# Similarities and Differences between Clauses and Nominals <br> - Comparative Syntax across Theoretical Approaches 

Sten Vikner<br>Sektion for Engelsk, Institut for Sprog, Litteratur og Kultur, Aarhus Universitet, DK-8000 Århus C, Denmark<br>89426522 - sten.vikner@hum.au.dk - www.hum.au.dk/engelsk/engsv

0. Introduction, p. 2
1. Structure, p. 3
1.1 X-bar structure, p. 3
1.2 Clause structure, p. 4
2. CP and verb second (V2), p. 5
3. IP and $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement, p. 6
3.1 IP and $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement in the SVO-languages, p. 6
3.2 IP and $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement in the SVO-languages, p. 9
4. VP, p. 11
5. NP, p. 12
6. DP, p. 13
7. Parallels between DP and IP/CP (and missing parallels), p. 16

References, p. 18

## 0. Introduction

Research project, Feb. 2008-Jan. 2011, financed by FKK (the Danish Research Council for Culture and Communication)

Principal Investigators:
Steffen Krogh, German/SLK
Henning Nølke, French/SLK
Sten Vikner, English/SLK
Johanna Wood, English/SLK

Ph.d. student:
Katrine Jakobsen, Feb. 2008-Jan. 2011

Post docs / research assistants:
Eva Engels, May 2009-Jan. 2011
N.N., Sept. 2009-July 2010

Web site (next week at the earliest)
www.hum.au.dk/engelsk/engsv/clauses-nominals
Initial content: info about persons, project description, ...
(I expect to do it in a fashion relatively parallel to
www.hum.au.dk/engelsk/engsv/objectpositions, so let me know if you have any ideas for improvement)

Intro-meetings (in 1461-415)
07.02.2008, 14:00, Sten
21.02.2008, 14:00, Johanna
28.02.2008, 13:00, Henning
13.03.2008, 14:00, Steffen
27.03.2008, 14:00, Katrine

## 1. Structure

### 1.1 X-bar structure

In a generative analysis, syntactic constituents are all constructed according to the same pattern: The "X-bar structure" as in (1) (where the sequence of the head and the complement may vary).
(1)

(2) $\quad X P=$ phrase - the maximal projection of $X$

```
X' = X-bar - the intermediary projection of X
X }\mp@subsup{}{}{\circ}=\mathrm{ head - the minimal projection of X
```

A maximal projection may occur as specifier or as complement in another projection. A head is always a head of its own projection, and all maximal projections have a head (are endocentric). Furthermore, a maximal projection can also be adjoined to another maximal projection:
(3)


X (and also $\mathrm{Y}, \mathrm{Z}$ and W ) may stand for one of the following categories:

| lexical categories (word classes) | "functional" categories |  |
| :--- | :--- | :--- |
| N (noun) | C ('complementiser' - |  |
| V (verb) |  |  |
| P (preposition) | subordinating conjunction) |  |
| Adj (adjective) | ('inflection', used to be AUX) |  |
| Adv (adverb) | etc. | D (determiner/article etc.) |

### 1.2 Clause structure

In a somewhat simplified generative analysis, the structure of a sentence is as follows:
(5) A clause is a CP,
the complement of its head $\left(=\mathrm{C}^{\circ}\right)$ is an IP, and the complement of the IP's head ( $=I^{\circ}$ ) is a VP.
(VP thus corresponds to Diderichsen's 1962 "indholdsfelt",
IP thus corresponds to BOTH Diderichsen's 1962 "nexusfelt" AND "indholdsfelt")
All verbs have their own VP. Adverbials (etc.) may be adjoined both on the left side and on the right side of a VP.

The structure in (6a) may thus be compared to the Diderichsen model for modern Danish (etc.) as illustrated in (6b) for main clauses and in in (6c) for embedded clauses (Diderichsen 1962:162, 186, cf. also Hansen 1977:44, 72-74, Heltoft 1986, Allan et al. 1995:491-498, Jørgensen 2000:63-78, Togeby 2003:56, 72, 97-99, Hansen \& Heltoft 2003:172-173):
(6) a.


"Nexusfelt"
Nexus field

"Indholdsfelt"
Content field
(This collapsing of the Diderichsen model for the main clause with the one for the embedded clause was introduced by Platzack 1985).
(On compatibilities and incompatibilities between formal and functional linguistics, see also Vikner 2004 and Bjerre, Engels, Jørgensen \& Vikner 2007).

