



## University of Pennsylvania Working Papers in Linguistics

---

Volume 4 | Issue 2

Article 15

---

1-1-1997

# What Does the Copula Do?

Kunio Nishiyama

*Cornell University*, [kn20@cornell.edu](mailto:kn20@cornell.edu)

---

This paper is posted at ScholarlyCommons. <http://repository.upenn.edu/pwpl/vol4/iss2/15>

For more information, please contact [libraryrepository@pobox.upenn.edu](mailto:libraryrepository@pobox.upenn.edu).

---

# What Does the Copula Do?

# What Does the Copula Do?\*

Kunio Nishiyama

## 1. Introduction

It is widely assumed in the literature on the copula that there are at least two kinds of copula (cf. Higgins 1973):

- (1) a. John is a boy. (predicative)
- b. Dr. Jekyll is Mr. Hyde. (equative)

It is controversial whether these different usages should be treated differently or can be given a unified account, and this is not my concern here. The purpose of this paper is to analyze the syntactic structure of predicative copular sentences like (1a) from a crosslinguistic perspective.

Since Bach (1967), it has often been claimed that the copula is a tense-supporter.<sup>1</sup> For example, Rapoport (1987: 152ff) notes the following contrast:

- (2) a. I consider [*Xeli* a nut].
- b. *Xeli* \*(is) a nut.

In a small clause structure like (2a), no copula is necessary, even though there seems to be a predication relation between *Xeli* and *a nut*. In the matrix sentence, however, the copula is necessary (2b). Since (2a) shows that the copula is not necessary for predication, Rapoport (1987: 157) claims that “[*b*]e is inserted to support the feature of INFL, in the cases above [2b] the features of tense ([-past]) and agreement.” According to this hypothesis, (3) is analyzed as (4):

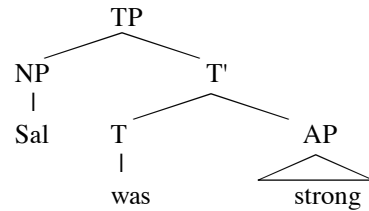
- (3) Sal was strong.

---

\*I thank John Bowers, Keiko Miyagawa, and John Whitman for discussion.

<sup>1</sup> Déchaine (1993: 303) cites references on this view such as Williams (1984: 136f), Rothstein (1983: 73f), Gestel (1986), Rapoport (1987: 155ff), and Moro (1990).

(4) Hypothesis A: Copula as a tense supporter

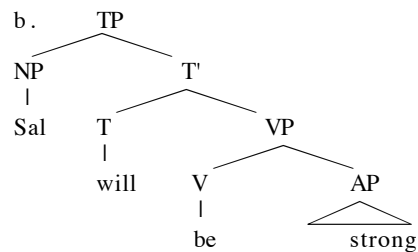
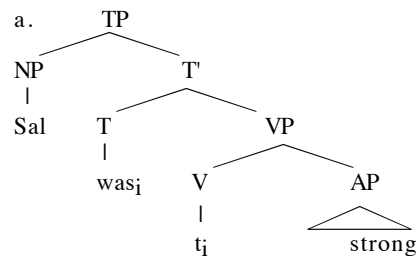


This view on the copula has recently been criticized by Déchaine (1993). Déchaine cites (5),

- (5) a. Sal was strong.      b. Sal will \*(be) strong.

and points out that “if English modals are base-generated in Tense [...], the obligatoriness of *be* in [5b] is unexpected in an insertion analysis” (p.304). Although it is possible to assume a modal feature in (5b) and claim that *be* supports the modal feature (cf. Rapoport 1987: 158), Déchaine proposes that the copula heads its own VP projection. Thus, (5a-b) are analyzed as follows:<sup>2</sup>

