

## 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**

→ *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

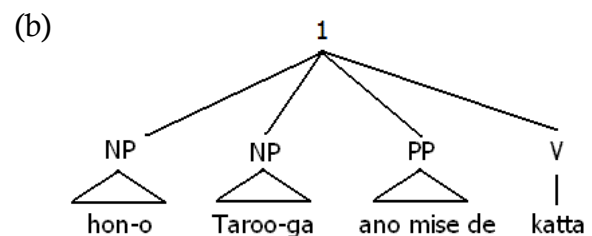
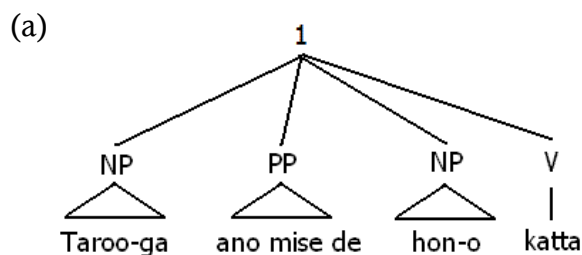
(4) Terminology: A language is **configurational** if it

(a) distinguishes different constituents, for example subjects and objects...

(b) ...on the basis of a structural (=configurational) difference

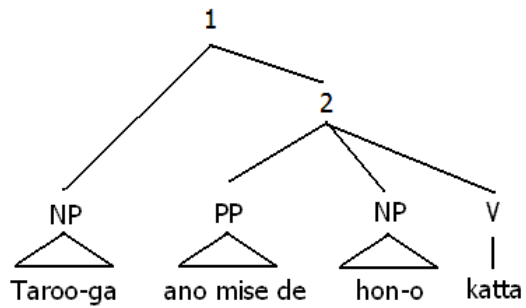
II. What kind of evidence do we need to test for configurationality?

(5) Base-generated free constituent order with *no* VP-type node — this would work

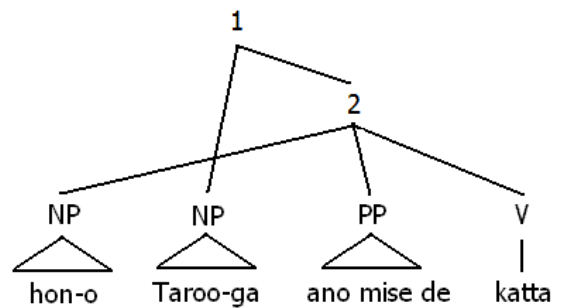


(6) Base-generated free constituent order with a VP-type node — this would *not* work

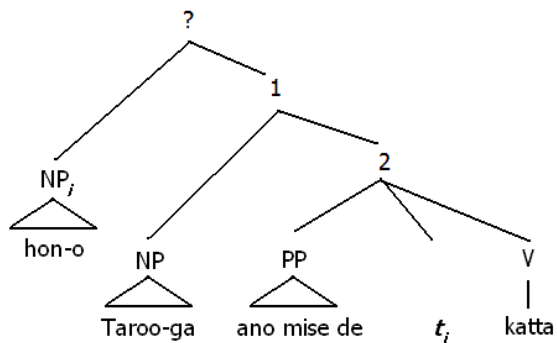
(a)



(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 base-generated 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*), coferent with the N head being modified

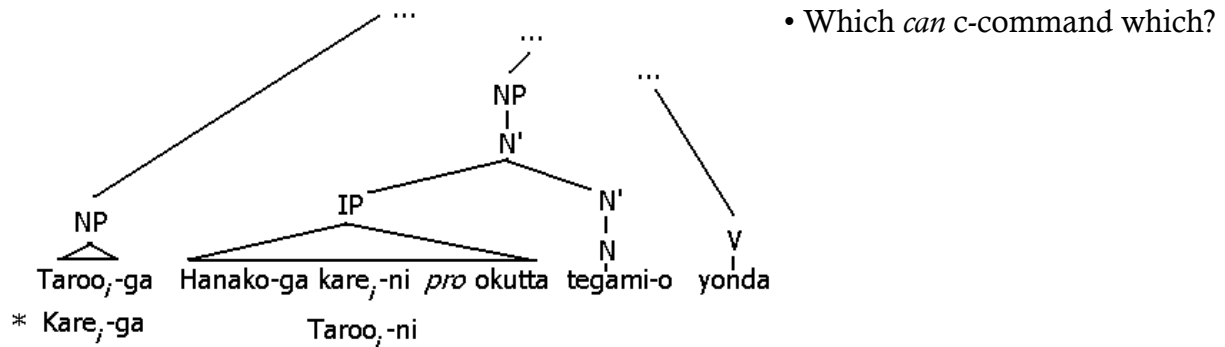
(a) Co-reference between an NP and a “pronoun” is grammatical here: (note that *kare* may not actually have the syntactic properties of a pronoun, but this argument still makes the point)

