# Word order: Configurationality and "scrambling"

- I. Is the X-bar schema really appropriate for all languages?
- (1) We have been assuming the following claims about syntactic structure:
  - (a) There is a fundamental distinction between a subject and a predicate
  - (b) This fundamental distinction is represented structurally
    - $\rightarrow$  Specifier of IP vs. complement of I, in X-bar theory
  - BUT: Is this approach appropriate for every human language? Or are these aspects of syntax subject to cross-linguistic variation?
- (2) Japanese word-order variation (see data set handout)
  - Side note: Why are Japanese sentences interpretable without fixed word order?
- (3) There are two leading explanations for flexible/variable word order in Japanese:
  - (a) Hypothesis 1:

Japanese has a basic constituent order, determined by the X-bar schema in a way very similar to what we motivate for English (except that Japanese phrases are head-final)

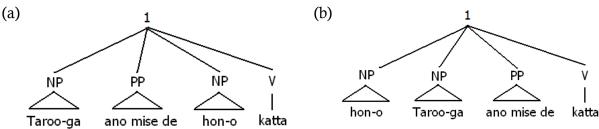
Deviations from this order are the result of **movement** 

• Similar analyses have been motivated for questions/passive in English, etc.

### (b) Hypothesis 2:

**No movement** involved in Japanese constituent order; all orders are **base-generated Consequences:** 

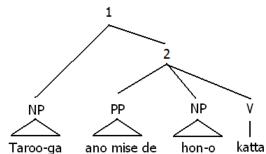
- Japanese sentence trees can have no VP node (or I' node!) see below for why
- The **rules** for building Japanese syntactic structure have to be **radically different** from the X-bar schema motivated for "configurational" languages like English; they have to allow for many different word orders, but less hierarchical structure
- (4) Terminology: A language is **configurational** if it
  - (a) distinguishes different constituents, for example subjects and objects...
  - (b) ...on the basis of a structural (=configurational) difference
- II. What kind of evidence do we need to test for configurationality?
- (5) Base-generated free constituent order with *no* VP-type node this would work

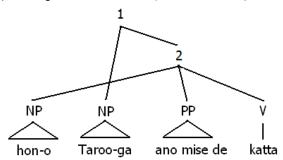


(6) Base-generated free constituent order with a VP-type node — this would *not* work

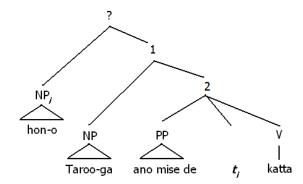
(a)

(b) not a possible structure ("crossed lines")





(7) **Movement** analysis of Japanese free word order is compatible with the presence of a VP node in the structure



#### Notes:

- *t* stands for *trace*
- A trace shows where a moved element has moved from
- The relationship between the trace and the moved element (its *antecedent*) is shown by a subscript index

(8) Crucial question:

Does Japanese have at *least one node* (i.e., VP, I') that *excludes the subject*?

- → **If Japanese is nonconfigurational**, and the phrases that precede the verb can be basegenerated in any order, then there **cannot be a node that excludes the subject**, distinguishing it hierarchically from other phrases in the sentence
- (9) For determining which approach to Japanese word order is best, we would like to know:
  - (a) whether or not there is evidence for a node that excludes the subject
  - (b) whether or not there is evidence that constituents can move/have moved
- III. Evidence from c-command and NP/pronoun coreference
- (10) Diagnostic we can use to investigate structural relationships

**c-command:** A c-commands B if neither A nor B dominates the other, and the first branching node that dominates A also dominates B

- Put differently: A c-commands B if B is A's sister or B is a descendant of A's sister
- (11) C-command is relevant for **co-reference relationships** 
  - Nouns (as distinguished from pronouns (him), reflexives (herself)) may not be
     c-commanded by an antecedent (antecedent=co-referent NP)

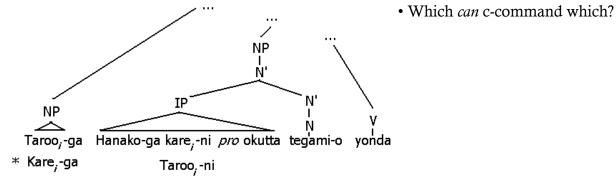
- The following sentences are from Tsujimura (2007, ch 5, §3.3.2) unless otherwise noted
- (12) Examples to establish the relevance of c-command in NP/pronoun coference
  - Background: A **relative clause** is an IP that is a modifier inside an NP; the relative clause has an empty element (call it *pro*), cofererent with the N head being modified
  - (a) Co-reference between an NP and a "pronoun" is grammatical here: (note that *kare* may not actually have the syntactic properties of a pronoun, but this argument still makes the point)

    Taroo<sub>i</sub>-ga [NP [IP Hanako-ga kare<sub>i</sub>-ni pro okut-ta] tegami-o] yonda.

