Verb Semantics and Dative Alternation

Hiromitsu Akashi, Katsuo Ichinohe, Manabu Kusayama, Joe Morita

In English, there are two classes of locomotion verbs with respect to the ability to participate in the so called dative alternation. For example, *push* contrasts with *bring* in this respect, as shown in the following:

- (1) a. Ken pushed {the box to Sara/*Sara the box}.
 - b. Ken brought {the box to Sara/Sara the box}.

Note that their Japanese counterparts show a parallel in acceptability:

- (2) a. * Ken-ga Sara-ni hako-o osi-ta.
 - b. Ken-ga Sara-ni hako-o motteki-ta.

We argue that the to-phrase to Sara in (1a) refers to Goal, while the indirect object Sara to Receiver. As for to Sara, it is preferably interpreted as Receiver, but could also be as Goal. In (2) Sara-ni expresses Receiver.

To explain the contrasts above in (1) and (2), we examine the compatibility of the verbs and the directional phrases, *toward* in English and *hoo-ni* in Japanese.

- (3) a. John pushed the cart toward Mary.
 - b. * John brought the book toward Mary.
- (4) a Taroo-ga Hanako-no-hoo-ni hako-o osi-ta.

 (Lit.)'Taro pushed the box to Hanako's direction.'
 - b. * Taroo-ga Hanako-no-hoo-ni syorui-o motteki-ta.
 (Lit.)'Taro brought the document to Hanako's direction.'

The expressions *hoo-ni* and *toward* both refer to the direction of locomotion. The verbs *osu* and *push* can occur with the directional phrases, as opposed to *motteiku* and *bring*. Notice that both in Japanese and English the verbs which occur with the directional phrase cannot be used in the ditransitive forms.

It is generally agreed that directional phrases like *toward* are incompatible with those verbs which describe nondelimited events. Thus, based on the fact that *push* and *osu* cannot alternate into the ditransitive variant, we can set up the condition that the range of verbs that can enter into the ditransitive alternation is restricted to those which can occur with the directional phrase, and so describe delimited events.

Yet the story is not so simple as it appears to be. There are some verbs which describe non-delimited events, yet nevertheless cannot enter into the ditransitive pattern. Consider the following.

- (5) a. Amanda carried {the package to Pamela/OK/7Pamela the package}.
 - b. * John carried the package toward Mary.

When carry is used in the ditransitive form, judgments vary among native speakers. Our assumption predicts that the ditransitive expression in (7a) is perfectly acceptable as well as that in (1b), since both carry and bring do not occur with toward.

A further distinction is needed between the verbs incompatible with toward, viz., the distinction between the verbs describing events that necessarily contain Goal and those describing events that are associated with, but do not necessarily entail Goal. Bring belongs to the former, and carry to the latter. When used ditransitively, verbs of the former class are perfectly acceptable, but verbs of the latter are marginal. Thus, the verbs of locomotion in English, push, carry, bring, belong to three different classes.

What makes the problem puzzling is that the three types of verbs can appear in the single syntactic form of [V NP₁ to NP₂] This is relevant to the fact that to-phrase can refer to both Goal and Receiver. In this respect, Japanese shows a clear contrast. Goal and Receiver are given two separate forms, tokoro-ni and hito-ni, respectively:

- (6) a. Ken carry the box to Sara.
 - b. Ken ga {Sara-no-tokoro-ni/??Sara-ni} nimotsu-o hakon- da.

The phrase to Sara in (7a) refers to Goal, but not to Receiver; this difference takes a formal contrast in Japanese: in contrast to hitoni, tokoro-ni is specifically used to express Goal. Next, consider the following:

- (7) a. Joe gave a key to Mary.
 - b. Joe-ga {Mary-ni/*Mary-no-tokoro-ni} kagi-wo age-ta.

Unlike the to-phrase in (8a), the to-phrase in (9a) refers only to Receiver. In this case, hitoni-ni is primarily used to express Receiver.

- (8) a. Ken brought the box to Sara
 - b. Ken-ga {Sara-ni/Sara-no-tokoroni} hako-o motteki-ta.

As is clear from (10b), both forms *hito-ni* or *tokoro-ni* appear in that position. Based on this, it could be predicted that *to Sara* may ambiguously refer to either Receiver or to Goal. These observations indicate that the *to*-phrase in English covers the two distinct domains which are formally distinguished in Japanese.

To sum up, verbs of locomotion such as *bring*, *carry*, and *push* are ordered with respect to implication of Goal: on the top of the scale is *bring*, which selects Goal obligatory. In the second place comes the verb *carry*, which does not select Goal, but describes an event which imply Goal. The lowest comes the *push*, which has nothing to do with Goal. The conclusion is that the ability to participate in the dative alternation varies along this scale. We also show that the corresponding Japanese verbs *mottekuru*, *hakobu*, and *osu*, rank on the same scale in this order.