øre

b. **Adjectives / Adverbs**
    nævneværdig(t)
    synderlig(t)

c. **Place Adverbials**
    nogen steder
    nogetsteds

d. **Time Adverbials**
    nogensinde
    endnu
    på noget tidspunkt

e. **Measure adverbials**
    overhovedet
    i det hele taget
    på nogen måde
    så meget som ....
    i mindste måde

f. **Verbs**
    behøve (with infinitive only)
    døje
    fordrage
    orke
In the second list of negative polarity items in Danish, (21), the NPIs can be used in negated clauses but not in questions:

\[(21)\]

<table>
<thead>
<tr>
<th>g. Full VPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>falde nogen ind at ...</td>
</tr>
<tr>
<td>finde hoved og hale på noget</td>
</tr>
<tr>
<td>fortanke nogen i noget</td>
</tr>
<tr>
<td>have en jordisk chance</td>
</tr>
<tr>
<td>have noget at skulle have sagt</td>
</tr>
<tr>
<td>kimse ad noget</td>
</tr>
<tr>
<td>lade noget sidde på sig</td>
</tr>
<tr>
<td>lade sig mærke med noget</td>
</tr>
<tr>
<td>se en hånd for sig</td>
</tr>
<tr>
<td>skulle nyde noget</td>
</tr>
<tr>
<td>tro sine egne øjne</td>
</tr>
<tr>
<td>vokse på træerne</td>
</tr>
<tr>
<td>være at foragte</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Adverbials</th>
</tr>
</thead>
<tbody>
<tr>
<td>ligefrem</td>
</tr>
<tr>
<td>heller</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. Full VPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>give fem flade øre for noget</td>
</tr>
<tr>
<td>give noget ved dørene</td>
</tr>
<tr>
<td>have en trevl på kroppen</td>
</tr>
<tr>
<td>have opfundet den dybe tallerken</td>
</tr>
<tr>
<td>have opfundet det varme vand</td>
</tr>
<tr>
<td>have opfundet krudtet</td>
</tr>
<tr>
<td>have tone i livet</td>
</tr>
<tr>
<td>krumme et hår på nogens hovede</td>
</tr>
<tr>
<td>kunne gøre en kat fortræd</td>
</tr>
<tr>
<td>kunne tage/snuppe/udstå noget</td>
</tr>
<tr>
<td>lægge fingrene imellem</td>
</tr>
<tr>
<td>lægge skjul på noget</td>
</tr>
</tbody>
</table>
2.4 Licensing of NPIs requires c-command

The negative polarity element must be c-commanded by the licenser, e.g. by the negative element (see e.g. Fromkin 2000: 223, 404, though see Hoeksema 2000 for problems with this analysis).

The subject c-commands the object, but the object does not c-command the subject. Thus a negative subject can license an NPI-object, but a negative object cannot license an NPI-subject:

(22) En. a. No one understood anything.
   b. * Anyone understood nothing.
   Da. c. Ingen forstod nogetsomhelst.
   d. * Nogensomhelst forstod ingenting.

(23)

![Diagram](image)

For the purposes of this talk, I will simply assume that sentential negation has the same position in the tree as any other sentential adverbial. This has the following consequences for c-command:

(24)

![Diagram](image)

The subject position (IP-spec) is not c-commanded by the negation, but the position of the logical subject (“the associate”) in *there*-constructions is.

(25) En. a. * Because anybody wasn't standing outside the door, ...
   b. Because there wasn't anybody standing outside the door, ...
   c. * Because there was anybody standing outside the door, ...
   Da. d. * Fordi nogensomhelst ikke stod uden for døren , ...
   e. Fordi der ikke stod nogensomhelst uden for døren , ...
   f. * Fordi der stod nogensomhelst uden for døren , ...
The negative polarity element can also be licensed by a negative element in a different clause, provided there is c-command:

(26) En. a. * Because Torben thought that I would ever understand it, ...
    b. Because Torben didn't think that I would ever understand it, ...
    c. * Because Torben ever thought that I would not understand it, ...