Vikner, 07.02.2008, p. 4

## 2. CP and verb Second (V2)

In all Germanic languages with the exception of Modern English, all main clauses have a special property, namely that they are "verb second" (V2), which means that the finite verb occupies the second position in the clause, irrespective of which constituent occupies the first position:
(7) Verb second = V2:


Danish, Icelandic and German are thus V2, whereas English and French are not:

|  |  | CP-Spec | $\mathrm{C}^{\circ}$ | IP |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (8) | a. Da. <br> b. Ic. <br> c. Ge. <br> d. En. <br> e. Fr. | Den her bog <br> Eessa bók <br> Dieses Buch <br> *This book <br> *Ce livre | $\begin{aligned} & \frac{\text { har }}{\frac{\text { hefur }}{}} \\ & \frac{\text { hat }}{\text { has }} \\ & \frac{a-t-}{\text { an }} \end{aligned}$ | ```Peter læst Pétur lesið Peter gelesen Peter read il lu``` |  |
| (9) | a. Da. <br> b. Ic. <br> c. Ge. <br> d. En. <br> e. Fr. | Nu <br> Nú <br> Jetzt <br> *Now <br> *Maintenant | har <br> hefur <br> hat <br> has <br> a-t- | Peter læst den her <br> Pétur lesið pessa <br> Peter dieses <br> Peter read this <br> il lu ce | ```bog bók Buch gelesen book livre``` |

V2 is analysed as two movements: A maximal projection (e.g PP, AdvP, DP) moves into CP-Spec (i.e. the $1^{\text {st }}$ position) and the finite verb moves into $\mathrm{C}^{\circ}$ (i.e. the $2^{\text {nd }}$ position).
(10)


Because V2 moves the finite verb out of the clause (into the $\mathrm{C}^{\circ}$-position, to the left of the subject position), we have to look at sentences without V2 in order to be able to see which verb positions are possible in which languages. In English and French this is not difficult, as only main clause questions are V2, whereas in the other Germanic languages, we have to turn to embedded clauses.

## 3. IP and $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement

### 3.1 IP and $V^{\circ}$-to- $I^{\circ}$ movement in the SVO-languages

French is a language with what is called $\mathbf{V}^{\circ}$-to- $\mathbf{I}^{\circ}$ movement. This means that in French the finite verb moves from its position in $\mathrm{V}^{\circ}$ to a functional position further left, namely $\mathrm{I}^{\circ}$. This movement can be detected if there is a e.g. medial adverbial present, in this case souvent:
(11)


In other words, in French the finite verb is base-generated in one position, to the immediate left of the object, and then moved across the sentence adverbial into another position, to the immediate right of the subject. This is what is called $\mathbf{V}^{\circ}$-to- $I^{\circ}$ movement.

In modern English and modern Danish, finite main verbs do not undergo $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement:


Chomsky (1995:222) says about the ability of constituents to move in the syntax: "Minimalist assumptions suggest that this property should be reduced to morphology-driven movement." This was the objective of Vikner $(1997,1998)$, where finite verb movement was linked to verbal inflectional morphology:
(13) An SVO-language has $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement if and only if person morphology is found in all tenses.
(Vikner 1997:207, (23))
The generalisation in (13) accounts for the above difference in the positions of finite main verbs, assuming a clause structure as in (12) and (11) above.

Among all the Romance and Germanic SVO-languages, the only languages where inflectional differences for person are not found in every tense are modern English and four modern Scandinavian languages: Danish, Faroese, Norwegian, and Swedish, cf. (18) and (19) below.

These five languages are also the only SVO-languages without $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement, cf. (14) and (15) below.

## - Which languages have $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement?

Icelandic, Yiddish, and French all have $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement:
(14)

|  | $\mathrm{C}^{\circ}$ | IPsp | $I^{\circ}$ | AdvP | $\mathrm{V}^{\circ}$ | DP |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. En. | *That | John | eats | often |  | tomatoes | (surprises most people) |
| b. Da. | * At | Johan | spiser | ofte |  | tomater | (overrasker de fleste) |
| c. Fa. | * At | Jón | etur | ofta |  | tomatir | (kemur óvart á tey flestu) |
| d. Ic. | Aठ | Jón | borðar | oft |  | tómata | (kemur flestum á óvart) |
| e. Yi. | Az | Jonas | est | oft |  | pomidorn | (iz a khidesh far alemen) |
| f. Fr. | Que | Jean | mange | souvent |  | des tomates | (surprend tout le monde) |

