

Object Case and Event Type: Accusative-Dative alternation in Japanese

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➤ Some Japanese verbs allow their object to be case marked with either accusative *-o* or dative *-ni* (Kuno 1973):

- (1) a. Gakusei-ga yama_i-o/ni (2-tsu_i) nobor -ta
student-NOM mountain-ACC/DAT (2-CL) climb -PERF
'Students climbed (two) mountains.'
- b. Kodomo-ga kabin_i-o/ni (2-tsu_i) sawar -ta
children-NOM vase-ACC/DAT (2-CL) touch -PERF
'The children touched (two) vases.'

➤ The case alternation is accompanied by three other alternations:

- (a) Interpretation of objects (*path* vs. *goal*),
(b) Interpretation of subjects (*agent* vs. *theme*)
(c) Interpretation of event type (*durative* vs. *instantaneous*)

I argue:

- The alternation is an *unergative/unaccusative alternation*, where the sole argument of a verb is realized as either the external (unergative) or internal (unaccusative) argument.
- the alternating verbs are mapped into two different structures which
(i) determine how the sole argument is realized (agent vs. theme),
(ii) introduce and case-license the second argument (path vs. goal),
(iii) provide aspectual specifications (activity vs. achievement).
- The proposed analysis of the 'dative object' accounts for dative object verbs in Japanese in general

1. Three changes that accompany *Acc-Dat alternation*

1.1 Interpretation of objects: *Path* vs. *Goal*

- Accusative objects are interpreted as *path*, dative objects as *goal* (Kuno 1973).
- Objects that can only be interpreted as *path* can only be marked with accusative *-o* (2a).
 - Objects that can only be interpreted as *goal* can only be marked with dative *-ni* (2b).

- (2) a. Gakusei-ga **kaidan-o/*ni** nobor -ta
student- NOM stairs- ACC /*DAT climb - PERF
'Students climbed the stairs.'
- b. Gakusei-ga **yane-*o/ni** nobor -ta
student- NOM roof- *ACC / DAT climb - PERF
'Students climbed to the roof.'

1.2 Interpretation of event type: *Activity* vs. *Achievement*

➤ Accusative objects create an *activity* interpretation, dative objects an *achievement* interpretation.

- The alternating verbs are compatible with completive aspect verbs only with an accusative case marked object (Sugamoto 1982).
- (3) Gakusei-ga **yama-o/*ni** nobori **kir** -ta
student- NOM **mountain-** ACC /*DAT climb complete -PERF
'Students finished climbing the mountain.'
- The alternating verbs can have a durative interpretation only with an accusative marked object.

- (4) Kodomo-tachi-ga [te-ni-motte] **kabin-o/*ni** sawar -ta
child-PL- NOM [hand-LOC-have] **vase-ACC/*DAT** touch - PERF
'The children touched the vase while holding it.'

1.3 Interpretation of subjects: Agent vs. Theme

- The subject with an accusative object is interpreted as *agent*, with a dative object as *theme*.
- Inanimate subjects are incompatible with a dative object.

- (5) Sukaato-ga **yuka-*o/ni** sawar -ta
 Skirt-NOM floor-*ACC/DAT touch -PERF
 'The skirt touched the floor.'

1.4 Summary of the alternations:

	<i>object</i>	<i>event type</i>	<i>subject</i>
<i>Accusative case</i>	path	activity	agent
<i>Dative case</i>	goal	achievement	theme

2. Acc-Dat alternation as unergative/unaccusative alternation

- Three language-specific unaccusativity diagnostics show that the *Acc-Dat* alternation is an **unergative/unaccusative alternation**.

2.1 Modification with *takusan* 'lot' (Kageyama 1993)

- *takusan* 'lot' modifies the activity denoted by an unergative verb, the quantity of the argument with an unaccusative verb.

- (6) a. Kodomo-ga *takusan* aruk/asob -ta
 child-NOM *lot* walk/play -PERF
 'The child(ren) walked/played a lot.' (**the amount of the activities**)

- b. Kodomo-ga *takusan* umare/nakunar -ta
 child-NOM *lot* be.born /die -PERF
 'Many children were born/died.' (**the quantity of the argument**)

- *takusan* 'lot' modifies **the amount of the activity** with an **accusative object**, **the quantity of the subject** with a **dative object**.

