Movement

EGG 2021 — Introduction to Syntax

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1 So far …

Yesterday's class

There is no consensus on how to represent noun phrases at the moment

- Up until the mid-1980s, everyone used NPs
- Abney (1987) argued at length for the **DP hypothesis**
- It's been widely adopted and is introduced in many textbooks
- But there is renewed debate about whether it is accurate or not …

🕐 Today, we'll look at a final syntactic phenomenon: **movement**.

2 Movement

The idea of movement

Elements can appear in different positions in otherwise similar structures

(1)   a.   Anke, Maria, and Adrian taught **syntax** at the EGG.

       b.   **What** did Anke, Maria and Adrian teach ＿＿ at the EGG?

(2)   a.   It seems that **you** really like syntax.

       b.   **You** seem ＿＿ to really like syntax.

(3)   a.   David enjoyed writing *Core Syntax*.

       b.   *Core Syntax*, David enjoyed writing ＿＿.

(4)   a.   There are **thirty students** in this course.

    b.   **Thirty students** are ___ in this course.

💡 The highlighted phrases in (1)–(4) can appear in different positions in the clause — apart from *what* in (1b) they're even spelled out identically.

In (1), both *syntax* and *what* represent the **direct object**

Movement

Constituents can be reordered with respect to others in the constructions in (1)–(4). Everyone agrees on that issue. But it is a characteristic of theories originating from **transformational grammar** that the two positions are linked by an operation often called **movement**. In Government and Binding Theory (GB) and Minimalism, some operation moves an element from its **base generated position** to one or more c-commanding positions.

(5)   Movement (abstractly)
    XP … ⟨XP⟩ … ⟨**XP**⟩

Types of movement

Not all phrasal movement is the same — two types are often distinguished

- **A-movement** is the movement to an **argument** position
  - A-movement is often a matter of Case, such as raising and passive

- **A′-movement** ('A-bar movement') is movement to a **non-argument** position
  - Wh-movement (as in (1))
  - Topicalisation (as in (3))
  - Relativisation, …

Examples of A-movement

Raising and passives in English can be analysed as movement for Case

- In raising, an embedded subject moves to the main subject position to get Case

- In the passive, a logical object moves to the subject position to get Case

- Exceptional case marking (ECM) and unaccusatives also involve movement for Case

(6) ECM (or 'raising-to-object'; (5a) from Baltin 2001: 249)

    a.   I believe **John** with all my heart ⟨John⟩ to be a fine person.

    b.   I believe **him** with all my heart ⟨him⟩ to be a fine person.

However, not all types of A-movement can be explained using Case

(7) **Hyperraising** in Lubukusu (Bantu; Diercks 2012: 275)

    a.   *Ka-lolekhana* (*mbo*) ***John*** *ka-a-kwa.*
          6.SBJ-seems   that   1.John 1.SBJ-PST-fell
          'It seems that John fell.'

    b.   ***John*** *a-lolekhana* (*mbo*) *John* *ka-a-kwa.*
          1.John 1.SBJ-seems that 1.SBJ-PST-fell
          'John seems like he fell.', 'John seems to have fallen.'

A′-movement: wh-movement

A′-movement shows different properties than A-movement

(8)   a.   **Which course** did you enjoy ____ at the EGG?

    b.   **Which course** did Mary say that you enjoyed ____ at the EGG?

    c.   **Which course** did Peter believe that Mary said that you enjoyed ____ at the EGG?

- In each example in (8), *which course* is the object of *enjoy*

? What does this tell us about wh-movement?

→ Wh-movement is **not clause-bound**: it is an **unbounded dependency**

(9) Reconstruction: binding evaluates the base position of a wh-phrase
Which picture of herself$_i$ does Mary$_i$ like ____ the most?

Some languages allow **multiple wh-movement**

(10) Bulgarian (Bošković 2002: 352)
Na kogo what dade Ivan?
to   who   what   gave   Ivan
'What did Ivan give to who?'

In these languages, **superiority** might restrict the order of wh-elements

- Superiority requires wh-elements to retain the order of the arguments

(11) BCS (Bošković 2002: 353)
  a. *Ko koga voli?*
     who   whom   loves
     'Who loves whom?'
  b. Koga ko voli?

(12) Bulgarian (Bošković 2002: 354)
  a. *Koj kogo običa?*
     who   whom   loves?
     'Who loves whom?'
  b. **Kogo koj* običa?

Not all languages show wh-movement — wh-elements can remain **in situ**

(13) Chinese (Bošković 2002: 352)
John gei-le   shei shenme?
John   give-PFV   who   what
'What did John give to who?'

💬 The lovely Latin phrase *in sitū* literally means 'in position'. In other words, the wh-phrase remains in the same position as the argument or adjunct it represents.