English, Danish, and Faroese (and also Norwegian and Swedish) all lack $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement:
(15)

|  | $C^{\circ}$ | IPsp | $I^{\circ}$ | AdvP | $V^{\circ}$ | DP |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a. En. | That | John |  | often | eats | tomatoes |
| b. Da. At | Johan |  | ofte | spiser | tomater | (surprises most people) |
| C. (overrasker de fleste) |  |  |  |  |  |  |
| C. Fa. At | Jón |  | ofta | etur | tomatir | (kemur óvart á tey flestu) |
| d. Ic. *Ad | Jón |  | oft | borðar | tómata | (kemur flestum á óvart) |
| e. Yi. *Az | Jonas |  | oft | est | pomidorn | (iz a khidesh far alemen) |
| f. Fr. *Que | Jean |  | souvent | mange | des tomates | (surprend tout le monde) |

Furthermore, the languages without $\mathrm{V}^{\circ}$-to $-\mathrm{I}^{\circ}$ movement have all only recently lost $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement. In English and also in Danish (Vikner 2005a), this change took place in the 15th and 16th centuries, Middle English and Old Danish were like French:

| (16) a. ME. He swore that he talkyd neuer | $t$ | wyth no man ... |
| :--- | :--- | :--- | :--- | :--- |
| b. En. He swore that he | never talked to anybody ... |  |

((16a): 1460 William Paston I, Letter to John Paston I, 02.05.1460, Davis 1971:164)
(17) OD. Æn beriær man threl for bondæns øghæn. tha bøtæ han

But hits a man a slave for peasant-the's eyes, then pays he
bondæn tolf øræ foræ um thrællæn takær ey atær gen
peasant-the twelve ore therefore if slave-the attacks not back again
"Men slår en mand en træl for øjenene af bonden, da skal han bøde tolv øre derfor til bonden, hvis trællen ikke sætter sig til modværge"
(ca. 1300, Valdemars sjellandske lov, yngre redaktion, chap. 86, Uldaler \& Wellejus 1968:54, 1. 21-22)

- Which languages have person morphology in all tenses?

| (18) | English (20th C.) | Early modern English <br> (16th C.) | ```Middle English (14/15th C.)``` | French (20th C.) |
| :---: | :---: | :---: | :---: | :---: |
| Infinitive | hear | hear (en) | here (n) | entendre |
| Imperative Singular Plural | hear hear | hear <br> hear | her (e) <br> hereth | entends entendez |
| Participles <br> Present <br> Past | hearing heard | hearing heard | hering herd | entendant entendu |
| ```Present 1st singular 2nd}\mathrm{ singular 3rd singular 1st plural 2nd plural 3rd plural Different forms``` | I hear <br> you hear <br> he hears <br> we hear <br> you hear  <br> they hear <br> 2  | I hear <br> thou hearst <br> he heareth <br> we hear (en) <br> you hear (en) <br> they hear (en) <br> 3  | I here <br> thou herest <br> he hereth <br>   <br> we here (n) <br> ye here (n) <br> bei here(n) <br> 4  | j' entends <br> tu entends <br> il entend <br> nous entendons  <br> vous entendez  <br> ils entendent  <br> 4 $(1 s=2 s=3 s)$ |
|  | hear-d <br> hear-d <br> hear-d <br> hear-d <br> hear-d <br> hear-d <br> 1 | ```hear-d hear-d-[st] hear-d hear-d-(en) hear-d-(en) hear-d-(en) 2``` | ```her-d-e her-d-est her-d-e her-d-e(n) her-d-e(n) her-d-e(n) 3``` | entend-ais entend-ais entend-ait <br> entend-i-ons entend-i-ez entend-aient $3 \quad(1 / 2 s=3 s=3 p)$ |


