Syntax II – Class #9
What is Minimal about the Minimalist Program?

In answer to Yaping’s question from the last class…

Chomsky’s Summary

“This work is motivated by two related questions:

(1) what are the general conditions that the human language faculty should be expected to
satisfy, and
(2) to what extent is the language faculty determined by these conditions, without special
structure that lies beyond them?

The first question in turn has two aspects: what conditions are imposed on the language
faculty by virtue of (A) its place within the array of cognitive systems of the mind/brain, and
(B) general considerations of conceptual naturalness that have some independent plausibility,
namely, simplicity, economy, symmetry, nonredundancy, and the like?” (Chomsky, 1995: p.1)

Levels of Representation

“Conditions on representations – those of binding theory, Case theory, theta theory, and so
on – hold only at the interface, and are motivated by properties of the interface, perhaps
properly understood as modes of interpretation by performance systems. The linguistic
expressions are the optimal realizations of the interface conditions, where “optimality” is
determined by the economy conditions of UG. Let us take these assumptions too to be part of
the Minimalist Program.” (Chomsky, 1995: p.171)

• This can be viewed as nothing more than good scientific practice
• Different ways of understanding this: (i) assume that it must be true; (ii) ask where it is and is
not true

Government-Binding Theory levels

D-structure
S-structure → Spell Out
Phonetic Form
Logical Form

Interface Conditions

• Binding Theory: plausible arguments for application of binding constraints at LF

(1) a. John washed himself.
b. Which pictures of himself does John hate?
c. Which pictures of himself does Mary think John hates?

Constraints on interpretation of moved phrases (Romero 1996; Fox 1999): the scopal interpretation of a phrase interacts with binding constraints.

(2)  a. It seems to Bill, that a student of his, is hacking into his computer.
     b. * It seems to him, that a student of Bill,'s is hacking into his computer.

(3)  Binding Condition C (informal)
     A pronoun cannot c-command a referring expression.

(4)  Some student_i seems to Bill [ip t_i to be hacking into the department’s computer ]

     There is some student x such that it seems to Bill that x is hacking...
     It seems to Bill that there is some student x who is hacking...

(5)  a. Some student of his_j seems to Bill [ip t_i to be hacking into the computer ]
     b. Some student of Bill_j’s seems to him [ip t_i to be hacking into the computer ]

     (a) is ambiguous, (b) is not – the embedded clause reading of ‘some student of Bill’s’ violates Condition C.

•  Negative Polarity licensing

(6)  a. Sue didn’t enjoy the stories about anybody.
     b. * Those stories about anybody, Sue didn’t like.

Emphasis on Derivations

•  Explicit structure-building as part of the derivation helps to avoid positing an explicit D-S level.

•  Otherwise, the emphasis on derivations (e.g. for movement dependencies, etc.) is not obviously ‘minimalist’. It is simply an empirical question.

•  Some argue that derivations are specifically non-minimal, and that a non-derivational theory is preferable.

Bare Phrase Structure and Lexicalism

Application of the basic interface-driven program to phrase structure:

“At the LF interface, lexical items and their constituent features must be accessed. Accordingly, such items and their (semantic and formal) features should be available for C_{HL}. It is also apparent that some larger units constructed of these items are accessible, along with their types; noun phrases are interpreted differently from verb phrases, etc. Of the larger
units, only maximal projections seem to be relevant to LF interpretation. If so, output
conditions make the concepts minimal and maximal projection available to C_{ill}, and on
minimalist assumptions, nothing else apart from lexical features. […]
“We also hope to show that computation keeps to local relations of XP to terminal head. All
principles of UG should be formulated in these terms, and only such relations should be
relevant to the interface for the modules that operate there.” (Chomsky, 1995b: p.396).

Consequences:

- Absence of vacuous projections (in contrast to structures generated by X-bar templates)
- Lots of information built into lexical items

Two aspects of ‘lexicalism’ in the Minimalist Program

- Lots of syntactic information built into syntactic heads – this follows from quotation above
- Derivations manipulate fully-formed words (rather than assembling complex words by
  syntactic derivation) – this is an independent empirical hypothesis. There are related
  approaches which explicitly drop this assumption (e.g. Distributed Morphology, Halle &
  Marantz 1993 and others)

Local Relations

- Accusative case assignment in G-B theory: assigned in different configurations (complement
  of V, SpecIP), unified under notion of ‘government’
- Accusative case assignment in Minimalist theory: assigned in more uniform configuration
  (e.g. SpecAgrOP), but entailing additional phrase structure positions and additional
  movement operations.

Economy Principles

- Although the term ‘minimal’ can be used to characterize the focus on interface conditions
  and the assumption that derivations satisfy economy principles, these are two logically
  independent notions.

Empirical domain:

- Derivations that are blocked because some other alternative derivation is more highly valued

(7) a. Wallace likes cheese.
    b. * Wallace does like cheese.
    c. Wallace does not like cheese.

(8) a. Who bought what?
    b. * What did who buy?itorev view]
• Derivations that are blocked because some movement occurs that is not ‘the most local possible movement’

(9) * What do you wonder who likes?

• Derivations that are blocked because some movement does not satisfy any requirement of the moving element

(10) a. * John seems [ t is leaving]
    b. * John seems to t [that Bill is leaving]

‘Strong’ vs. ‘Weak’ Features

• Why do English verbs not move to Tns/Agr overtly? Answer: because they don’t have to!
• Therefore, something must force French verbs to move overtly \( \rightarrow \) ‘Strong’ features.
• This can lead to a situation where strong/weak features essentially mimic sets of rules.

Empirical Tensions

There’s a tension between the considerable empirical successes of much work in the government-binding tradition (and other traditions, too), and the austere theoretical concerns which dominate much work in the Minimalist Program.

Remember!

• The Minimalist Program is a set of often interesting (and bold) hypotheses, which do not form an indivisible whole – each of Chomsky’s assumptions can be evaluated independently.
• It is important to be well aware of the motivation for any of the components of the theory – whether these motivations are theoretical or empirical. Some assumptions have rather more empirical support than others.

References

