

## **Pre-Minimalist background on islands and movement constraints**

*Reading notes and questions on excerpts from Haegeman (1994).*

### **1 Reading notes for Haegeman (1994)**

When reading this, note that the textbook is both older and more conservative in its assumptions. So, you will not see any *v*Ps (just VPs) and you will not see any DPs (they are called NPs). The projection she refers to as IP is the effectively the same as what we called TP in Syntax I. You will see references to “D-structure” (‘deep structure’) and “S-structure” (‘surface structure’) as well. D-structure refers to the original positions syntactic elements occupied, essentially where they were Merged first, and S-structure refers to positions those elements might have moved to (that is, where they are pronounced). So, for example, we assume that *what* in *What did Pat buy?* was originally the object of *buy*, and then moved to the specifier of CP. So, it is in the complement of VP at D-structure, and in the specifier of CP at S-structure.

The summary of what you are to read is: Chapter 7: sections 6.1–6.4 (pp. 400–413), Chapter 8: sections 2.1–2.2 (pp. 441–446), Chapter 9: sections 1.1–2.2 (pp. 488–501), the first part of section 4.1 (pp. 523–526), and 4.3 (p. 532). If you wish to subdivide the task, read the chapters 7–8 part by Thursday, and the chapter 9 part by Tuesday. To the extent that there’s extra time, we can potentially look at some of the skipped-over parts, but I won’t presume you’ll have read them ahead of time.

### **2 Chapter 7: Wh-movement**

#### **2.1 Section 6: Bounding Theory**

Section 6.1 reviews a subset of the island types we discussed in class (complex noun phrase islands and *wh*-islands). Section 6.2 introduces the *Subjacency condition* which gives IP and NP (TP and DP) special status as “bounding nodes” and proposes a condition on grammatical derivations that a movement can cross one—but no more than one—of these in any single step. Then, it is illustrated how violations of the complex NP constraint and the *wh*-island constraint are both also violations of Subjacency—which means that we don’t need the complex NP constraint or *wh*-island constraint, but can reduce those two constraints to one: Subjacency.

Section 6.3 introduces an important methodological tool: We have evidence that *wh*-movement is constrained by Subjacency, and if we suppose that Subjacency is a general condition on movement, then we can use Subjacency to test whether movement is occurring in places where it might be less obvious. 6.3.1 covers “left dislocation” (*As for John, I don’t like him*), which does not appear to be subject to the Subjacency constraint, and therefore does not appear to be derived by movement. 6.3.2. covers relative clauses (*the man Mary will invite*), which *do* appear to be subject to the Subjacency constraint, and therefore involve movement (even if the movement is much less obvious than in the case of *wh*-movement in questions). 6.3.3 discusses resumptive pronouns briefly, and 6.3.4 talks about raising constructions (though, 6.3.4 is a bit peripheral). 6.4 discusses a way in which Italian and English differ as far as Subjacency is concerned.

### 3 Chapter 8: Empty categories

#### 3.1 Section 2.1: The ECP

Section 2.1 outlines a proposed principle of grammar called the Empty Category Principle (“the ECP”). This section will be rougher going, since it will make reference to more things that you won’t have seen before.

The intuitive idea behind the ECP is that the trace of *wh*-movement needs to be “identified” in some way. Since nothing is pronounced there, we have to know how to find it, know what it is. If we can identify it, then it is “licensed” (permitted) to be there. Page 442 has all of the legalistic and formal terminology spelled out that can allow you to determine whether a given trace is licensed or not. There is a concept of “government” which plays a fairly central role in the theoretical framework (which, after all, is called “government and binding theory”). An important step in the path toward licensure for a trace is that it be *governed*. So, there needs to be something in the tree (call it “A”) that governs the trace (call it “B”). As an example, a verb governs the object (in its complement), so if the object is a *wh*-word that is moved away leaving a trace, the verb will govern that trace, and so the trace will be licensed. The verb effectively identifies the trace, telling us that there was something there originally even though the *wh*-word has moved away.

In the definition of government (in this situation, where “B” is a trace), a governor is either a head or something that shares an index with the trace, and there is a requirement that the governor “m-commands” the trace. “M-command” is sort of like c-command, except it is a little bit more permissive. A m-commands B if (A does not itself dominate B and) every *maximal projection* (that’s what the “M” is for) that dominates A also dominates B. In brief: the head, the complement, and the specifier all m-command one

another.

Government can be blocked in two ways: there can be a “barrier” between the governor and the would-be governee, or there could be a closer potential governor. Only the closest potential governor gets to be the actual governor (that’s what “Minimality” in (14) on p. 442 encodes). We’ll ignore “barriers” for now (and actually, we are unlikely ever to come back to it).