(6) Hypothesis B: Copula as a dummy verb



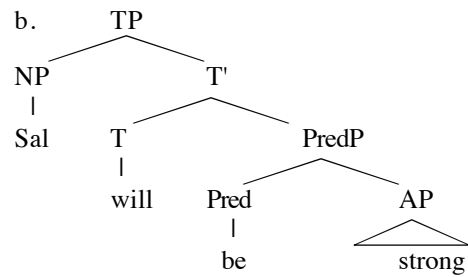
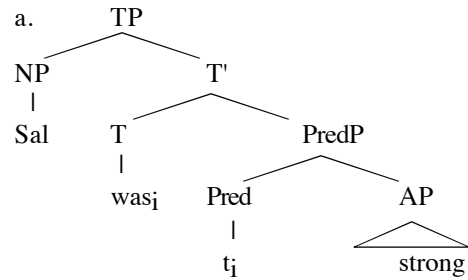
(adapted from Déchaine's 23' and 24")

<sup>2</sup> We return to Déchaine's proposal in section 3.

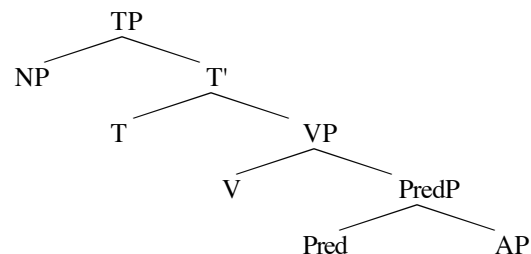
What is common to (4) and (6), despite the absence / presence of VP, is that they both assume that the copula has no semantic import.

Still another analysis of the copula is possible. According to Bowers (1993), whenever there is predication, there is PredP. If the copula projects PredP, (5) is analyzed as follows:

(7) *Hypothesis C: Copula as a predicate*



Since (6) and (7) look similar, one might wonder whether they are notational variants, and if not, which is correct. The claim of this paper is that **(6) and (7) are not notational variants** and that both are basically correct. In particular, I claim that Japanese copular sentences have the following structure (abstracting away from linear order):

(8) *Hypothesis D: The layered copula hypothesis*

This structure is motivated by the existence of two morphologically distinct copulas in Japanese. In section 2, I claim that one class of adjectives in Japanese shows that Japanese has two kinds of copulas, one semantically vacuous and projecting VP, and the other semantically contentful and projecting PredP. Section 3 analyzes the other kind of Japanese adjectives and discusses the peculiarity of the present tense in the sense clarified there.

## 2. Two Types of Copulas

This section is concerned with the class of Japanese adjectives which I dub *Nominal Adjectives (NAs)*<sup>3</sup>

(9) *Nominal Adjectives (NAs)*

- a. yoru-ga    sizuka    da  
 night-Nom   quiet    copula.pres  
 'The night is quiet.'
- b. hon-ga    kiree    da  
 book-Nom   pretty    copula.pres  
 'The book is pretty.'

What characterizes NAs is that their root does not inflect and they take the copula, which inflects. According to Bloch, a pioneering American scholar of the Japanese language, "every predicate contains an INFLECTED word as its NUCLEUS" (1946: 207, small capital original). Since he refers to the whole expression consisting of "NA + copula" as a predicate and identifies the copula as the inflected part, his view is consistent with Hypothesis C in (7). That is,

<sup>3</sup> NAs are called *Keeyoo-doosi* (lit. adjectival verbs) in traditional grammar.

Bloch assumes that the copula in Japanese has some semantic import. The following supports this view:

- (10) a. John-ga Bill-o siawase ni sita  
 -Nom -Acc happy cop made  
 ‘John made Bill happy.’  
 b. John-ga kabe-o makka ni nutta  
 -Nom wall-Acc crimson cop painted  
 ‘John painted the wall crimson.’

Regardless of how the sentences in (10) are analyzed, it is obvious that where English requires no copula, Japanese requires (some allomorph of) the copula (cf. Martin 1975). Recall from (2) that the fact that small clauses contain no copula led some researchers to conclude that the copula is the tense supporter and is semantically vacuous. But (10a-b) show that even when there seems to be no tense feature to support, Japanese requires the copula. This indicates that, as far as Japanese is concerned, Hypothesis C in (7) is empirically correct.

