Handout #1

Theory of locality in syntactic movement: from GB to Minimalism

句法移位的局部性理论研究：从**GB**到**MP**

I. **Locality theory before *Barriers***

II. **Barriers, minimality**

III. **Locality and Minimalism**

- The status of locality conditions in MP
- ECP
  - Minimality: RM
  - Barriers
  - Strong vs. weak islands
  - Covert movement
- CED
  - Some attempts to derive CED effects
  - Nunes and Uriagereka, Stepanov, Truswell
  - Barrie (and Fox/Pesetsky)
  - Chomsky (2005)

IV. **Some topics for projects**

Part I: Locality theory before *barriers*

1. The A-over-A Principle (Chomsky 1964)

(1)   John saw the woman at the podium.
(2)   Which woman did John see at podium?

2. Island Constraints (Ross 1967)

- The problem of the A-over-A Principle

(3)   Who did you see a picture of t?

- Pied-Piping

(4)   a. The government prescribed the lettering on the cover of the report.
        b. This is the report which the government prescribed the lettering on the cover of.
        c. This is the report of which the government prescribed the lettering on the cover.
        d. This is the report the cover of which the government prescribed the lettering on.
        e. This is the report on the cover of which the government prescribed the lettering.
        f. This is the report the lettering on the cover of which the government prescribed.

- The Complex NP Constraint (CNPC)
    - Relative clause cases
    - Appositives
    - Noun phrase complements

- The Coordinate Structure Constraint (CSC)
    - The Condition
    - The ATB exception

- The Sentential Subject Constraint (SSC)
- The Subject Condition (SC)
- The Left Branch Condition (LBC)
- The Wh-Island Condition (WIC)

3. Bounding Theory: Subjacency (Chomsky 1973, etc.)
- Description vs. explanation
- Subjacency and how the island constraints are "derived"
- Some questions about the supposed generality
- This leads to the adoption of a theory of proper government, a subset of government, a notion that has independent motivations in Case theory and Theta theory, with their own range of applications

4. Government Theory and the ECP
- The insufficiency of Subjacency
- Subject-object asymmetries and the ECP (Chomsky 1981)
- Adjunct-complement asymmetries
- The ECP generalized (Huang 1982)

5. Bounding, Government and the CED
- Subject-object asymmetries under extraction: SSC and SC
- Adjunct-complement asymmetries under extraction: Adjunct Condition
- The Condition on Extraction Domain (CED) (Huang 1982)

Some classical examples: Subjacency, ECP and CED

6. Subject-Object Asymmetries

(5)   a.   ?*[What$_i$ did [you know [where$_j$ [I bought t$_i$ t$_j$]]]?
        b.   *[Who$_i$ did [you know [where$_j$ [t$_i$ bought the books t$_j$]]]]?
(6)   a.   ?*What did you wonder who bought t?
        b.   *Who did you wonder what t bought?
(7)   a.   ?This is the book that I was wondering where you bought t.
        b.   *This is the man that I was wondering where t bought the book.
(8)   a.   ??This is the book that I was wondering who wrote t.
        b.   *This is the authoring that I was wonder what t wrote.

The "that-trace" effect:
(9)   a.   What did he say John will buy t?
        b.   What did he say that John will buy t?
        c.   Who did he say t will buy the book?
        d. *?Who did he say that t will buy the book?

7. The ECP
An empty category is properly governed.

α properly governs β iff α governs β, and (a) or (b)
(a) α is lexical (N, V, A, P but not I or C)   (lexical government)
(b) α is co-indexed with β (antecedent government)

- Subject traces are not lexically governed (because I^0 is not lexical); so they must be antecedent governed.
- Extraction of a subject must be local enough so as to allow the antecedent to still govern the trace.
   → (5a), (6a), (7a), (8a): violates only Subjacency

(5b), (6b), (7b), (8b): violates ECP and Subjacency
(9a, b, c): no violation of any principle
(9d): violates only ECP, but not Subjacency.

- **NB:** to account for (9d), we need to add the minimality condition to the definition of government: (α m-commands β, no barrier intervening except IP, and no closer potential governor). In (5d) *that* is a potential governor (though not a potential proper governor or lexical governor), and this blocks the (normal) government of the subject trace by the intermediate trace. (Chomsky 1986)

8. Complement-Adjunct Asymmetries

(6)   a.   ?*What did you wonder why I bought t?
         b.   *Why$_i$ did you wonder what I bought t$_i$.