| (19) | Danish | Faroese | Yiddish | Icelandic |
| :---: | :---: | :---: | :---: | :---: |
| Infinitive | høre | hoyra | hern | heyra |
| Imperative Singular Plural | $\begin{aligned} & \text { hør } \\ & \text { hør } \end{aligned}$ | $\begin{aligned} & \text { hoyr } \\ & \text { hoyr (ið) } \end{aligned}$ | her hert | heyr heyrið |
| Participles <br> Present <br> Past | hørende hørt | hoyrandi hoyrt | herndik gehert | heyrandi heyrt |
| ```Present 1st singular 2nd singular 3rd singular 1st plural 2nd plural 3rd plural Different forms``` | jeg hører du hører han hører <br> vi hører I hører de hører 1 | eg hoyri <br> tú hoyrir <br> hann hoyrir <br> vit hoyra <br> tit hoyra <br> tey hoyra $3$ | ikh her <br> du herst <br> er hert <br>   <br> mir hern <br> ir hert <br> zey hern <br> 4  | ég heyri <br> bú heyrir <br> hann heyrir <br> við heyrum <br> pið heyrið <br> peir heyra $5$ |
|  | hør-te <br> hør-te <br> hør-te <br> hør-te <br> hør-te <br> hør-te <br> 1 | $\begin{aligned} & \text { hoyr-d-i } \\ & \text { hoyr-d-i } \\ & \text { hoyr-d-i } \\ & \text { hoyr-d-u } \\ & \text { hoyr-d-u } \\ & \text { hoyr-d-u } \\ & 2 \end{aligned}$ |  | $\begin{aligned} & \text { heyr-ð-i } \\ & \text { heyr-д-ir } \\ & \text { heyr-д-i } \\ & \text { heyr-ð-um } \\ & \text { heyr-д-uð } \\ & \text { heyr-д-u } \\ & 5 \end{aligned}$ |

Vikner, 07.02.2008, p. 8

### 3.2 IP and $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement in the SOV -languages

Now what about SOV-languages like German or Dutch? As far as verbal inflection is concerned, the above suggestion would lead us to expect German (but not Dutch) to have $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement. Although this is what I used to think (Vikner 1995:152-157), I no longer think so, in that I now think that none of the SOV-languages have $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement, not even German (Vikner 2001, 2005b). Consider first the German version(s) of (14) and (15):
(20) Ge. a. *Dass Johann isst oft Tomaten (überrascht die meisten Leute)
b. Dass Johann oft Tomaten isst (überrascht die meisten Leute)

The ill-formedness of (20a), which must have the structure (21a), could be due to $I^{\circ}$ being final (as I thought in Vikner 1995:153) and/or be due to German not having $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement (as argued in Vikner 2001, 2005b).

The well-formedness of (20b) may either be the result of $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement if $\mathrm{I}^{\circ}$ is final, as in (21b), or of lack of $V^{\circ}$-to- $I^{\circ}$ movement, as in either of (21a,b) WITHOUT the arrows:
(21)


In other words, if German lacks $\mathrm{V}^{\circ}$-to $-\mathrm{I}^{\circ}$ movement, we have no evidence of the position of $\mathrm{I}^{\circ}$ in German, and thus it may be that the only difference between German clause structure and that of e.g. English and Danish is the position of $\mathrm{V}^{\circ}$, as in (21a) vs. (12).
(22)

|  | V 2 | $\mathrm{~V}^{\circ}-\mathrm{to}-\mathrm{I}^{\circ}$ |  |  |
| :--- | :--- | :---: | :---: | :--- |
| a. French | - | + |  |  |
| b. | English | - | - | (at least not main verbs) |
| c. Icelandic | + | + |  |  |
| d. Danish | + | - |  |  |
| e. German | + | $?$ | (Vikner 1995: + , Vikner 2001, 2005b:- ) |  |

In my view, there are at least two other things that indicate that German (etc.) does not have $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement:

## 1. (Vikner 2005b)

A number of complex verbs in German and Dutch have a strange distribution. The occur as non-finite verbs in both main and embedded clauses, (23a,b), but as finite verbs, they only occur in embedded clauses, (23c), NOT in main clauses, (23d,e):

```
(23) Ge. a. Sie will bausparen
    She wants (to) building-save
    (She wants to save with a building society)
    b. ... weil sie bausparen will
    ... because she building-save wants
    (... because she wants to save with a building society)
c. ... weil sie bauspart
    ... because she building-saves
    (... because he saves with a building society)
```

                            ((23a,c) adapted from Eisenberg 1998:226, 324, (16a))
    $\begin{array}{lrl}\text { d. * } & \text { Spart sie bau } \\ \text { e. * Bauspart sie }\end{array}$
e. * Bauspart sie ?
(Building-) saves she (building) ?
(Intended: Does she save with a building society?)