If (7) is correct in Japanese, does this mean that Japanese has no dummy copula and (6) is wrong for Japanese? Recently, Urushibara (1993) has proposed that Japanese indeed has a *dummy* copula. Consider:

- (11) a. yoru-ga sizuka da (=9a)  
 night-Nom quiet copula.pres  
 ‘The night is quiet.’  
 b. yoru-ga sizuka de \_\_\_\_\_ ar-u  
 night-Nom quiet copula.gerund dummy.verb-pres  
 ‘The night is quiet.’

Note that *da*, the present form of the copula in (11a), can be replaced by *de aru*, the gerundive form of the copula plus a dummy verb in (9b).<sup>4</sup> Apart from some stylistic differences, (11a-b) are basically synonymous. Therefore, let us suppose that ***da* is the contracted form of *de aru***.<sup>5</sup>

There are contexts where contraction cannot apply:

<sup>4</sup> Since *ar-u* means ‘exist’, (11b) literally means ‘the night exists being quiet.’

<sup>5</sup> The same position is taken by Urushibara (1993: 15), who does not make any arguments for this assumption. She cites Ueyama (1991) in this regard but fails to give the reference.

- (12) a. yoru-ga sizuka de-mo ar-u  
 night-Nom quiet copula.gerund-even dummy.verb-pres  
 'The night is even quiet.'
- b. \*yoru-ga sizuka da-mo (ar-u)  
 night-Nom quiet copula.pres-even (dummy.verb-pres)  
 'The night is also quiet.'

In (12), the predicate is focused with the particle *mo*, and the only possible expression is with *de*, as in (12a), not with *da*, as in (12b). If *da* is the basic form of the copula, it is not clear why it cannot be used in (12b). If *da* is the contracted form of *de aru*, the contrast in (12) follows by assuming that there is an adjacency requirement in the contraction of *de aru* into *da*. Thus, when a particle like *mo* intervenes between *de* and *aru*, as in (12b), adjacency is disrupted and the contraction is blocked.

Another context where the contraction is blocked is in appositive clauses:

- (13) Taro-ga hunanori \*da/\*no/\*na/de aru koto  
 -Nom sailor fact  
 'the fact that Taro is a sailor.'

(adapted from Kubo 1992: 139)

Here, even though there is no intervening element between *de* and *aru*, we cannot use *da* or any other adnominal allomorph of the copula such as *no* or *na*. If *da* is the basic form of the copula, it is again not clear why it cannot be used in (13). In our terms, *da* cannot appear in (13) because the contraction is blocked in appositive clauses for some reason. Whatever the reason, I think (13) suffices to show that it is not *da* but *de aru* that is the basic form.<sup>6</sup>

Now, let us follow Urushibara (1993) and regard the dummy verb /ar/ as the copula. Since I am also assuming, following Bloch, that /de/ is also the copula, I refer to /ar/ as **the dummy copula (dum.cop)** and /de/ as **predicative copula (pred.cop)**. The following contrast shows that /de/ is essential for predication but /ar/ is a dummy:

- (14) a. sizuka de ii  
 quiet cop good  
 'Being quiet, it is good.'

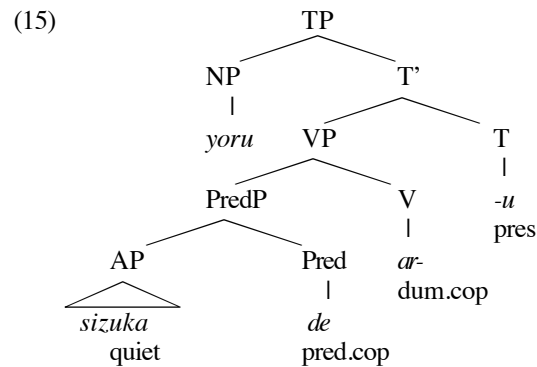
<sup>6</sup> The contraction in question is not a phonological process. See Nishiyama (1997) for the nature of this construction.