(7)   a.   ?*Which car did you wonder how John fixed?
         b.   *How$_i$ did you wonder which car [John fixed t$_i$]

→ Huang 1982: These asymmetries also follow from the ECP, in the following way. The idea is that although the object (being closest to the verb) is governed by the verb, the adjunct (being adjoined to V' or I', and not so close to the verb) is not governed by the verb. I.e., maybe an adjunct is not lexically governed (any more than a subject is). To put this idea to work, let's refine the definition of proper government just a bit, to require α to c-command β (in addition to governing β):

Proper government (revised):
α properly governs β iff:
(i) α governs β,
(ii) α c-commands β (perhaps simply "sister hood") and
(iii) either (a) or (b):
    (a) α is lexical (N, V, A, P but not I or C)   ("lexical government")
    (b) α and β are coindexed   ("antecedent government")

→ Adjunct traces are not c-commanded by the verb, they are not lexically governed. (They may be governed and c-commanded by I, if adjoined to I', but that's not lexical government.) Hence they must be antecedent-governed.

9. Extraction Asymmetries: Adjunct-complement Asymmetries

(8)   a.   Who did you say that John talked to t?
         b.   ??Who did you go home before John talked to t?
         c.   ??Who did you get jealous because Mary talked to t?

(9)   a.   Which table did you put the book on t?
      b.   ??Which class did you fall asleep during t?

The Adjunct Condition (AC)
No phrase contained in an adjunct may be extracted out of the adjunct.

10. Some cases of extraction from NP:

(10)   *Whose did you see [t mother]?
          (an example of LBC violation)

(11)   *On which table did you buy [the books t]?
          (Extraction *of* an adjunct)

(12)   *Which table did you buy [the books on t]?
          (Extraction *out of* an adjunct)

→ (11) can be seen as a direct result of the ECP as generalized above.
→ (10), an LBC effect, can also be seen as following from the ECP. The LBC is
derived as a theorem of the ECP. In [__ N'], the left-branch trace is not c-commanded by
N (if we say that c-command actually requires sisterhood, then N' breaks c-command).
Then the left branch trace is not lexically governed. But it's also not antecedent
governed, because the higher NP or DP node breaks government.
→ (12) can be seen as an instance of Adjunct Condition Violation

11. The CED: Condition of Extraction Domain

Let's go back to the Ross Constraints:
              CNPC, WIC (which are theorems of Subjacency)
              LBC is reduced to the ECP
              SSC, SC, and AC
Question: why this clustering of SSC, SC and AC; why not OC, for example?

Answer: the Condition on Extraction Domain (CED)

(13) **The CED** [Huang 1982]
      Extraction out of domain D is possible only if D is properly governed

- Thus, when movement applies, not only is the trace required to be properly
  governed (ECP), but also every domain out of which movement takes place must
  be properly governed (CED).

- → Results:

Ross Constraints → reduced to Subjacency, ECP and CED (perhaps plus CSC)
  - CED subsumes Subject Condition, Adjunct Condition, 2 sub-cases of CNPC (and, a coordinate structure involves adjunction, also the CSC).
  - Subjacency is left with WIC and one sub-case of CNPC, where argument extraction is involved.

12. The empirical domain of the ECP/CED:
- Overt long extraction asymmetries (subject-object, adjunct-complement)
- Covert asymmetries:
  - ne personne
  - superiority (subject-object, adjunct-complement)
  - cf: some 'pure superiority' effects
- Covert asymmetries: wh-in-situ languages
- Extraction out of any island/barrier: subject or adjunct extraction out of any island (in addition to violation of CED, etc.). (nb: intermediate traces)
- Weak island violations (some)
- A note on *where, when, how* and *why* w.r.t. overt vs. covert
  - cf. Huang 1982; Tsai 1994 i.a.; Caponigro and Pearl 2009)
- Adjunct extraction and predicate clefts in Vata (Koopman 1984)
- *Who did t leave early? (Who left early? Who didn't leave, who would leave, why did he leave early?

13. Some problems:
- *Who do you believe [pictures of t] to be on sale?
  - Seems no difference from "*Who do you believe [pictures of t] are on sale.)
- "pure superiority effects" (Kenstowics and Rochmont 1982):
  - Which book did you give to whom?
  - *Who did you which book to?
  - Who do you believe t to have stolen what?
  - *What do you believe who to have stolen t?
- Other islands for adjunct extraction, which does not seem to involve a barrier for movement:
  - Non-bridge verbs
  - Negative contexts
  - Factive contexts

Main References:

Ross (1967) *Constraints on Variables in Syntax*, Chapter 4, MIT dissertation.

Huang (1998 [1982]) Logical Relations in Chinese and the Theory of Grammar, Garland.

Huang (1983) ECP, LF and non-vacuous quantification.

Chomsky (1986) *Barriers*, MIT Press

Background reading: Haegeman, Liliane (1994) Introduction to GB Theory, Blackwell.

Rizzi (1990) *Relativized Minimality*, MIT Press.