    Taroo<sub>i</sub>-NOM Hanako-NOM he<sub>i</sub>-DAT send-PST letter-ACC read-PST

    'Taroo<sub>i</sub> read the letter that Hanako sent him<sub>i</sub>.'
  - (b) Co-reference between an NP and a pronoun is not grammatical here:
    - \* **Kare**<sub>*i*</sub>-ga [NP [IP Hanako-ga **Taroo**<sub>*i*</sub>-ni *pro* okutta] tegami-o] yonda.

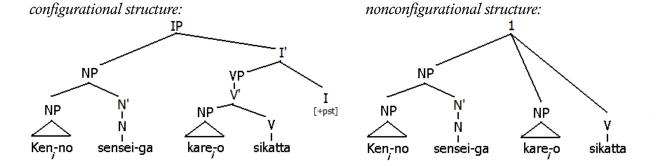
      \* *He*<sub>*i*-NOM</sub> Hanako-NOM Taroo<sub>*i*-DAT</sub> send-PST letter-ACC read-PST (intended meaning: \*'He<sub>*i*</sub> read the letter that Hanako sent Taroo<sub>*i*</sub>.')
  - (c) This structure involves c-command (whether sentences are configurational or not)



- (13) Now, applying this diagnostic to the question of whether there is a VP node
  - (a) This sentence is grammatical:

[NP **Ken**<sub>i</sub>-no sensei-ga] **kare**<sub>i</sub>-o sikat-ta. (Miyagawa 1989: 13) *Ken*<sub>i</sub>-GEN teacher-NOM he<sub>i</sub>-ACC scold-PST 'Ken<sub>i</sub>'s teacher scolded him<sub>i</sub>.'

- (b) Which structure **predicts** that the sentence is grammatical?
  - Note: A genitive/possessive construction (*Ken-no*, 'Ken's') is a specifier of NP

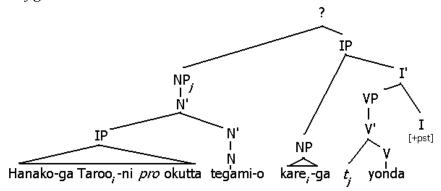


- (14) We can also use c-command and NP/"pronoun" coreference facts to argue in favor of the **movement approach** to OBJECT—SUBJECT word order
  - (a) A reordered version of the ungrammatical sentence in (12)(b) is **grammatical**

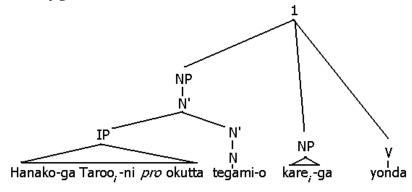
[NP [IP Hanako-ga **Taroo**<sub>i</sub>-ni pro okutta] tegami-o]<sub>j</sub> **kare**<sub>i</sub>-ga t<sub>j</sub> yon-da. Hanako-NOM Taroo<sub>i</sub>-DAT sent letter-ACC he<sub>i</sub>-NOM read-PST 'The letter that Hanako sent to Taroo<sub>i</sub>, he<sub>i</sub> read.'

(b) Which structure **predicts** that the sentence is grammatical?

configurational structure:



nonconfigurational structure:



## (15) Conclusions:

- (a) There is evidence in Japanese for a **node that excludes the subject** but includes other constituents
- (b) There is evidence that "scrambled" sentences in Japanese involve **movement**
- (c) The X' model (or its newer versions) is in fact appropriate for Japanese syntax

# For further reading

Miyagawa, Shigeru. 1989. Structure and Case Marking in Japanese. San Diego: Academic Press.

Nemoto, Naoko. 1999. "Scrambling." In Natsuko Tsujimura (ed.), *The Handbook of Japanese Linguistics*, 121-153. Oxford: Blackwell.

• This book is on reserve for the course, and also available as an e-book through the library web site.

Tsujimura, Natsuko. 2007. Ch 5, "Syntax." *An Introduction to Japanese Linguistics*. [See especially §3.3.2, "Pronominal reference".] Oxford: Blackwell.

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