- b. \*sizuka atte ii  
 quiet cop good  
 'Being quiet, it is good.'

(14a-b) are gerundive sentences. As (14b) shows, *atte*, the gerundive form of /ar/, cannot enable *sizuka* to function as a predicate, but *de* can (14a). This shows that /de/, but not /ar/, is the pred.cop, which is necessary in predication. /ar/ is the dum.cop that supports an affix.

Suppose that the predicative copula and projects Pred(icate) Phrase in the sense of Bowers (1993). Then we have the following structure for both (11a-b):



Bowers' (1993) main claim is that small clauses are uniformly of category PredP. However, since Pred is usually null,<sup>7</sup> it is hard to empirically support his proposal. Japanese, which always has the overt realization of the pred.cop in small clause contexts (cf. 10), provides direct empirical evidence of the desired kind. Since Bowers claims that PredP is required whenever there is predication, and Japanese NAs always require the pred.cop, the analysis in (15) strongly supports Bowers' theory of PredP. The next question is, why do we need the dummy copula /ar/ above? Section 3 answers this question.

<sup>7</sup> The only possible candidate for an overt Pred in English cited by Bowers (1993: 596) is *as* in "I regard John as crazy / an idiot."

### 3. Peculiarity of the Present Tense

This section discusses another class of Japanese adjectives, which I dub *Canonical Adjectives (CAs)*:

(16) *Canonical Adjectives (CAs)*

- a. yama-ga taka-i  
mountain-Nom high-pres  
'The mountain is high.'
- b. miti-ga hiro-i  
road-Nom wide-pres  
'The road is wide.'

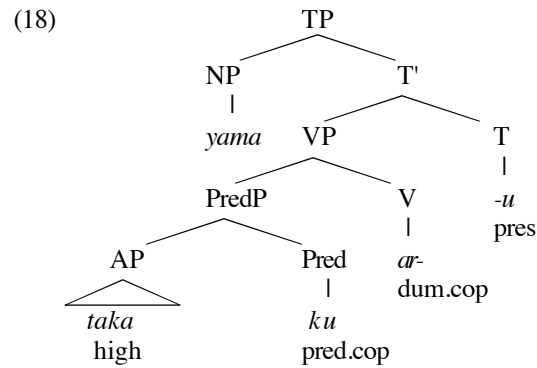
Contrary to NAs in (9), CAs seem to require no copula. Due to this apparent radical difference, no attempt has been made to give a unified syntactic analysis of NAs and CAs.<sup>8</sup> However, consider the following focus sentences:

- (17) a. yama-ga taka-ku-mo ar-u  
mountain-Nom high-ku-even dum.cop-pres  
'The mountain is even high.'
- b. yoru-ga sizuka-de-mo ar-u (=12a)  
night-Nom quiet-de-even dum.cop-pres  
'The night is even quiet.'

Note that (17a-b) are almost completely parallel, the sole difference being that where (b) uses *de*, (a) uses *ku*. If *de* is the predicative copula, as I have argued in the previous section, it is plausible that *ku* in (b) is also the pred.cop. Therefore, abstracting away from the focus particle *mo*, (17a) should be analyzed as follows:

---

<sup>8</sup> Exceptions are Kubo (1992) and Urushibara (1993). See Nishiyama (1997) for the similarities and differences between their analyses and mine.



