

Subcategorization and null pronouns

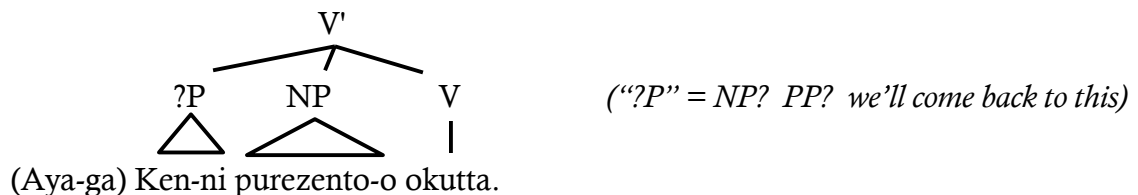
- (1) According to our X-bar approach to Japanese, the *structure* of the following sentence should be fine — so why is it ungrammatical?

*Hanako-ga susi-o warat-ta.
Hanako-NOM sushi-ACC laugh-PAST
 * ‘Hanako laughed sushi.’

- (2) The problem here is that the verb *waraw-* is incompatible with having any NPs inside the VP — it is **intransitive**

- (a) intransitive: no NPs internal to the VP *waraw-* ‘laugh’, *ne-* ‘sleep’
 (b) transitive: one NP internal to the VP *tukur-* ‘make’, *tabe-* ‘eat’
 (c) ditransitive: two NPs internal to the VP *okur-* ‘send’, *age-* ‘give’

- The basic assumption is that X-bar branching is binary. However, a **ditransitive** verb has **two complements**, and complements are supposed to be sisters to the head. So *for this one situation*, we relax the binary-branching requirement:



- (3) Proposal in syntactic theory, based on cross-linguistic data:

- (a) The lexical entry for a morpheme may include a specification for what types of phrase must co-occur with it in a constituent headed by that morpheme
- (b) This specification is stated as a **subcategorization frame** (‘__’ represents the V)
- /waraw-/ (V) [v' __]
 /tabe-/ (V) [v' NP __]
 /okur-/ (V) [v' NP NP __]
- (c) The elements specified in the subcategorization frame for a head are known as **arguments** of the head — they are (*usually*) **complements** in the structure

- (4) Do transitive verbs truly **require** one or more complements, or merely **allow** them?

- (a) Some data from English for comparison:

Ken slept.	Ken ate.
* Ken slept the pillow.	
* Ken demanded.	
Ken demanded the answer.	Ken ate the cookie.
or Ken demanded that Aya give the answer.	

Is *sleep* transitive? What about *demand*? What about *eat*?

(b) Data from Japanese:

Ken-ga tabeta.		
Ken-ga senbei-o tabeta.	<i>senbei</i>	‘rice cracker’
Ken-ga motometa.	<i>motome-</i>	‘to demand’
Ken-ga handan-o motometa.	<i>handan</i>	‘decision’

- Generalization: Japanese verbs can *always* appear alone, without any overtly expressed arguments.
- Question: Does this mean that all transitive verbs in Japanese are only *optionally* transitive?

(5) How natural are these dialogues? Compare the English and Japanese cases:

(a) A: Did you eat my cookie?

B: #Yeah, I ate. (# = grammatical, but *infelicitous* (contextually odd))

(b) A: Watasi-no kukkii, tabeta?

I-GEN cookie eat-PAST

B: Un, tabeta.

yeah eat-PAST

Meaning: ‘Yeah, I ate it.’

- In (5b-B), the semantic representation (meaning) of the sentence includes a *reference to the cookie* mentioned in (5b-A) — there must be **something in the structure** that causes this

(6) Proposal: Sometimes, a Japanese sentence contains a **null** (empty, zero) **pronoun**.

(a) A null pronoun has no phonological content — but it is present in the syntactic structure (and contributes meaning to the semantics of the sentence)

(b) We can represent it as *pro* (pronounced “pro” or “little pro”)

- Draw an X-bar tree for the **sentence** in (5b-B): *Tabeta*.

(7) More evidence for empty pronouns in Japanese sentence structure (data, Takahashi 2008) (Note that this author argues that there is more than one kind of empty noun phrase in Japanese, and some of them are better analyzed as what’s left over after a deletion operation rather than as pronouns)

(a) Empty pronouns can act as **variables** bound by quantifiers (just like overt pronouns)

Dare.mo₁-ga [*pro*₁ susi-o taberu to] itta.

everyone-NOM *pro* sushi-ACC eat C said

‘Everyone said that **s/he** would eat sushi.’ (*saying person = eating sushi person*)

Dare.mo₁-ga [Hanako-ga *pro*₁ butta to] itta.

everyone-nom Hanako-nom *pro* hit C said

‘Everyone said that Hanako hit **her/him**.’ (*saying person = person Hanako hit*)

- (b) Empty pronouns can pick up their reference from the situation itself, not only from prior linguistic context

[Context: Taroo is observing a student smoking in the classroom]

Taroo: *pro* haigan de sinu ka.mo.sirenai
pro lung.cancer of die may
'**S/he** may die of lung cancer.'

Taroo: Sensei-ga *pro* sikaru daroo
teacher-nom *pro* scold probably.will
'The teacher will probably scold **her/him**.'

(8) Conclusions

- (a) In Japanese, there is evidence for the existence of null pronouns
- Do you know other languages with null pronouns?
- (b) Null pronouns are represented in the syntactic structure (we use the notation *pro*) and affect the meaning of the sentence
- (c) Where does this leave us in our inquiry into whether transitive predicates are obligatorily or optionally transitive? What kind of further investigation could we carry out to explore this question for Japanese?

Reference:

Takahashi, Daiko. 2008. Noun phrase ellipsis. In Shigeru Miyagawa & Mamoru Saito (eds.), *The Oxford Handbook of Japanese Linguistics*, 394–422. Oxford: Oxford University Press.