I think that this is best explained if we assume that what (23a-c) have in common is that the verbs here all are in $\mathrm{V}^{\circ}$, i.e. what these verbs are unable to do is to leave $\mathrm{V}^{\circ}$. The reason is that they then would have to be treated either as separable ("trennbar") or as non-separable ("nichttrennbar") verbs, and this special property of these verbs is that they have to fulfill the conditions on verbs of both types.

## 2. (Vikner 2001:66-99)

There is a lot of variation in the sequence of verbs in embedded clauses like

$$
\begin{array}{llll}
\text { (24) Du. ... dat hij haar hoort roepen } \\
\text { b. Ge. ... dass er sie rufen hört } & \text { ( } \ldots \text {... that he her hears shout') } \\
\text { ( } \ldots \text { that he her shout hears') }
\end{array}
$$

both across nine different Germanic languages/dialects (Dutch, Afrikaans, West Flemish, Frisian, Standard German, Swabian German from Stuttgart, Swiss German from Sankt Gallen, Swiss German from Zürich, and Swiss German from Bern) and across six different constructions (perfect, passive, durative, causative, perception verbs, and modal verbs).

This variation in embedded clauses where one of the two verbs is finite, as in (24a,b), is almost identical to the variation in the sequence of the verbs in main clauses where none of the two verbs in question are finite, ( $25 \mathrm{a}, \mathrm{b}$ ):
(25) a. Du. Hij zal haar horen roepen ('He will her hear shout')
b. Ge. Er wird sie rufen hören ('He will her shout hear')

This shows that it makes no significant difference whether the higher of the two verbs concerned is finite, as hoort/hört in (24a,b), or non-finite, as horen/hören in (25a,b). This again means that in embedded clauses in the nine SOV-Germanic languages, there can be no obligatory movement that involves only finite verbs. This amounts to saying that there is no $\mathrm{V}^{\circ}$-to- $\mathrm{I}^{\circ}$ movement in the Germanic SOV-languages.

Vikner, 07.02.2008, p. 10

## 4. VP

It is possible to refer to a preceding VP without repeating it word for word:

```
(26)
    En. a. Henry will buy presents in Paris tomorrow and
(27) Da. a. Henrik vil købe julegaver i Paris og
    det vil Joachim
    købe julegaver i Paris i morgen 
    b. Henrik vil købe julegaver i Paris i morgen og
    det vil Joachim i næste uge
c. Henrik vil købe julegaver i Paris i morgen og
    det vil Joachim i Møgeltønder i næste uge
    d. *Henrik vil købe julegaver i Paris i morgen og
    det vil Joachim bøger i Møgeltønder i næste uge
```

do so / det (gøre det) can replace the following:

1. $\mathrm{V}^{\circ}$-NP-PP-AdvP (26a): buy presents in Paris tomorrow
2. $\mathrm{V}^{\circ}$-NP-PP (26b): buy presents in Paris
3. $\mathrm{V}^{\circ}$-NP (26c): buy presents
$\begin{array}{lc}\text { 1. } \mathrm{V}^{\circ}-\mathrm{NP}-\mathrm{PP}-\mathrm{PP} & (27 \mathrm{a}): \text { kobe julegaver } i \text { Paris } \text { i morgen } \\ 2 . \mathrm{V}^{\circ}-\mathrm{NP}-\mathrm{PP} & (27 \mathrm{~b}): \text { kobe julegaver } i \text { Paris } \\ 3 . \mathrm{V}^{\circ}-\mathrm{NP} & (27 \mathrm{c}): \text { kobe julegaver }\end{array}$
but not just:
4. $\mathrm{V}^{\circ}$
(26d): buy
5. $V^{\circ}$
(27d): kobe

The fact that three different constituents may be replaced by one and the same element can be captured by assuming that these three constituents are of the same category, namely VP:
(28)


Vikner, 07.02.2008, p. 11

## 5. NP

Important announcement: Articles (etc.) are not seen as part of the NP (noun phrase) here. Instead, what was earlier seen as an NP is here seen as a DP (determiner phrase). (Abney 1987, Giorgi \& Longobardi 1991, Haegeman \& Guéron 1999:406-422, and others).

## BEFORE :

(29) a. [ NP these green chairs]
(30) a. [ ${ }_{N P}$ the chairs from France]

HERE :
b. [ ${ }_{D P}$ these [ ${ }_{N P}$ green chairs]]
b. [DP the $[\mathrm{NP}$ chairs from France] ]

The minimal NP thus consists of the head ( $\mathrm{N}^{\circ}$ ) and its complement(s). Modifiers may be adjoined to the left or to the right.