However, (18) would wrongly yield (19a):

- (19) a. \*yama-ga taka-ku ar-u  
           mountain-Nom high-ku dum.cop-pres  
           ‘The mountain is even high.’
- b. yama-ga taka-i (=16a)  
     mountain-Nom high-pres

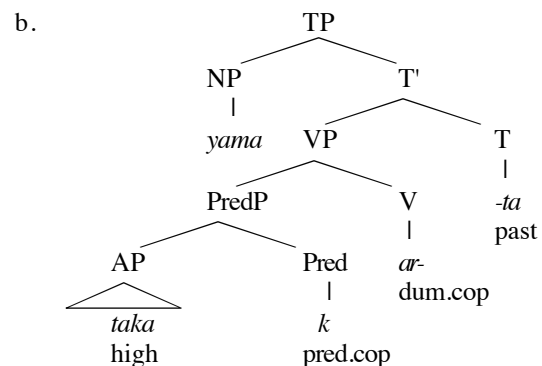
The correct form is (19b). Recall from (11b) that (17b) is grammatical without *mo*. This contrasts with (17a), which would be ungrammatical without *mo* (19a). Thus, the problems we must solve to maintain the hypothesis that *de* and *ku* have the same status are the following<sup>9</sup>:

- (20) a. Why doesn't [ku] appear in (19b)?  
       b. Why doesn't the dummy copula appear in (19b)?

To answer these questions, it is useful to consider the past form of (19b):

- (21) a. yama-ga taka-k-at-ta  
           mountain-Nom high-pred.cop-dum.cop-past  
           ‘The mountain was high.’

<sup>9</sup> What is wrong with (19a) is discussed by Sells (1996), who rules it out by economy of representation (his AVOID AFFIX).



Unlike (19b), (21a) contains both the pred.cop /k/ and the dum.cop /ar/. (*at-* is due to assimilation.) Thus, suppose that (19b) is underlyingly /taka/-/k/-/i/, and that /k/ is deleted by a phonological process. Suppose further that [u] in *ku* in (17a) is the result of phonological epenthesis. If these construals are correct, the lack of *k(u)* in (19b) raises no problem for postulating the pred.cop /k/ (underlyingly). I refer readers to Nishiyama (1997) for extensive justification of [k]-deletion and [u]-epenthesis. The focus of the discussion in this section is on (20b): why is no dummy copula required in the present tense in (19b)?

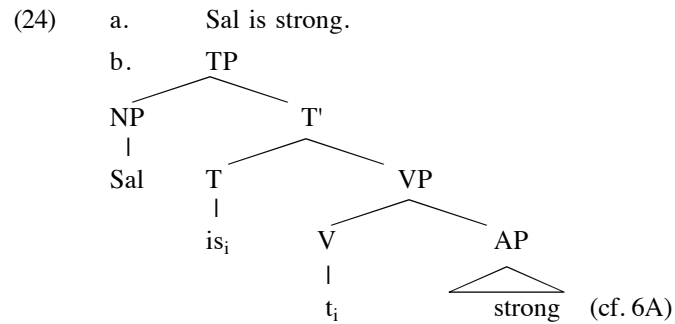
Following Urushibara's (1993: 36) insight, I analogize the lack of the dum.cop in (19b) to the crosslinguistic tendency that present tense does not require the (dummy) copula. Consider the following sentences in Modern Hebrew:

- (22) a. Dani more ba-universita  
 teacher in.the-university  
 'Dani is a teacher at the university'
- b. Dani haya more ba-universita  
 be.past teacher in.the-university  
 'Dani was a teacher at the university'  
 (Déchaine 1993: 303)

Note that in the present tense (22a), no copula appears, unlike in the past tense (22b). Déchaine (1993: 309ff) proposes (23) and accounts for why some tenses do not require the copula:

- (23) *Morphological Tense Hypothesis*  
 Morphological tense c-selects V, but non-morphological tense has no c-selection.

According to this hypothesis, (24a) is analyzed as (24b):



Since the tense in (24) is morphological, it selects V, and this is why we have the copula in (24).

However, it is not clear to me what Déchaine means by “morphological.” First, it does not seem to mean “phonologically overt,” because it is not clear what part of *is*, *are*, and *am* is the overt realization of the tense morpheme per se. Rather, the standard analysis is that when the tense and agreement features are supported by /be/, they are realized as *is*, *are*, or *am*. Besides, though the Japanese CA present marker [i] is an overt morpheme, it does not require the *dum.cop* (cf. 19b). So the phonological entity is not relevant in (23).