- We saw at the open podium that this is also the case in Arabic and French
- But those languages show a mixture and more variation

3 Analysing movement

A-movement

We have already seen one possible analysis of A-movement

- Arguments need Case — to get it, they move into a certain position
- This *kind of* works for English ...
- ❗ But that cannot be the whole story: in (14), *students* gets NOM too

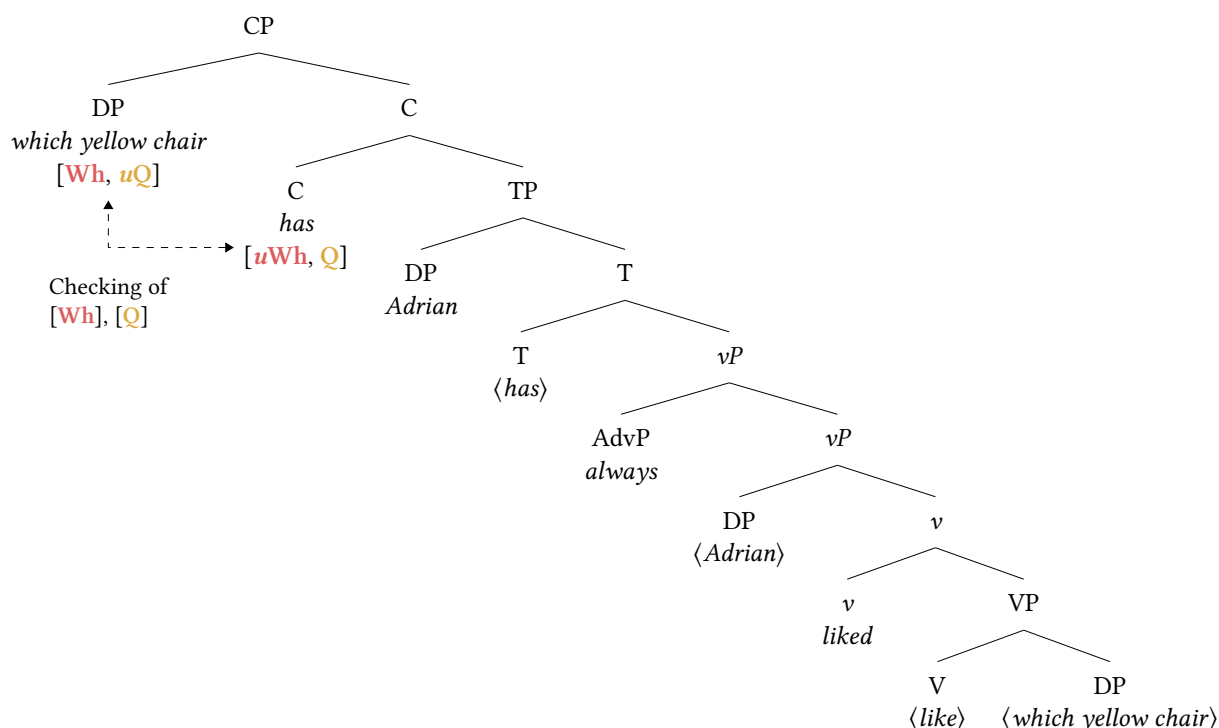(14) There are **students** in front of the dorm.

🤔 Agree can work over longer distances ... So why do subjects have to move for Case? It actually looks like the movement of the subject is independent of Case — A-movement is often modelled using EPP features. A head with an EPP feature requires its specifier to be filled.

Analysing A'-movement

Wh-movement is analysed using features that need to be checked: [uWh], [uQ]

(15) *Which yellow chair has Adrian always liked?* (Koeneman & Zeijlstra 2017: 173–175)

4 Islands

When does movement fail?

In certain structures, no movement dependency can be formed

- Such structures are called **islands**
- Movement is impossible out of certain coordinated structures and complex NPs

💬 They're called islands because it is not straightforward to get onto or off an island... that's the metaphor, at least.

(16) Violation of the Coordinate Structure Constraint (CSC)

    a.   Mary plays [$_{\&P}$ the piano and the guitar].

    b. *__What__ does Mary play [$_{\&P}$ the piano and ____]?

(17) Violation of the Complex NP Constraint (CNPC)

    a.   Mary heard [$_{DP}$ the rumour [$_{CP}$ that János kissed Milena]].

    b. *__Who__ did Mary hear [$_{DP}$ the rumour [$_{CP}$ that János kissed ____]]?

5 Summary

Summary and conclusions

Movement refers to the fact that elements can appear in different positions

- **A-movement** is movement into argument positions (raising, passive, …)
- **A′-movement** (A-bar) is movement into non-argument positions
- A′-movement includes wh-movement, topicalisation, focus movement, …
- **Islands** can block movement (Boeckx 2008, Chaves & Putnam 2020)

♥ That's it! Thank you very much for coming, for your questions and for PRO$_i$ discussing syntax with me and each other$_i$!

Abbreviations

BCS = Bosnian–Croatian–Serbian, CNPC = Complex NP Constraint, CSC = Coordinate Structure Constraint, ECM = exceptional case marking, EPP = Extended Projection Principle, GB = Government and Binding Theory, NOM = nominative, PFV = perfective, PST = past, SBJ = subject.

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