Da. d. * Fordi Torben troede at jeg nogensinde ville forstå det, ...
    e. Fordi Torben ikke troede at jeg nogensinde ville forstå det, ...
    f. * Fordi Torben nogensinde troede at jeg ikke ville forstå det, ...

Ge. g. * Weil Torben geglaubt hat, dass ich es jemals verstehen würde, ...
    h. Weil Torben nie geglaubt hat, dass ich es jemals verstehen würde, ...
    i. * Weil Torben jemals geglaubt hat, dass ich es nicht verstehen würde, ...

A topicalised object is not c-commanded by the negation (i.e. the situation that counts is the one after movement of the object from the object position to topic position in CP-spec, cf. (24)):

(27) En. a. Tim had not met a living soul
    b. * A living soul Tim had not met
    c. Not a living soul had Tim met

Da. d. Tim havde ikke mødt en levende sjæl.
    e. * En levende sjæl havde Tim ikke mødt.
    f. Ikke en levende sjæl havde Tim mødt.

Ge. g. Tim hatte keine Menschenseele getroffen.
    h. * Eine Menschenseele hatte Tim nicht getroffen.
    i. Keine Menschenseele hatte Tim getroffen.

In the following, I shall compare the c-command condition on NPI-licensing with an alternative condition that requires precedence instead. In the first set of examples the NPI a word is both c-commanded and preceded by the licenser:

(28) a. En. Earlier nobody tried to understand a word during the classes
    b. Da. Tidligere forsøgte ingen at forstå et ord i timerne
    c. Ge. Früher hat niemand versucht im Unterricht ein Wort zu verstehen

In the following examples, the NPI is preceded but not c-commanded by the licenser, because the negation is inside the PP in topic position:

(29) a. En. * [Not long ago] I tried to understand a word during the classes
    b. Da. * [For ikke ret lang tid siden] forsøgte jeg at forstå et ord i timerne
    c. Ge. * [Vor nicht langer Zeit] habe ich versucht im Unterricht ein Wort zu verstehen

This contrasts with the following examples, where the NPI is preceded and c-commanded by the licenser, because here the entire topic counts as negative (as can be shown e.g. by tag questions):

(30) a. En. [At no point in time] I tried to understand a word during the classes
    b. Da. [På intet tidspunkt] forsøgte jeg at forstå et ord i timerne
    c. Ge. [Zu keiner Zeit] habe ich versucht im Unterricht ein Wort zu verstehen
2.5 Licensing of NPI-verbs

Finally, I want to look at NPI-verbs, where c-command might seem not to be required.

The NPI-verbs are e.g. *need* in English (as an auxiliary, i.e. with an infinitive without *to*) and *behøve/brauchen* in Danish and German (only when they embed an infinitive), see (31). When *need/behøve/brauchen* take a DP-object, they are not NPI-verbs, see (32).

In none of (31)a,c,e are the NPI-verbs c-commanded by the negation. But still, it cannot be the case that these verbs do not need to be licensed by e.g. a negation, as shown by the ungrammaticality of (31)b,d,f. Instead, what is necessary is that the base position of the NPI-verb is c-commanded by a licenser (i.e. the NPI-verb must be c-commanded by a licenser before movement):

(31) En. a. Maybe Torben need not read these books.
   b. * Maybe Torben need read these books.

   Da. c. Måske behøver Torben ikke læse de her bøger.
   d. * Måske behøver Torben læse de her bøger.

   Ge. e. Vielleicht braucht Torben diese Bücher nicht zu lesen.
   f. * Vielleicht braucht Torben diese Bücher zu lesen.

(32) En. a. Maybe Torben does not need these books.
   b. Maybe Torben needs these books.

   Da. c. Måske behøver Torben ikke de her bøger.
   d. Måske behøver Torben de her bøger.

   Ge. e. Vielleicht braucht Torben diese Bücher nicht.
   f. Vielleicht braucht Torben diese Bücher.

Constituent negation inside the object does not c-command the NPI-verb (here *stand*/fordragel*abkönnen*), not even when this verb is in its base position:

(33) En. a. * Torben can stand [not vodka but whisky].
   b. Torben might drink [not vodka but whisky].