“Morphological” in (23) doesn’t seem to mean “underspecified tense” either, because Déchaine explicitly rejects Doron’s (1983) and Enç’s (1991) proposal that the tense feature of the present tense is underspecified. In addition to Déchaine’s conceptual argument against this underspecification approach, the following empirical argument to the point can be cited:

- (25) a. Jak     manje   pom   nan  
               eat     apple   Det  
               ‘Jak ate the apple.’
- b. Jak     renmen   pom   nan  
               like     apple   Det  
               ‘Jak likes the apple.’

(Haitian, Déchaine 1993: 295)

As (a) shows, a specific DP with a bare eventive verb gives a past reading in Haitian, while a stative verb remains non-past in

interpretation (b). In underspecification theory, the present tense in (b) has no tense feature; thus there is no need to support it, as shown by the bare form of the verb. However, since (a) also seems to contain the underspecified tense, it is not clear why it has the past reading.

Third, “morphological” in (23) does not mean “affixal,” either. Recall that in the present forms of CAs like *taka-i* ‘high-pres’ (19b), /i/ is supported by *taka-* (non-V), without any help of the dummy copula (V). Thus, whether the tense marker is affixal or not is irrelevant to whether it selects V or not.

I reinterpret Déchaine’s proposal as follows:

(26) *Verb-Selecting (VS) Feature*

If an affix has the VS feature, it selects (or is supported by) a verb.<sup>10</sup>

Of course, (26) is just a restatement of the facts. What I am trying to show is that this feature cannot be reduced to any existing inventory of features (tense specification, affix, or phonological), and that this single feature accounts for the behavior of the copula in English, Hebrew, and Japanese. In English, tense uniformly has the VS feature. This is why it always has an overt copula in matrix copula sentences (cf. 5). In Hebrew, while the past tense has the VS feature, the present tense doesn’t. This is why there is no copula in the present tense, while there is a copula in the past tense (cf. 22).

In Japanese CAs, the following paradigm shows that the behavior of the present form is exceptional rather than regular:

- (27) a. *taka-i* (<= /taka/-/k/-/i/ ‘high-pred.cop-pres’)
   
high-pres
- b. *taka-k-at-ta*
  
high-pred.cop-dum.cop-past
- cf. *at-ta*
  
exist-past
- c. *taka-k-ar-oo*
  
high-pred.cop-dum.cop-presumptive
- cf. *ar-oo*
  
exist-presumptive

---

<sup>10</sup> In terms of feature checking theory, the VS feature is checked off only by a verb.

Note first the parallelism between (b-c) and the corresponding forms of the lexical verb /ar/ ‘exist’. Since they are identical, they support my claim that /k/ and /ar/ can be abstracted from (b-c) as the predicative copula and the dummy copula, respectively. However, (a) contains no /ar/. (Recall that /k/ exists underlyingly.) In our terms, while /ta/ and /oo/ have the VS feature and must be supported by a verb (i.e., dum.cop), /i/ in (a) has no VS feature (or its value is specified negative). This is why there is no dum.cop /ar/ in (a).<sup>11</sup>

Consider finally another paradigm of CAs:

- (28) a. taka-k-u                      nai  
       high-pred.cop-epenthesis    neg
- b. taka-k-ereba  
       high-pred.cop-conditional
- c. taka-k-u-te  
       high-pred.cop-epenthesis-gerundive

Contrary to (27b-c), the existence of /ar/ is hard to attest in (28a-b). It is possible to find /ar/ in (28a-b) diachronically. That is, *nai* in (a) is the result of suppletion of *-ar-azu* ‘dum.cop-neg’, and *-k-ereba* in (b) is originally probably *-ki ar-eba* (dum.cop-cond), with [i + a] > [e].<sup>12</sup> However, synchronically speaking, these construals do not make much sense. Rather, /nai/ and /ereba/ in Modern Japanese have simply acquired a status that enables them to stand without the support of a verb (dum.cop /ar/). In our terms, by incorporating /ar/ etymologically, /nai/ and /ereba/ lost the VS feature, and have come to be able to attach to (or select) a CA root (plus the pred.cop) directly. Of particular interest is /te/ in (28c), in which no evidence can be found for the existence of /ar/ etymologically or phonologically. Thus, /te/ is considered to be another candidate lacking the VS feature.