The article is the head of its own projection (DP, i.e. determiner phrase), which dominates $\mathrm{D}^{\circ}$ and its complement (NP), cf. the following section.

One reason to assume the existence of both NPs and DPs is NPs, (31a), (32a), (33a), \& (34a), and DPs, (31b), (32b), (33b), \& (34b), do not occur under the same circumstances:

```
(31) En. a. Nice man though he is, my uncle can be a little boring
    b. *A nice man though he is, my uncle can be a little boring
(32) En. a. *I met nice man
    b. I met a nice man
(33) Da. a. Stor dyreven som han var, den lille Emil, lukkede han katten ud
    b. *En stor dyreven som han var, den lille Emil, lukkede han katten ud
(34) Da. a. *Ida kender dyreven
```

English has an element that may be substituted for NP: one.

```
(35) En. a. These chairs from Germany are cheaper than
    the ones over there
    b. These chairs from Germany are cheaper than
    the ones from France over there
```

The fact that two different constituents may be replaced by one and the same element can be captured by assuming that these two constituents are of the same category, namely NP:
(36)

(37)

(38a,b) is thus accounted for by assuming that of linguistics is a complement in teacher of linguistics, whereas with an American accent is a modifier. The same assumptions will also account for the ordering restrictions in $\mathrm{a}, \mathrm{b}$ ):

```
(38) En. a. The teacher of linguistics with an American accent knows
    more about German than the one with a Danish accent
    b. *The teacher of linguistics knows more about German
                        than the one of physics
(39) En. a. A teacher of linquistics with an American accent
    b. *A teacher with an American accent of linquistics
```


## 6. DP

As was said in the previous section, the article is here seen the head of its own projection (DP, i.e. determiner phrase), which dominates $\mathrm{D}^{\circ}$ and its complement (NP). Other examples of $\mathrm{D}^{\circ}$ are demonstratives, e.g. this, and possessives, e.g. my.
(40)


ONE argument for making a distinction between DP and NP is that NPs and DPs do not occur under the same circumstances, cf. (31)-(34) above (even if it only happens very rarely that an NP is not part of a DP).

A SECOND argument for making a distinction between DP and NP is that this allows us to analyse pronouns as a kind of determiners:

## new DP-analysis:

 old discarded NP-analysis: a.

b.


Taking pronouns to be $\mathrm{D}^{\circ} \mathrm{s}$ (with no sisters) gives a better account of a large number of elements across languages that occur both as articles/demonstratives and as pronouns: Not just English this book and this, but also e.g. Danish den bog and den, German das Buch and das, and French le livre and le.

It also allows a straight-forward analysis of cases where other pronouns seem to occur as determiners:
(43)


A THIRD argument in favour of the DP-analysis is that it makes the following analysis of possessive constructions possible, where the actor is in the specifier position of DP, i.e. it is in some sense a subject.
(44)


This analysis has two advantages:

1. It predicts that possessor phrases and articles do not cooccur, because both 's and the have to be in $\mathrm{D}^{\circ}$.
```
(45) En. a. *The actor's the disappearance was mysterious
    b. *The actor's the book was expensive
```

2. And it predicts that 's occurs not on the noun in the possessor DP (as it would if it was a real case ending) but after the entire possessor DP:
(46) En. a. *The little $\left[{ }_{N}\right.$ o girl's] next door bicycle
b. [ ${ }_{D P}$ The little girl next door]'s bicycle
(47) En. a. *The $\left[_{N}\right.$ 。Queen's] of England new hat
b. [ ${ }_{D P}$ The Queen of England]'s new hat
(48) En. a. *In a [No year's] or so time b. In [DP a year or sol's time
(0 Google hits, Nov. 2005)
(2500 Google hits, Nov. 2005)
(49) Da. a. *[ $\mathrm{N}^{\circ}$ Deres $]$ der ikke kom egen skyld

$$
\begin{aligned}
& \text { b. [DP De der ikke kom] 's egen skyld } \\
& \text { Those who not arrived's own fault }
\end{aligned}
$$

## - DPs containing proper names

Proper names like London or Louise normally occur without an article in English, Danish or French, and so one might be tempted to analyse them as NPs (as in (31a) above) rather than DPs. There are at least two reasons why we shall nevertheless take them to be DPs, with a structure as in $(50 \mathrm{a}, \mathrm{b})$ where $\mathrm{D}^{\circ}$ is empty:
(50) En. a.