**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</sub>-NOM Hanako-NOM Taroo<sub>i</sub>-DAT 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**

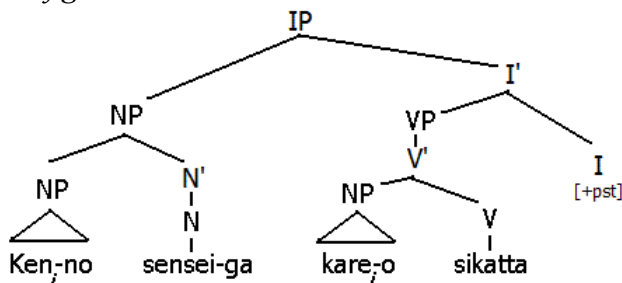
(a) This sentence is grammatical:

[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>.’

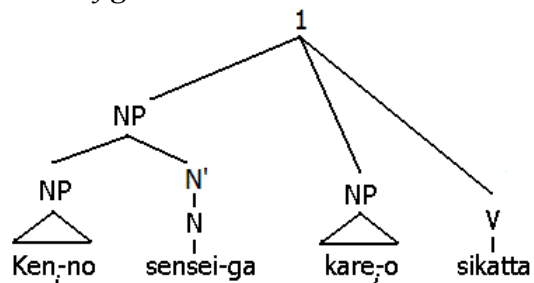
(b) Which structure **predicts** that the sentence is grammatical?

- Note: A genitive/possessive construction (*Ken-no*, ‘Ken’s’) is a specifier of NP

*configurational structure:*



*nonconfigurational structure:*



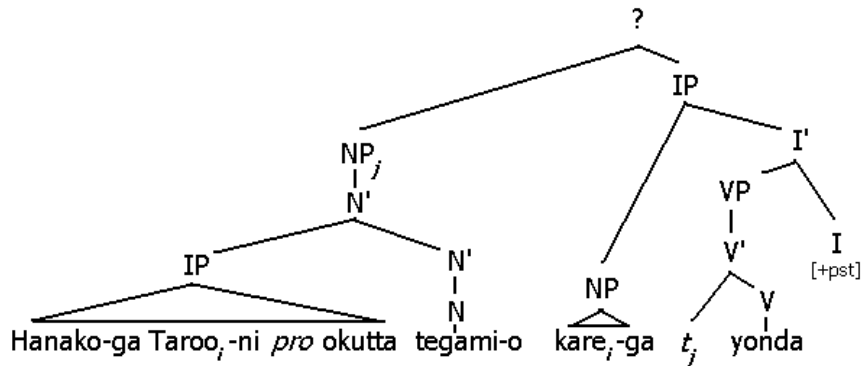
(14) We can also use c-command and NP/”pronoun” coreference facts to argue in favor of the **movement approach** to OBJECT–SUBJECT word order

(a) A reordered version of the ungrammatical sentence in (12)(b) is **grammatical**

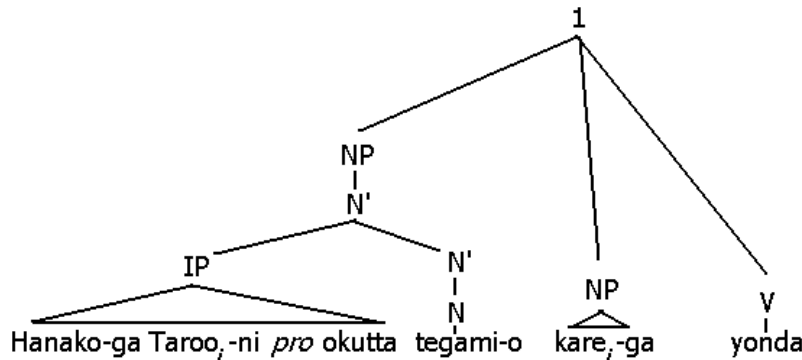
[NP [IP Hanako-ga **Taroo<sub>i</sub>-ni** *pro* okutta] tegami-o]<sub>j</sub> **kare<sub>i</sub>-ga** *t<sub>j</sub>* yon-da.  
*Hanako-NOM Taroo<sub>i</sub>-DAT sent letter-ACC he<sub>i</sub>-NOM read-PST*  
 ‘The letter that Hanako sent to Taroo<sub>i</sub>, he<sub>i</sub> read.’

(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.

- This book is on reserve for the course.