Syntax & Morphology: A Summary
(or: Everything in 12 pages)\textsuperscript{1}

Ken Ramshøj Christensen
Dept. of English, Inst. for Language, Literature & Culture,
Aarhus University, DK-8000 Århus
http://www.hum.au.dk/engelsk/engkrc/
engkrc@hum.au.dk

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\textsuperscript{1} This is a summary handout for the introductory course in GB syntax based on Haegeman & Guéron (1999) \textit{English Grammar. A Generative Perspective} and Huddleston & Pullum (2005) \textit{A Student’s Introduction to English Grammar}.
1 Morphology

1.1 Word classes: Categories
Lexical categories: V, N, P, Adj, Adv
Functional categories: D, I, C

1.2 Morphemes, roots, and affixes

1.2.1 Compounding
Root + Root → Stem

1.2.2 Derivation
Forms new words / changes meaning
Root + affix → Stem
– affixes are bound morphemes.
– Some roots are also bound (e.g. destruct- which is a bound allomorph of destroy, formed by backformation from destruction, see 1.2.5):
1.2.3 Inflection

Verbs: tense (past, present), progressive aspect, person

```
  V
   \  /  \\
  V  suffix
   /  \
 destroy -_ present 1., 2. sg. & 1., 2., 3. plural
    -s  present 3. sg.
    -ed  past
    -ing  progressive aspect
```

Nouns: number (plural/singular), possession (-s), case (pronouns)

```
  N
   \  /  \\
  N  suffix
   /  \
 Dragon -_ singular
    -s  plural
    -s  possessor
```

Adjectives: positive, comparative, superlative

```
  Adj
   \  /  \\
  Adj  suffix
   /  \
 Smart -_ positive
    -er  comparative
    -est  superlative
```

1.2.4 Blends

- smoke+fog=smog
- breakfast+lunch=brunch

1.2.5 Backformation

N: editor  \rightarrow  V: edit
N: destruction  \rightarrow  V: destruct-  (e.g. self-destruct)
2 Syntax

2.1 **Lexical entries: Subcategorization and Theta-grids**

<table>
<thead>
<tr>
<th>Predicate:</th>
<th>Sleep</th>
<th>Love</th>
<th>Seem</th>
<th>Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category:</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>Adj</td>
</tr>
<tr>
<td>Subcategorization:</td>
<td>[ DP/IP]</td>
<td>[ IP/CP]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theta-grid:</th>
<th>1:Agent</th>
<th>1:Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>External argument</td>
<td>1:Agent</td>
<td>1:Agent</td>
</tr>
<tr>
<td>Internal argument</td>
<td>2:Theme</td>
<td>2:Theme</td>
</tr>
</tbody>
</table>

| 1:Theme |

To a large extent, the properties of the verb determine the composition of the clause.

2.2 **Subjects**

a. Arguments (+theta role): *Carl bought beer*
b. Quasi/weather-arguments (-theta role): *It snows*
c. Expletives (-theta role): *There were many people in the house*  
   *It is Elvis leaving the building*

2.3 **The Theta-criterion**

Each argument must be associated with one and only one theta-role  
Each theta-role must be associated with one and only one argument

2.4 **Theta-role assigners**

- **AGENT**  
  a. Verbs: *[They] smashed [the windows]*  
  b. Adjectives: *[they] are happy*  
  c. Prepositions: *The windows were smashed by [them]*

2.5 **Case assigners**

a. **NOMINATIVE**: Finite 1° (past/present tense)  
   b. **ACCUSATIVE**: Lexical V°, P°  

   *[They] I° smashed [the windows] with [a hammer]*
2.6 The Case Filter

*DP[-case]: All overt (i.e. non-empty) DPs must have case.

2.7 Exceptional Case Marking: ECM

Case assignment into a non-finite clause in order to assign case to the subject (to obey the case filter).
Non-finite I° does NOT assign case.

\[
\text{I need [IP him [I to [VP build a wall]]]}
\]

\[
\text{I consider [IP him [I° [AdjP stupid]]]}
\]

2.8 Constituency tests

a. Movement
   i. Fronting (topicalization, see 2.14.4)
   ii. Clefting (“It is X that … t\_X …”)
   iii. Pseudo-clefting (“What … t\_X … is X”)
   iv. Passivisation (see 2.14.5)
   v. Heavy NP shift (… \_t\_X …X)

b. Substitution

c. Deletion

Rule:
If something passes at least one constituency test, it is a constituent. If it fails a test, it may or may not be a constituent.

