A Cartographic Approach to Nominative/Genitive Conversion in Japanese

Overview: Adopting the perspective of Cartographic Approach (CA: Rizzi, 1997), this paper provides new insight into Nominative/Genitive Conversion (NGC) in Japanese. Under the assumption that genitive Case is valued via Agreement with D⁰ above C⁰, the Agree relation is obstructed when C⁰ fully projects. In addition, the optionality of NGC is attributed to optional Feature Transmission (FT) in C⁰-T⁰ (Chomsky, 2005; Takahashi, 2008; Takeuchi, 2010). Lastly, our theory can account for ga-no alternation with verbal nouns in a uniformed way.

Background: According to Harada (1971, 1976), NGC optionally takes place in adnominal clauses (1a) and cleft constructions headed by no (1b), but does not occur in clauses headed by the Q-particle ka or the “adposition-particle” toiu (1c). Two major hypotheses have been proposed for the genitive subject: D-licensing (e.g., Miyagawa, to appear; Ochi, 2001) and C-licensing (Hiraiwa, 2005). The D-licensing hypothesis does not assume the existence of a CP level for the genitive subject structure, in contrast to the C-licensing hypothesis. Drawing on the analysis of the genitive subject in Uyghur (Asarina & Hartman, to appear), we analyze NGC under the assumption that D-licensing occurs across a CP level, which is a mixture of the previous two hypotheses.

Proposal: [1] The sentential particles no (cleft), ka (Q-particle), toiu (adposition-particle) in (1) are strictly ordered as no>ka>toiu as shown in (2). The order of the particles reflects their hierarchy within CP layers. According to CA, whether a sentence denotes a question or declarative is determined by the element in Force⁰. For instance, the Q-particle ka is located in Force⁰, and sets the sentential force to that of a question. The nominalizer no, which is located in Fin⁰, appears below the ForceP headed by ka. The adposition-particle toiu appears above ForceP. Thus, structures containing ForceP or higher projections cannot have NGC, in contrast to (1b), which realizes FinP, a CP layer below ForceP. The C-licensing hypothesis does not explain the ungrammaticality of the genitive subject with the predicate adnominal form kireina in (2), because it assumes that genitive Case is valued by the [+N] C⁰ with “C-T conspiracy” that is realized as the adnominal form. In terms of our assumption, (2) shows that overt C heads, such as the Force particle ka or the adposition-particle toiu, disallow D⁰ to Agree with any elements under ForceP. This indicates that the overt head in Force⁰ or upper layers in CP create a phase (PH), inducing the Phase Impenetrability Condition (PIC) effect (Chomsky, 1998) (3). Conversely, the realization of Fin⁰ head as no under ForceP optionally creates PH.

[2] The optionality of NGC is attributable to the optional FT. If the PH-head has a strong feature in terms of phasehood, the Case-feature of the higher projection inherits to a lower projection (i.e., v⁰ to V⁰, C⁰ to T⁰). When C⁰ is PH, FT takes place and the Case feature of C⁰ inherits to T⁰. This process allows T⁰ to Agree with the nominative subject in SpecTP. On the other hand, when C⁰ is not PH, FT does not occur and the Case-feature of C⁰ does not inherit to T⁰, and T⁰ does not Agree with the subject. In this case, the elements inside the CP can be visible from the higher projection of C⁰, which allows D⁰ to Agree with the genitive subject in SpecvP.

[3] This theory can account for another ga-no alternation that appears with verbal nouns (e.g., Hoshi, 2001; Iida, 1987; Miyagawa, 1991), as shown in (5), in a uniformed way. (5) shows that this construction can take VP adverbs but not adjectives, in contrast to purely nominal phrases such as Taro-no *issyokenmeini/issyokenmeina tizu-no sakusei ‘(lit) Taro’s drawing hard of a map’. It indicates that this construction does not contain a nominal level, which provide
evidence against the analysis that assumes a category changing of verbal nouns and includes nominal levels in the construction. The similarity between this construction and NGC can be found in the ungrammaticality of the pair no-o (5b). This ungrammaticality is derived from the Transitivity Restriction, which is the general property of NGC and derived from the Acc-Nom Generalization in Hiraiwa (2005). Therefore, we assume the same structure as NGC to this construction. For instance, D 0 multiple Agree with both the subject in Spec vP and the object in the base-generated position to license Genitive (6).

(1) a. [Taro-ga/no katta] hon Nom/Gen bought book
   b. [Taro-ga/no kekkon sita]-no-wa Hanako-to-da. Nom/Gen marry did-C-Top -with-is
      ‘the book that Taro bought’       ‘It is Hanako that Taro married with.’
   c. [Taro-ga/*no kekkon sita]-ka/toiu… Nom/Gen marry did-Q/Adposition
      ‘whether/that Taro married’

(2) [naze sakura-ga/*no kireina]-no-ka-toiu hanasi
   why cherry.blossoms-Nom/Gen beautiful-NO-KA-TOIU story
   ‘the story about why cherry blossoms are beautiful’

(3) a. \[DP[\text{ForceP} [\text{FinP} [\text{TPSubj-ga/*no…Pred}] T^0] no=(PH)] D^0] \]
   \[\text{Agree} \quad \text{PIC} \quad \text{OK} \]
   b. \[DP[XP[\text{ForceP} [\text{FinP} [\text{TPSubj-ga/*no…Pred}] T^0] no](PH)] to[D^0] \]
   \[\text{Case-F(eature)Transmission/PH forms} \]

(4) a. \[DP[\text{FinP} [\text{TPSubj-ga…Pred}] T^0] \]
   \[\text{no (=PH)} \] D^0]
   \[\text{Agree} \quad \text{PIC} \]
   \[\text{OK} \]
   \[\text{*Failure of Case-F Transmission/no PH forms} \]
   b. \[DP[\text{FinP} [\text{TPSubj-no…Pred}] T^0] \]
   \[\text{no (=*PH)} \] D^0]

(5) a. Taro-ga issyokenmeini/*issyokenmeina tizu-o/no sakusei tuyu
   Nom hard map-Acc/Gen draw while
   ‘while Taro draws a map hard’
   b. Taro-no issyokenmeini/*issyokenmeina tizu-*o/no sakusei tuyu
   Gen hard map-Acc/Gen draw while
   ‘while Taro draws a map hard’

(6) \[\text{[[[[\text{subj-no} \text{ obj-no} v^0] T^0] C_{(par)}] D^0]} \]
   \[\text{Multiple Agree} \]