- (7) a. Gakusei-ga *takusan* **yama-o** nobor -ta
 student-NOM *lot* mountain-ACC climb -PERF
 'The student(s) climbed mountains a lot.' (**amount of climbing**)

- b. Gakusei-ga *takusan* **yama-ni** nobor -ta
 student-NOM *lot* mountain-DAT climb -PERF
 'Lots of students climbed mountains.' (**quantity of the students**)

2.2 *Te-iru* construction (Kindaichi 1976 and many others)

- *Te-iru* construction has a progressive interpretation with unergative verbs, a result state reading with unaccusative verbs.

- (8) a. Kodomo-ga *takusan* arui/asob -te -iru
 child-NOM *lot* walk/play -TE -IRU
 'The child(ren) are walking/playing a lot.' (**progressive**)

- b. Kodomo-ga *takusan* umare/nakunar -te -iru
 child-NOM *lot* be_born /die -TE -IRU
 'Many children have been born/died.' (**result-state**)

- *Te-iru* construction has a **progressive** interpretation with an **accusative object**, a **result state** reading with a **dative object**.

- (9) a. Gakusei-ga **yama-o** nobor -te -iru
 student-NOM mountain-ACC climb -TE -IRU
 'Students are climbing the mountain.' (**progressive**)

- b. Neko-ga **yane-ni** nobor -te -iru
 cat-NOM roof-DAT climb -TE -IRU
 'A cat is on the roof.' (**result-state**)

- (10) a. Kodomo-tachi-ga **kabin-o** sawar -te -iru
 child-PL-NOM vase-ACC touch -TE -IRU
 'The children are touching the vase.' (**progressive**)

- d. Sukaato-ga **yuka-ni** sawar -te -iru
 skirt-NOM floor-DAT touch -TE -IRU
 'The skirt is touching the floor.' (**result-state**)

2.3 Stranded numeral quantifier phrases (Miyagawa 1989)

➤ Subjects of unaccusative verbs can license a stranded numeral quantifier phrase (NQP), while subjects of unergative verbs cannot:

(11)a. **Gakusei**_i-ga ohisu-ni **5-nin**_i ki -ta
 student_i-NOM office-LOC **5-CL**_i come -PERF
 'Students, five of them, came to the office.'

b. ***Gakusei**_i-ga geragerato **5-nin**_i waraw -ta
 student_i-NOM loudly **5-CL**_i laugh -PERF
 'Students, five of them, laughed loudly.'

• A NQP following a **dative object** can be **associate with the subject**, but **not following an accusative object**:

(12) Gakusei_i-ga yama-*o/ni 5-nin_i nobor -ta
 student_i-NOM mountain-*ACC/DAT 5-CL_i climb -PERF
 'Students, five of them, climbed the mountain.'

➤ Summary so far

- ❑ The alternating verbs can be either unaccusatives or unergatives (Hoekstra and Mulder 1990, Borer 1994).
- ❑ The unergative/unaccusative alternation somehow manifests in the object case marking.

3. Deriving the alternation

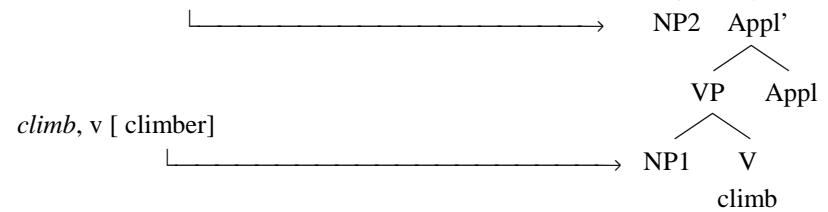
- ❑ Lexical entries of the alternating verbs only specify the role of the argument these verbs require (i.e. the climber) (Borer 1994).
- ❑ The sole argument of the alternating verbs can be realized as either the external (unergative) or internal (unaccusative) argument.
- ❑ The alternating verbs are mapped into two different syntactic structures, which determine:
 - (i) syntactic realization of the argument (external vs. internal)
 - (ii) thematic role and case of the second argument (path vs. goal)
 - (iii) aspectual specifications (activity vs. achievement)

3.1 Unaccusative:

- The argument is realized as the internal argument (*theme*), i.e. the complement of V.
- The *goal* argument is introduced *and* case-licensed by a silent applicative verb.