#### 4. The Typology of Copular Sentences

This paper has argued that there are two kinds of copula: a predicative copula (pred.cop) and a dummy copula (dum.cop). The

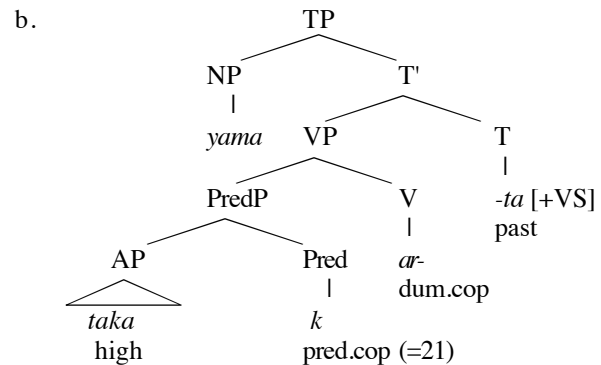
<sup>11</sup> Since another present marker /u/ requires the dum.cop /ar/ (cf. 11b, 17), it has the VS feature, unlike /i/.

<sup>12</sup> Because of the frontness of [i], the reconstruction of [ki-areba] for [kereba] is more plausible than [ku-areba] (John Whitman, p.c.).

former is necessary for predication and exists universally whenever there is predication (cf. Bowers 1993). Although pred.cop is usually null in English, Japanese manifests overt counterparts of the pred.cop: /de/ or /k/. That pred.cop is not the dummy tense supporter is confirmed by its appearance in small clauses, where there is no tense to support. The role of tense-supporting is played by dum.cop, whose existence depends on whether the tense has the feature specification to be supported by a verb (i.e., whether the tense has the VS feature or not). Utilizing the two parameters, i.e., whether the pred.cop is null or overt and whether the tense has the VS feature or not, there are four types of copular sentences: [overt pred.cop, +VS], [overt pred.cop, -VS], [null pred.cop, +VS], [null pred.cop, -VS]. As a summary of this paper, I exemplify the four classes of copular sentences below:

(29) Japanese past CAs: [overt pred.cop, +VS]

- a. yama-ga taka-k-at-ta  
 mountain-Nom high-pred.cop-dum.cop-past  
 'The mountain was high.'

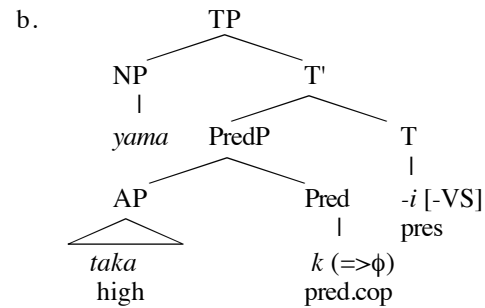


Because of the VS feature, /ta/ must be supported by a verb (dum.cop) /a/. Pred.cop is overtly realized as /k/.

(30) Japanese present CAs: [overt pred.cop, -VS]

- a. yama-ga taka-i (=16a, 19b, 27a)  
 mountain-Nom high-pres

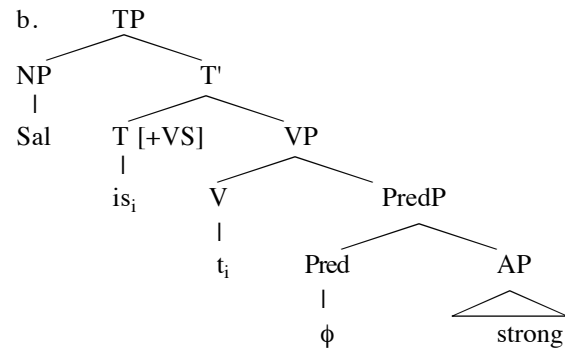




Due to the lack of (or negative specification of) the VS feature, /i/ does not have to be supported by a verb. This is why we don't have /ar/ in (30). Although the pred.cop /k/ is eventually deleted, it exists underlyingly.

