## Interdependency between Object Case and Event Type: Accusative-Dative Alternation in Japanese Shin Fukuda, University of California, San Diego

A small number of Japanese verbs allow an alternation of object case between accusative -o and dative -ni (1), which is accompanied by three other alternations: interpretation of objects (path vs. goal), subjects (agent vs. theme), and event type (durative vs. instantaneous) (Kuno 1973, Sugamoto 1982). In this paper, we argue that the apparent accusative-dative object case alternation (the ACC-DAT alternation) in fact involves two different verbs and two distinct syntactic structures. This seemingly undesirable conclusion (postulating two phonologically identical verbs based on object case) nonetheless offers an account for differences between accusative-object (ACC-object) verbs and dative-object (DAT-object) verbs in Japanese, which, under the proposed analysis, represent different types of event.

Kuno (1973) claims that the ACC-DAT alternation is accompanied by a change in interpretation of objects, showing that the objects that can only be interpreted as goal and path are only compatible with dative and accusative case, respectively (2). He also notes that interpretation of event type changes with the ACC-DAT alternation as well. For instance, completive aspect verbs are only compatible with an ACC-object (3), which suggests that these verbs are interpreted as instantaneous (achievement) with a DAT-object, but as durative (activity/accomplishment) with an ACC-object (Sugamoto 1982). Another change accompanying the ACC-DAT alternation involves interpretation of subjects. While human subjects are compatible with both DAT- and ACC-object (1), inanimate subjects are only compatible with a DAT-object (4), suggesting that subjects must be agent with ACC-object. These differences are summarized in (5).

There are at least two ways to account for the alternation. One may assume that there is one lexical entry for the 'alternating' verbs and the two sets of characteristics are derived from it. Alternatively, one may assume that there are no alternations but two lexical entries, each of which corresponds to the two sets of characteristics. Evidence from quantifier float and relative scope of arguments strongly suggests that the latter is the case. While a stranded numeral quantifier phrase (NQP) following a DAT-object can be associated with subjects, such an association is impossible with an ACC-object (6). Assuming Miyagawa's (1989) mutually c-command restriction for an NP and its associate NQP, the contrast means that subjects with a DAT-object originate in a position that is lower than the object, while subjects with an ACC-object are never lower than the object. Scope facts support this assumption. A universal quantifier *subete* 'all' in the subject position can take either narrow or wide scope with an existential quantifier *subete* 'something' as a DAT-object; however, with the same existential quantifier as an ACC-object, the inversed scope is harder to obtain (7). These data suggest that subjects with an ACC-object are base-generated, while subjects with a DAT-object are derived.

We argue that the 'alternating' verbs with an ACC-object are ergative verbs, which require v introducing agent. This v can also introduce accusative case, which licenses the path argument, and an event argument that is [+durative], which creates a durative interpretation (8a). In contrast, the 'alternating' verbs with a DAT-object are unaccusative verbs, which require v with neither an external argument nor structural case, which nonetheless introduces an event argument that is [-durative]. The dative marked goal argument is both introduced and case-licensed by a silent applicative verb, which leaves the theme argument as the only argument which can be the subject (8b). Under the single-lexicalentry approach, however, the fact that the 'alternating' verbs behave like both ergative and unaccusative is difficult account for, especially under the assumption that external arguments are introduced by a separate functional head, i.e. v. Moreover, the single-lexical-entry approach suggests that the ACC-DAT alternation can be productive. However, it is limited to only a small group of verbs. That favors the twolexical-entry approach, which is compatible with idiosyncrasy. Finally, the proposed analysis can be extended to the cases of Japanese verbs whose sole internal argument must be dative marked. What is interesting is that these 'DAT-object' verbs never passivize and are always interpreted as achievement (9). If the DAT-object verbs have the structure in (8b), the achievement interpretation is due to the [-durative] event argument of v, and the impossibility of passive is due to dative case being provided by the applicative head, not by v. The proposed analysis, therefore, provides a way to account for the interdependency between object case marking, interpretation of arguments, and the event type of sentences, which derive from different combinations of lexical verbs and different types of v.

- (1) a. Gakusei-ga yama-o/ni (2-tsu) nobor -ta student-NOM mountain-ACC/DAT (2-CL) climb -PERF 'Students climbed (two) mountains.'
  - b. Kodomo-ga kabin-o/ni (2-tsu) sawar -ta children-NOM vase-ACC/DAT (2-CL) touch -PERF 'The children touched (two) vases.'
- (2) Gakusei-ga {kaidan-o/\*ni} / {yane-\*o/ni} nobor -ta student-NOM {stairs-ACC/\*DAT} / {roof-\*ACC/DAT} climb -PERF 'Students climbed the stairs/to the roof.'
- (3) Gakusei-ga yama-o/\*ni nobori kir -ta student-NOM mountain-ACC/\*DAT climb complete -PERF 'Students finished climbing the mountain.'
- (4) Kimono-ga yuka-\*o/ni sawar -ta Kimono-NOM floor-\*ACC/DAT touch -PERF 'Kimono touched the floor.'

| (5) Summary       | object | subject | event type              |
|-------------------|--------|---------|-------------------------|
| Accusative object | path   | agent   | activity/accomplishment |
| Dative object     | goal   | theme   | achievement             |

- (6) Gakusei<sub>i</sub>-ga yama-\*o/ni 5-nin<sub>i</sub> nobor -ta student<sub>i</sub>-NOM mountain-\*ACC/DAT 5-CL<sub>i</sub> climb -PERF 'Students, five of them, climbed the mountain.'
- (7) **Subete-**no-gakusei-ga **nanika-**ni/o swar -ta **all**-GEN-student-NOM **something-**DAT/ACC touch -PERF 'All the students touched something.' DAT =  $\{ \forall > \exists, \exists > \forall \}, ACC = \{ \forall > \exists, ?? \exists > \forall \}$
- (8) a.  $[_{vP}$  Agent  $[_{v'}$   $[_{VP}$  Path  $[_{VP}$  V $_{[AGENT, ACC, +Durative]}]]] b. <math>[_{vP}$  Theme $_{i}$   $[_{v'}$   $[_{ApplP}$ Goal  $[_{VP}$  Theme $_{i}$  V] APPL $_{[DAT]}$ ] $\nu_{[\emptyset, \emptyset, -Durative]}]]]$
- (9) a. Keiko-ga Takeshi-ni (\*2-jikan) aw/bustukar/dekuwas -ta K-NOM T-DAT (\*2-hours) meet/run\_into/come\_across -PERF 'Keiko met/ran into/came across Takeshi (\*for two hours).'
  - b.\*Takeshi-ga (Keiko-ni) aw/bustukar/dekuwas -are -ta
    T-NOM (K-BY) meet/run\_into/come\_across -PASS -PERF
    'Takeshi was met/run\_into/come\_across by Keiko.'

**References: Kuno, S.** 1973. *The Structure of the Japanese Language*. Cambridge, Mass. MIT Press. **Miyagawa, S**. 1989. *Syntax and Semantics* 22: *Structure and Case-marking in Japanese*. San Diego: Academic Press. **Sugamoto, N.** 1982. Transitivity and objecthood in Japanese. In P. J. Hopper and S. A. Thompson (eds.) *Syntax and Semantics* 15: *Studies in Transitivity*. 423-447. New York: Academic Press.