2.9 X-bar structure

Right-adjointed modifier

```
XP
   XP Modifier
      Specifier X'
         X° Complement
            (Head)
```

Left-adjointed modifier

```
XP
   Modifier XP
      Specifier X'
         X° Complement
            (Head)
```


2.10 Structure of the clause

2.11 Verb types

Base-generated in V°:
1) Lexical verbs: NEVER leave V°
2) Auxiliary verbs: move to I° (when finite)
   a. aspectual auxiliaries: have (perfect), be (progressive)
   b. copula verb: be

Base-generated in I°:
1) Modal auxiliaries: will, shall, can, may, must
2) Dummy auxiliary: do

2.12 Subject Auxiliary Inversion: SAI

Wh-elements move to spec-CP and the auxiliary verb (Aux) moves from I° to C°, inverting the order of Subj and Aux:

```
[IP Subject [IP Aux ... XP ... ... ]]]
[CP wh-2 [C° Aux [IP Subject [I° t1 ... ... t2 ... ... ]]]]
```
2.13 **The subject requirement**

ALL clauses have subjects:

a. DP, PP, Expletive it / there, Weather it, or ec: Spec-IP

b. Clausal subjects: CP or IP: Adjoined to IP and co-indexed with the empty category ec in spec-IP.

\[
\text{[IP} \ [\text{IP}_1 \ ec \text{ to solve the problem}] \ [\text{IP} ec_1 \text{ will be difficult}]]
\]

2.14 **Clause types and movement**

2.14.1 **Declarative**

\[
\text{[IP} \ We \ I^0 \ [VP \ [\text{AdvP} \text{ just}] \ [VP \text{ heard the news } \text{ ]}]]?
\]

2.14.2 **Yes/no question**

Movement of the auxiliary from I\(^0\) to C\(^0\) → SAI:

\[
\text{[CP} \ \text{Did}_1 \ [\text{IP you} \ t_1 \ [VP \text{ hear the news } \text{ ]}]?? \text{[CP} \ \text{Have}_1 \ [\text{IP you} \ t_1 \ [VP t_1 \ [VP \text{ heard the news } \text{ ]}]??}
\]

2.14.3 **Wh-question**

Movement of the wh-element into spec-CP:

a. **Object:**

\[
\text{[CP} \ \text{What}_2 \ \text{did}_1 \ [\text{IP you} \ t_1 \ [VP \text{ hear t}_2 \text{ ]}]?? \text{[CP} \ \text{What}_2 \ \text{have}_1 \ [\text{IP you} \ t_1 \ [VP t_1 \ [VP \text{ heard t}_2 \text{ ]}]??}
\]

b. **Subject:**

\[
\text{[CP} \ \text{who}_1 \ C^0 \ [\text{IP t}_1 \ I^0 \ [VP \text{ saw the movie } \text{ ]}]?? \text{[CP} \ \text{who}_1 \ \text{has}_2 \ [\text{IP t}_1 \ t_2 \ [VP t_2 \ [VP \text{ seen the movie } \text{ ]}]??}
\]

c. **Adjunct:**

\[
\text{[CP} \ \text{how}_2 \ \text{did}_1 \ [\text{IP you} \ t_1 \ [VP t_1 \ [VP \text{ open the door } t_2 \text{ ]}]?? \text{[CP} \ \text{when}_2 \ \text{did}_1 \ [\text{IP you} \ t_1 \ [VP t_1 \ [VP \text{ open the door } t_2 \text{ ]}]??}
\]

2.14.4 **Fronting**

Topicalization – adjunction to IP:

\[
\text{[IP} \ \text{Henry}_1 \ [\text{IP we already} \ [VP \text{ know t}_2 \text{ ]}]??}
\]
2.14.5 Passivisation
Movement from VP-compl to spec-IP: Object ➔ Subject

\[
\begin{align*}
&[\text{IP } \text{Henry}_1 \text{ was}_2 [\text{VP } t_2 \ [\text{VP } \text{recognized } t_1 ]]] \\
&[\text{IP } \text{Henry}_1 \text{ was}_2 [\text{VP } t_2 \ [\text{VP } \text{recognized } t_1 ] \ [\text{PP } \text{by } \text{us} ]]] \\
&[\text{IP } \text{Henry}_1 \text{ was}_2 [\text{VP } t_2 \ [\text{VP } \text{recognized } t_1 ]]] \\
&[\text{IP } \text{Henry}_1 \text{ was}_2 [\text{VP } t_2 \ [\text{VP } \text{recognized } t_1 ] \ [\text{PP } \text{by } \text{us} ]]]
\end{align*}
\]

2.14.6 Raising
Raising predicates have no external argument
Movement from spec-IP to spec-IP: Subject ➔ Subject

\[
\begin{align*}
&[\text{IP } \text{Henry}_1 \text{ may}_2 [\text{VP } \text{appear } t_1 \ [\text{IP } \text{to } \text{know } \text{us} ]]] \\
&[\text{IP } \text{Henry}_1 \text{ may}_2 [\text{VP } \text{seem } t_1 \ [\text{IP } \text{to } \text{know } \text{us} ]]] \\
&[\text{IP } \text{Henry}_1 \text{ could}_2 [\text{VP } \text{be } t_1 \ [\text{VP } \text{believed } t_1 \ [\text{IP } \text{to } \text{know } \text{us} ]]]
\end{align*}
\]

2.14.7 Embedded declarative
I know \([CP [C' that [IP they ]° [VP heard the news]]]]\)

2.14.8 Embedded wh-question
Movement of the wh-element into spec-CP; C° is empty.

a. Subject:
They know \([CP wh_2 e [IP t_2 ]° [VP heard the news]]\)

b. Object:
They know \([CP what_2 e [IP we ]° [VP heard_1 t_2 ]]]\)