(31) English: [null pred.cop, +VS]

a. Sal is strong.

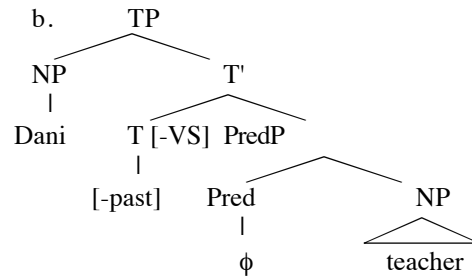


Since English tense is always specified with [+VS], the copula is called for. Since small clauses in English contain no copula, the English copula is dummy, not predicative. The predicative copula is null in English. I follow Bowers (1993) in that even though Pred is almost always null, there is PredP whenever there is predication. One attractive aspect of this hypothesis is that it makes it possible to analyze small clauses as PredP uniformly, as discussed by Bowers.

(32) Hebrew present tense: [null pred.cop, -VS]

a. Dani more (=22a)

teacher  
'Dani is a teacher.'



Since Hebrew present tense has no VS feature (or specified negatively), no (dummy) copula is required in (32). The past tense, on the other hand, has the VS feature, and is supported by the copula, as we saw in (22b).

## References

- Bach, Emmon (1967). "Have and Be in English Syntax." *Language* 43:462-85.
- Bloch, Bernard (1946). "Studies in Colloquial Japanese II: Syntax." *Language* 22:200-248.
- Bowers, John (1993). "The Syntax of Predication." *Linguistic Inquiry* 24:591-656.
- Déchaine, Rose-Marie (1993). *Predicates Across Categories*. Ph.D. dissertation, University of Massachusetts, Amherst.
- Doron, E. (1983). *Verbless Predicates in Hebrew*. Ph.D. dissertation, University of Texas, Austin.
- Enç, Mürvet (1991). "On the Absence of the Present Tense Morpheme in English." Manuscript, University of Wisconsin, Madison.
- van Gestel, F. (1986). *X'-Grammar: Attribution and Predication in Dutch*. Ph.D. dissertation, University of Utrecht.
- Higgins, F. Roger (1973). *The Pseudo Cleft Constructions in English*. Ph.D. dissertation, MIT.
- Kubo, Miori (1992). *Japanese Syntactic Structures and Their Constructional Meaning*. Ph.D. dissertation, MIT.

- Martin, Samuel (1975). *A Reference Grammar of Japanese*. New Haven: Yale University Press.
- Moro, Andrea (1990). "There-Raising: Principles across Levels." Paper presented at GLOW 13.
- Nishiyama, Kunio (1997). "Japanese Adjectives." Manuscript, Cornell University.
- Rapoport, Tova Rebecca (1987). *Copular, Nominal, and Small Clauses: A Study of Israeli Hebrew*. Ph.D. dissertation, MIT.
- Rothstein, Susan. D. (1983). *The Syntactic Forms of Predication*. Ph.D. dissertation, MIT.
- Sells, Peter (1996). Optimality and Economy of Expression in Japanese and Korean. Paper presented at the 7th Japanese / Korean Linguistics Conference. To appear in proceedings.
- Urushibara, Saeko (1993). *Syntactic Categories and Extended Projections in Japanese*. Ph.D. dissertation, Brandeis University.
- Williams, Edwin (1984). "There-Insertion." *Linguistic Inquiry* 15: 131-52.

Department of Linguistics  
Morrill Hall  
Cornell University  
Ithaca, NY 14853  
*kn20@cornell.edu*