The ECP itself (p. 442, (12)) says that traces have an extra-strict licensing requirement. Government is useful elsewhere for licensing things, but when the thing being licensed is silent (an “empty category”) like a trace, then not just government, but *proper* government is required. Proper government can be achieved in one of two ways: either the governor assigns a  $\theta$ -role to the trace (it “theta-governs” the trace), or the governor is the moved element itself (coindexed with the trace, and close enough to meet the requirements of government).

It’s all relatively complex, although I think it can remain mostly clear if the intuition that what the system is trying to do is identify the trace, which needs to be done from relatively nearby.

### **3.2 Subjacency and the ECP**

The reason I thought it was worth introducing you to the ECP, apart from the fact that it is likely to be mentioned occasionally in what we look at in the future, is that it sets us up to look at the interaction of Subjacency and the ECP, which allows us some insight into why some Subjacency violations are worse than others. The essential trick is: A Subjacency violation by itself is not very good, but a Subjacency violation combined with an ECP violation as very bad.

You can skip section 2.3.

## **4 Chapter 9: Logical Form**

### **4.1 Quantifier movement and logical form**

You can read through section 1.1 quickly and shallowly: the main point to take away there is that in order to interpret a syntactic structure, it must be converted into a kind of logical formula for the purpose of doing semantics. So, the “meaning” of *George saw everyone* is represented as in (3c) on p. 490: ‘For all  $x$ , where  $x$  is human, a *seeing* of  $x$  was experienced by George.’ The leading idea of this whole chapter is that *syntax* is responsible for assembling that logical representation, so that even though the S-structure (pronounced form) is “George saw everyone” we also need to derive a more abstract representation that has the form “Everyone [George saw <everyone>].” This is the

**logical form**—the “LF.” In this case, it would be derived by syntactic movement, of *everyone* up to a position outside the TP.

On p. 491 it says “An adjoined position is an A'-position.” An “A'-position” is a “non-argument position” (an “A-position” is an “argument position”)—an A-position is a position in which an argument could get a  $\theta$ -role or case (so, specifier or complement of  $\nu$ P, specifier of TP), and an A'-position is more or less everywhere else. The specifier of CP in particular is not a place for case or  $\theta$ -roles, it is an A' position (and movement to an A'-position is sometimes called “A'-movement” and said to leave an “A'-trace”). Moving the subject from the specifier of  $\nu$ P to the specifier of TP is A-movement, or moving a subject (in a raising construction) from a lower specifier of TP to a higher specifier of TP is also A-movement. *Wh*-movement is always A'-movement. And, as is being discussed here, the movement of quantifiers like *everyone* (assumed to adjoin to TP/IP) is also A'-movement.

The picture on p. 493, (7b), is basically the summary: syntax (in Government and Binding theory) is assumed to start with a D-structure representation, move things around until S-structure is reached, fix the pronunciation (the branch going off to PF), and then possibly move things around a little bit more until LF is reached. **Note** that there is an kind of an error in (7b) in that the real intention was to label the branch from S-structure to LF with “movement” (rather than the branch from S-structure to PF).

## 4.2 Wh-phrases and LF movement

The main reading comment I have here is just: don't worry too much about the footnotes, they get into a level of depth that is not necessary for what we're trying to accomplish here.

And you can skip 2.3. And all of 3.

## 4.3 Reconstruction

Here too I don't have much to add in terms of reading notes. But you only need to read up to p. 526, nothing including or following the paragraph above (62a) that starts “We turn to the other examples...” Skip 4.2. 4.3 is essentially one paragraph long and kind of interesting, so you might as well read that.

## 5 The homework

The homework part of this consists of **reading the sections from chapters 7 and 8**, and writing some thoughts about the following question:

**Homework.** In section 6.4, Haegeman reviews a difference between Italian and English that Rizzi observed, leading to the proposal that the “bounding nodes” for Italian are NP and CP, whereas they are NP and IP for English. But now think about the difference between Italian and English in terms of **phases** as we discussed them on the first day: upon completing the CP, you close off access to the IP by spelling it out. This more or less works for English to rule out (81a) on p. 412. But what could we propose is different about Italian? The idea would be to have the same kind of explanation Rizzi/Haegeman had, but updated. So, the Italian phase might be one step bigger, except what’s bigger than CP? Your task is basically to think about what needs to happen in Italian phases, make any suggestions you might have about what is different in Italian. I can think of a couple of possible things one might consider. Also: does your suggestion make any predictions about any structures other than those Haegeman gave? If so, what?

## References

Haegeman, Liliane. 1994. *Introduction to Government and Binding theory*. Oxford: Blackwell, 2nd edn.