Louise

The first reason is that sometimes proper names do have articles, which then fit into $\mathrm{D}^{\circ}$ :
(51) En. a. He much preferred the London of the 1930 es to the modern city
b. You probably know this Louise much better than that Louise
c. I much prefer your Fred to my Fred
d. Tower Bridge is a famous bridge across the Thames
e. The meeting took place in the Haque

There are also languages where proper names may frequently take articles:

$$
\begin{array}{llll}
\text { a. It. } & \frac{\text { La Maria non parla }}{\text { b. Ge. }} \begin{array}{lll}
\text { Die Maria } & \text { danese } \\
\text { The Maria (not) speaks (no) Danish }
\end{array} \tag{52}
\end{array}
$$

The second reason is that the positions and functions that proper names have can otherwise be filled with DPs, not with NPs:

```
En. a. London is a really nice place
    b. [DP This city] is a really nice place
    c. *[[NP City] is a really nice place
```

This also applies to what we before would have called "determinerless NPs". These are now taken to be DPs with an empty $\mathrm{D}^{\circ}$ ("zero article"):
(54) En. a. Mobile phones should be switched of during the lecture
b. Young Danes drink less beer than 50 years ago
c. Theory should go hand in hand with practice
d. He knew Danish before he learned English

## 7. Parallels between DP and IP/CP (and missing parallels)

Just as DP is built on top af an NP, so IP is built on top of a VP.
Notice that the subject of the DP is in DP-spec and the subject of the IP is in IP-spec. Notice further how the modifier of an NP is an AdjP which adjoins to the NP, and the modifier of the VP is an AdvP which adjoins to the VP:
(55)


(56)


We have seen examples of movement from $\mathrm{V}^{\circ}$ to $\mathrm{I}^{\circ}$ or from $\mathrm{V}^{\circ}$ to $\mathrm{I}^{\circ}$ to $\mathrm{C}^{\circ}$, but we have not (yet) seen any parallel examples in the DP. Danish and the other Scandinavian languages (and also unrelated languages like Romanian) are sometimes assumed to have $\mathrm{N}^{\circ}$-to- $\mathrm{D}^{\circ}$ movement:

```
(57) Da. a.
    \frac{D}{0}
    et billede
    c. det store billede
                                    a large picture
                                    a picture
                                    the large picture
                                    picture-the
```

Cf. that only the elements that occur between $\mathrm{D}^{\circ}$ and $\mathrm{N}^{\circ}$ (e.g. adjectives) may prevent this movement, not elements that occur left of $\mathrm{D}^{\circ}$ (e.g. quantifiers) or right of $\mathrm{N}^{\circ}$ (e.g. PPs):


Across different frameworks (Dik 1997:67, Platzack 2001a,b, the wording here is from Christensen 2005:30), it is often observed that the tripartition between CP, IP and VP correspond to a tripartion between (e.g.) discourse form, gramatical form and thematic form:


It remains to be seen whether something parallel could hold for the DP.

In the project application, we promised to look for similarities and differences between clauses and nominals in three different directions. From the point of view of the approach presented here, these three areas correspond to different parts of the phrase structure:

## Danish

(60)
a. Grammatiske relationer
b. Beskriverled
c. Bestemmerled

## English

Argument
structure
Modifiers
Determiners

## Positions ins the structure

Specifier and complement positions

Adjoined positions (or are they?)
"Functional" head positions

## References

Abney, Steven: 1987, "The English Noun Phrase in its Sentential Aspect", Ph.D., M.I.T.
Allan, Robin, Philip Holmes, \& Tom Lundskær-Nielsen: 1995, Danish, a Comprehensive Grammar, Routledge, London.
Bjerre, Tavs, Eva Engels, Henrik Jørgensen \& Sten Vikner: 2007, "Points of convergence between functional and formal approaches to syntactic analysis", submitted manuscript. < www.hum.au.dk/engelsk/engsv/papers/bjer07c-ms.pdf>
Chomsky, Noam: 1995, The Minimalist Program, MIT Press, Cambridge MA.
Christensen, Ken Ramshøj: 2005, Interfaces: Negation - Syntax - Brain, unpubl. Ph.d. dissertation, University of Aarhus. <www.hum.au.dk/engelsk/engkrc/Papers/krcphd.pdf>
Davis, Norman (ed.): 1971, The Paston Letters and Papers of the Fifteenth Century, Clarendon Press, Oxford.
Diderichsen, Paul: 1962, Elementerr Dansk Grammatik, 3rd edition, Gyldendal, Copenhagen. Reprinted 1984.
Dik, Simon: 1997, The Theory of Functional Grammar, Part 1: The Structure of the Clause, 2nd Edition, Mouton de Gruyter, Berlin.
Eisenberg, Peter: 1998, Grundriß der deutschen Grammatik I: Das Wort, J.B. Metzler, Stuttgart.