   Da. c. * Torben kan fordrage [ikke vodka men whisky].
   d. Torben kunne drikke [ikke vodka men whisky].

   Ge. e. * Torben kann [nicht Wodka sondern Whisky] ab.

These NPI-verbs (or at least their base positions) must be c-commanded by a licenser, e.g. the sentential negation:

(34) En. a. Torben can't stand vodka.
   b. * Torben can stand vodka.

   Da. c. Torben kan ikke fordrage vodka.
   d. * Torben kan fordrage vodka.

   Ge. e. Torben kann Wodka nicht ab.
   f. * Torben kann Wodka ab.
2.6 NPIs and because-clauses

Consider the following examples (which are discussed e.g. in Linebarger 1987, in McCawley 1988:565, and in Ladusaw 1996:334):

(35) a. En. Torben had not understood my talk because I had used German examples.
    b. Da. Torben havde ikke forstået mit foredrag fordi jeg havde brugt tyske eksempler.
    c. Ge. Torben hatte meinen Vortrag nicht verstanden, weil ich deutsche Beispiele verwendet hatte.

In spite of what one might think at first glance, these examples are actually ambiguous. Each of them may describe either

(36) (i) the situation where the use of German examples had prevented Torben from understanding my talk -- after all, he is a professor of English,
    or
    (ii) the situation where Torben had understood my talk for a different reason than because of my use of German examples (i.e. the German examples were not a problem -- after all he was once a student of Gunnar Bech's -- but what really made him understand the talk was that it was about syntax).

Consider now the following which lacks such an ambiguity:

(37) a. En. Torben had not understood a thing because I had used German examples.
    b. Da. Torben havde ikke forstået et klap fordi jeg havde brugt tyske eksempler.
    c. Ge. Torben hatte nicht die Bohne verstanden, weil ich deutsche Beispiele verwendet hatte.

(37) can only be used in the situation described by (36)i, not the one described by (36)ii.

A different set of examples of the same effect are the following:

(38) a. En. Torben had not read the book because he was annoyed.
    b. Da. Torben havde ikke læst bogen fordi han var irriteret.
    c. Ge. Torben hatte das Buch nicht gelesen, weil er genervt war.

(39) a. En. Torben had not lifted a finger because he was annoyed.
    b. Da. Torben havde ikke rørt en finger fordi han var irriteret.
    c. Ge. Torben hatte keinen Finger gerührt, weil er genervt war.

Again, (38) is actually ambiguous and may describe both the situation in (40)i and the one in (40)ii. (39), on the other hand, only describes the one in (40)i and not the one in (40)ii.

(40) (i) the situation where being annoyed had prevented Torben from reading the book (he needs peace of mind for reading),
    or
    (ii) the situation where Torben had read the book for a different reason than because he was annoyed (i.e. being annoyed was not really a problem, and what really made him read the book was that he was bored).
Presumably, the two interpretations differ with respect to whether the because-clause is negated:

- In the (i)-interpretations, the because-clause is not negated (it gives a valid reason for why something did not happen). This is because it is outside the scope of negation, i.e. it is not c-commanded by not.
- In the (ii)-interpretations, the because-clause is part of what is negated (it gives an invalid reason for why something happened). This is because it is inside the scope of negation, i.e. it is c-commanded by not.

This analysis is supported by the fact that only in the (ii)-interpretations may there be an NPI inside the because-clause itself. The following examples thus require the (ii)-interpretations (hence the but):

\[(41)\]
\[
\begin{array}{ll}
\text{En.} & \text{Torben had not skipped my talk because he was the least bit tired (but ...)} \\
\text{Da.} & \text{Torben havde ikke pjækket fra mit foredrag fordi han var det mindste træt (men derimod...)} \\
\text{Ge.} & \text{Torben hatte meinen Vortrag nicht geschwänzt, weil er im Geringsten müde war (sondern ...)}
\end{array}
\]

But even if the (ii)-interpretation has the because-clause inside the scope of negation, this does not explain why the (ii)-interpretation is not available in (37) and (39). Under both interpretations, (i) and (ii), the NPI in (37) and (39) must be taken to be c-commanded by not.