2.14.9 Embedded infinitival clauses

\[
\begin{align*}
&[\text{ACC } X] \\
&[\text{ACC } X] \\
&[\text{ACC } X] \\
&[\text{ACC } X] \\
\end{align*}
\]

(Empty categories do not need case, see 2.6 above)

\[
\begin{align*}
&[\text{ACC } X] \\
&[\text{ACC } X] \\
\end{align*}
\]

(Exceptional Case Marking, see 2.7 above)
2.14.10 **Wh-islands:**

Movement is **local**:

* \[ [\text{CP} \text{What}_1 \text{ did you hear } [\text{CP} \text{ where}_2 \ e \ \text{他们 saw } t_1 \ t_2 ]] \]

\[ [\text{CP} \text{What}_1 \text{ did you hear } [\text{CP} \text{ t}_1 \ e \ \text{他们 saw } t_1 \ \text{outside } ]] \]

2.15 **Relative clauses**

**Adjoined** clausal modifiers of NP

\[ \text{DP} \]
\[ \text{D'} \]
\[ \text{D}_0 \]
\[ \text{NP} \]
\[ \text{NP} \]
\[ \text{N'} \]
\[ \text{N}_0 \]
\[ \text{CP} \]
\[ \text{spec} \]
\[ \text{C'} \]
\[ \text{C}_0 \]
\[ \text{IP} \]

The thing 1 e
The thing 2 e
The thing 3 e

The thing 1 e
The thing 2 e
The thing 3 e

2.15.1 **Non-finite relative clauses**

*The thing* 1 e 2 e [IP 1 e [VP living in the woods]]

2.15.2 **Infinitival relative clauses**

*Something* 1 e 2 e [IP 1 e [VP play with ]]1]

*Someone* 1 e 2 e [IP 1 e [VP play with ]]2]
2.16 Particles

Test: Prepositions (P°) always precede the complement; Particles (Prt°) may appear either before or after the complement (but the particle always follows a pronominal complement)

Prepositions:

- Jacob climbed up the ladder
- * Jacob climbed the ladder up

- The vampire went into the coffin to sleep
- * The vampire went the coffin into to sleep

Particles:

- Edward will probably turn on the radio
- Edward will probably turn the radio on

- He never throws away old papers
- He never throws old papers away

V P         V P
V '          V '
V °    Prt°     V °     Prt°
      D P         D P

Prt°  Prt°
      t

V°     Prt'       spec    Prt'

V   Prt   DP
°      °

turn on the radio

Prt-incorporation

3 Grammatical Function

3.1 Subject (Subj / S)

The thing/action/entity the clause is about.
The element associated with spec-IP (see 2.13 above)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Predication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kevin</td>
<td>read a book about nuclear physics yesterday</td>
</tr>
</tbody>
</table>
3.2 **Direct object (Obj / DO / Od)**

Typically associated with the theta-role of THEME/PATIENT

a. The complement of V°

   DP: *I love chocolate*
   CP: *I know that you love chocolate*
   IP: *I like to go shopping*
   VP: *I like swimming*

b. The complement of P°

   DP: *I looked at the statue*
   CP: *I pointed out that she was wrong*

3.3 **Indirect object (IO, Oi)**

Typically associated with the theta-role role of RECIPIENT/BENEFICIARY

a. Part of a double object construction (see 3.4 below):

   DP: *Harry bought Sally a bunch of flowers*
   DP: *I’d like to give someone this present*

b. Complement of P°:

   DP: *Harry bought a bunch of flowers for Sally*
   DP: *I’d like to give this present to someone*

3.4 **The double object construction**
3.5 **Subject predicate (SPred)**
(Also called *Subject oriented Predicative Complement*, PCs)

The relation between the subject (Subj) and the subject predicate (SPred) is something like “=”.

a. With the copula verb *be*:

\[
\text{Subj} = \text{SPred}
\]

| AdjP: They are quite tired |
| AdjP: She is very beautiful |
| DP: He is an idiot |
| PP: He is in the toilet |

b. With other verbs meaning *be, become, look like, appear, be called...*

\[
\text{Subj} = \text{SPred}
\]

| DP: I am called Dannyboy |
| DP: Bill became the president |
| AdjP: They look absolutely stupid |
| AdjP: She seems nice |
| AdjP: He is presumed dead |
| IP: She appears to be smiling |

3.6 **Object predicate (OPred)**
(Also called *Object oriented Predicative Complement*, PCo)

The relation between the object (Obj) and the object predicate (OPred) is something like to “=”.

Note the close parallel with the subject complement:

\[
\text{She drove me crazy} \quad \text{cause & effect} \quad I \text{ am crazy}
\]

<table>
<thead>
<tr>
<th>Subj</th>
<th>Obj</th>
<th>OPred</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP: They call me Dannyboy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AdjP: I’ll keep the beer cold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AdjP: We consider the case solved</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>