Giorgi, Alessandra \& Giuseppe Longobardi: 1991, The Syntax of Noun Phrases, Cambridge University Press, Cambridge.
Haegeman, Liliane \& Jacqueline Guéron: 1999, English Grammar - A Generative Perspective, Blackwell, Oxford.
Hansen, Erik: 1977, Dcemonernes Port, Støttemateriale til undervisningen i nydansk grammatik, Hans Reitzel, Copenhagen.
Hansen, Erik \& Lars Heltoft, 2003: Grammatik: Syntaks. Skrifter fra dansk og public relations, Roskilde Universitetscenter, Roskilde.
Heltoft, Lars: 1986, "Topologi og syntaks. En revision af Paul Diderichsens sætningsskema" in Lars Heltoft \& John E. Andersen (eds.), Saetningsskemaet og dets stilling - 50 år efter, Nydanske Studier og Almen Kommunikationsteori, NyS 16/17, 105-130.
Jørgensen, Henrik: 2000, Indføring i Dansk Syntaks, University of Aarhus, Aarhus. < http://www.hum.au.dk/nordisk/lokal/pdf/syaug00.pdf>
Platzack, Christer: 1985, "A Survey of Generative Analyses of the Verb Second Phenomenon in Germanic" in Nordic Journal of Linguistics 8.1, 49-73.
Platzack, Christer: 2001a, "Multiple Interfaces" in Nikanne, Urpo \& Emilie van der Zee (eds.) Cognitive Interfaces. Constraints on Linking Cognitive Information, Oxford University Press, Oxford, pp. 21-53.
Platzack, Christer: 2001b, "The Vulnerable C-Domain", Brain \& Language 77.3, 364-77.
Togeby, Ole: 2003, Fungerer denne seetning? - Funktionel dansk sproglcere, Gads Forlag, Copenhagen.
Uldaler, Nelly \& Gerd Wellejus (eds.): 1968, Gammeldansk Leesebog, Gyldendal, Copenhagen.
Vikner, Sten: 1995, Verb Movement and Expletive Subjects in the Germanic Languages, Oxford University Press, New York.
Vikner, Sten: 1997, " ${ }^{\circ}$-to- ${ }^{\circ}$ Movement and Inflection for Person in All Tenses" in Liliane Haegeman (ed.), The New Comparative Syntax, Longman, London, pp. 189-213. < www.hum.au.dk/engelsk/engsv/papers/vikn97b.pdf> .
Vikner, Sten: 1998, " ${ }^{\circ}$-til- $I^{\circ}$ flytning og personfleksion i alle tempora" $\left(V^{\circ}\right.$-to- $I^{\circ}$ Movement and Inflection for Person in All Tenses) in Islenskt mál 19, 81-128. < www.hum.au.dk/engelsk/engsv/papers/vikn99b.pdf>.
Vikner, Sten: 2001, Verb Movement Variation in Germanic and Optimality Theory, Habilitationsschrift, University of Tübingen. < www.hum.au.dk/engelsk/engsv/papers/viknhabi.pdf> .
Vikner, Sten: 2005a, "Det finitte verbums position i dansk før og nu" [The position of the finite verb in Danish earlier and now] in Peter Widell \& Mette Kunøe (eds.) 10. Mode om Udforskningen af Dansk Sprog [10 th Conference on the Research into the Danish Language], Dept. of Scandinavian Languages, University of Aarhus, 383-394.
< www.hum.au.dk/engelsk/engsv/papers/vikn05a.pdf> .
Vikner, Sten: 2005b, "Immobile Complex Verbs in Germanic", Journal of Comparative Germanic Linguistics 8.1-2, 83-115.
<www.hum.au.dk/engelsk/engsv/papers/vikn05b.pdf>.

