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Exploring the Noun-classifier Continuum in Japanese

poster presentation in session: 4 Phonology and Morphology (Marc van Oostendorp)
Exploring the Noun-classifier Continuum in Japanese

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The 19th International Congress of Linguists: poster session (7/22/2013)

Abstract
This paper discusses the syntactic and semantic properties of Japanese numeral classifiers identical to their nominal counterparts, which we call "noung classifiers (NCS)," and suggests that there exists a gradience between classifiers and nouns by examining various aspects of the NCS compared to typical CLs and nouns.

Introduction & Literature Review

- Japanese has various counters I including numeral classifiers (CLs), and nouns cannot be directly modified by numerals but must be quantified by counters (Downing 1996, Iida 1999, Akienhald 2000).
- CLs are typically suffixes that cannot appear without numerals, i.e. bound morphemes.

1. (a) ni-inu/kuruma
2. dog/car
2. two dogs/cars
(b) ni-ni no inu
2-CL-GEN dog
2-CL-GEN car
2. two dogs/cars

Q. CLs or Nouns? Some classifiers are morphologically identical to their nominal counterparts, e.g. kyoku class 'song' (songs), which we call "noung classifiers (NCs)" in this paper.

2. (a) ni-kyoku no inu (NC)
2-NC(song)-GEN dog
2-NC(song)-GEN car
2. two dogs/cars
(b) kyoku
2. tukut-ta. (Noun)

"I composed a song."

Problems of the previous studies

1. The definitions of CLs in Japanese, cf. Table 1. Though most of the previous studies require CLs to be suffixes, the CLs shown include some NCS.

Purpose of this study: Since only a few attempts have so far been made at explaining NCS (cf. Narita 1990, Tojo 2012) despite their importance, we explore the properties of NCs in this paper.

Our Claim: This paper suggests that there exists a gradience between classifiers and nouns, which leads to difficulty distinguishing CLs from nouns in Japanese.

Data

We search for NCS in BCCWJ with the "Chuanangou" search system, and then pick out the NCS that satisfy the requirements for CLs suggested by Mano and Yonezawa (2013), as shown in (3).

- Search:
  - Numerals + Common noun + -nom(GEN) + Noun
  - e.g. san-tubu no rakkayou 'three rakkyos'
  - 3-GEN rakkayo
  - Mano & Yonezawa (2013): requirements for CLs
  - 1. attached to numerals
  - 2. "Non-NC" (what-NC) means "How many?"
  - 3. co-occur with the object

(3) NCS: kyoku 'music,' rei 'example,' daigaku 'university,' tubu 'grain,' geimu 'game,' anko 'salad,' hito 'person,' moi 'literature'

Results

- We explored various aspects of the NCS (as shown in (A-F)) compared to CLs and nouns, which is summarized in Table 2.

A. Semantic relations:
Several types of semantic relations are observed between numerals and NCS, while CLs do not show such variation like NCS.

1. number of object (nouns) ≠ CLs
2. ordinal number
3. number of arguments (limited to even NS) ≠ CLs
4. number of resultants (limited to even NS) ≠ CLs

B. Countability (B-E):

(B) "Non-NC" (what-NC) means "How many?"?
(C) Can they co-occur with any numerals?
(D) Can they be counting up?
(E) Can they be modified by indefinite numbers?

Referentiality (F):
Can they co-occur with their objects?

Findings: Some NCS behave like CLs, but some are similar to nouns. We will refer to the NCS close to typical CLs as "typical NCS" and the ones similar to nouns as "peripheral NCS."

Table 1: Differences between the definitions of Japanese CLs among the previous studies

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"Non-NC? asks 'how many?'"

Discussion

- Several types of semantic relations are observed between numerals and peripheral NCS just like in "Noun-Noun compounds," while typical NCS do not show such variation like CLs.

- Peripheral NCS tend not to co-occur with their objects, especially when they appear in the same forms because of "semantic redundancy," which means that peripheral NCS have more lexical information as nouns.

Nouns ➔ CLs: less referential, abstracted ref. ➔ [reference]

- Some of the peripheral NCS, such as goin 議員 "assembly member," have less countable functions compared to other NCS.

Nouns ➔ [count] ➔ [count] ➔ [count]

Conclusions

These facts show that there is a continuum from nouns to classifiers in Japanese. NCSs are in the process of grammaticization from nouns to classifiers with losing the referential meanings and gaining function to count objects, as in Figure 1.

Table 2. Comparisons among CLs, NCS, and Nouns in Japanese

<table>
<thead>
<tr>
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</table>

Abbreviations

ACC-accusative case, CG-numerical classifier, GEN-genitive case, NOM-nominitive case, PST-past tense.

Notes

1. Some categorizations of Japanese counters have been proposed (Matsumoto, 1991, Iida, 1999 etc.). This paper adopts Kageyama et al.’s (2011) categorization, which divides them into “numerical classifiers” and “measure specifiers” according to their functions, and focuses on “numerical classifiers.”
2. Simplified semantic restrictions of each classifier are shown in square brackets ( ).
3. BCCWJ (Balanced Corpus of Contemporary Written Japanese) by NINJAL; one hundred million words of contemporary written Japanese.

References