What is special about the (ii)-interpretation is that it is a case of focussing negation, with the focus on the because-clause. Focus creates a series of alternatives (Rooth 1992), cf. e.g. the focussing negation reading of (42)a, where focus is on this morning, and where the alternatives all have the form (42)b:

\[(42)\]
\[
\begin{array}{ll}
\text{En.} & \text{Peter didn't arrive in Aarhus \underline{this morning}} \\
\text{Da.} & \text{Peter arrived in Aarhus at some point in time X, } X \neq \text{this morning}
\end{array}
\]

It would seem that whereas normal negation licences any NPI that it c-commands, focussing negation only licenses an NPI which is inside the focus (i.e. inside the because-clause in (37) and (39)).

This is unexpected, given that a focussing negation c-commands much more than what is inside the focus. What is crucial here is that in the case of focussing negation, the alternatives are all positive, cf. that although (42)a is negative, the alternatives are all positive, (42)b.

The alternatives to the focus readings of (37) and (39) thus do not contain any negation, and therefore the NPI in these alternatives would not be licensed:

\[(43)\]
\[
\begin{array}{ll}
\text{En.} & \ast \text{Torben had not understood a thing because I had used German examples,} \\
& \ldots \text{he had understood a thing because the talk was about syntax.} \\
\text{Da.} & \ast \text{Torben havde ikke forstået et klap fordi jeg havde brugt tyske eksempler,} \\
& \ldots \text{han havde forstået et klap fordi foredraget handlede om syntaks.} \\
\text{Ge.} & \ast \text{Torben hatte nicht die Bohne verstanden, weil ich deutsche Beispiele verwendet hatte,} \\
& \ldots \text{er hatte die Bohne verstanden, weil der Vortrag über Syntax war.}
\end{array}
\]
(44) En. a. * Torben had not lifted a finger because he was annoyed, ... he had lifted a finger because he was bored.

Da. b. * Torben havde ikke rørt en finger fordi han var irriteret, ... han havde rørt en finger fordi han kedede sig.

Ge. c. * Torben hatte keinen Finger gerührt, weil er genervt war, ... er hatte einen Finger gerührt, weil er gelangweilt war.

If the NPI is inside the focus, there is no problem, because what is inside the focus is absent from the alternatives, and then it does not matter that there is no negation in the alternatives.

(45) En. a. Torben had not skipped my talk because he was the least bit tired, ... he had skipped my talk because he had heard it before.

Da. b. Torben havde ikke pjækket fra mit foredrag fordi han var det mindste træt, ... han havde pjækket fra mit foredrag fordi han havde hørt det før.

Ge. c. Torben hatte nicht meinen Vortrag geschwänzt, weil er im Geringsten müde war, ... er hatte meinen Vortrag geschwänzt, weil er ihn schon gehört hatte.

3. Conclusion
The objective here was mainly to illustrate a particular difference in the implementation of c-command between two kinds of approaches to clause structure, namely tree analyses like the generative analysis that Torben and I both advocate and field analyses like the sætningsskema analysis of Danish of Diderichsen (1946) and many others or the topologische Modell analysis of German of Drach (1937) and many others.

Having said this, I hope that at least part of my talk also illustrated that these approaches have a number of properties in common. I continue to believe that syntacticians would be well advised to look further than the surface of the different formal and functional approaches. Despite the occasionally polemic tone, the various approaches actually have much in common, which also means that they may learn from each other's insights.

All syntacticians, regardless of theoretical persuasion, are ultimately interested in explaining language data. Given the complex subject matter of the discipline, we need all the help we can get, and therefore none of us can afford to ignore the results reached within ‘the opposite camp’.

At the end of the day, linguists from the two approaches will still set out in different directions when it comes searching for an explanation, and this is as it should be, given that "the growth of knowledge depends entirely upon disagreement" (Popper 1994:x).

This quote is further explained in Popper (1994:93-94): "Since the method of science is that of critical discussion, it is of great importance that the theories discussed should be tenaciously defended. For only in this way can we learn their real power. And only if criticism meets resistance can we learn the full force of a critical argument."

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