Figure 1:

Applicative, [goal]



➤ The theme argument must move to [Spec, TP] to be case-licensed.

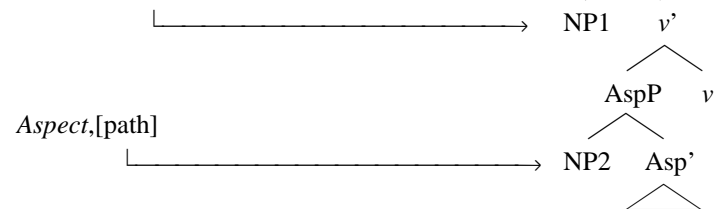
(13) [_{TP} Theme_i [_{AppIP} Goal [_{VP} Theme_i V] APPI_[DAT]]]

3.2 Unergative:

- The argument is realized as the external argument (*agent*), i.e. the specifier of vP.
- The *path* argument is introduced by *Aspect* phrase, which provides *duration* to events represented by these verbs.

Figure 2:

climb, v [climber]



- The path argument is licensed with accusative case by *v*.

(14) [_{VP} Agent [_v [_{AspP} Path [_{VP} V] ASP] *v* [_{AGENT, ACC}]]

➤ Why Aspect Phrase?

- Neither *agent* nor *accusative case* contributes duration.

(15)a. Keiko-ga Taro-o (*2-jikan) koroshi -ta
 K-NOM T-ACC (*2-hours) kill -PERF
 ‘Keiko killed Taro (*for two hours).’

b. Keiko-ga Taro-o (*2-jikan) mistake -ta
 K-NOM T-ACC (*2-hours) find -PERF
 ‘Keiko found Taro (*for two hours).’

- Duration must be introduced in syntax separately.

4. Alternative analyses

4.1 Deriving the alternation from single lexical entries

- Activity and achievement are fundamentally different (Pustejovsky 1991, Levin and Rappaport-Hovav 1998).
- The unergative/unaccusative alternation cannot be derived from a single lexical entry.

4.2 Deriving the alternation from two lexical entries

- If one assumes two lexical entries for the alternating verbs (unaccusative and unergative), these two lexical entries must still be associated with two different syntactic structures (i.e. one in which the subject is base-generated subject, and another in which the subject is derived).
- The proposed analysis postulates two syntactic structures but avoids postulating two different lexical entries.

5. Dative object verbs in Japanese

- Dative-object verbs in Japanese share the same characteristics that are different from the accusative-object verbs:

✓ They do not passivize:

(16) *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.’

✓ They are achievements.

(17) 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).’

- These characteristics would follow if the dative-object verbs have the structure in (13):

- They don’t passivize because (i) the dative argument is case-licensed by the applicative head, not *v*, and (ii) any principle that prevents unaccusative verbs from passivizing blocks the passivization of the theme argument (i.e. Perlmutter 1978).
- They are achievement because they lack *Aspect Phrase*, which provides duration.

6. Conclusion

- ❑ Japanese has verbs that allow an alternation of object case between accusative and dative, which is accompanied with the alternations in interpretation of object, subject, and event type.
- ❑ I have argued that *Acc-Dat* the alternation is in fact an unergative/unaccusative alternation.
- ❑ I have proposed that the alternating verbs are mapped into two different structures which (i) determine how their argument is realized in syntax, (ii) introduce the second argument, and (iii) provide aspectual specifications.
- ❑ The proposed analysis of the ‘dative object’ provides an account for dative object verbs in Japanese in general.

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References:

- Borer, H. (1994). The projection of arguments. In E. Benedicto and J. Runner (eds.), *Functional projections: University of Massachusetts Occasional Papers* 17: 19-48.
- Hoekstra, T and R. Mulder. (1990). Unergatives as copular verbs: locational and existential predication. *The Linguistics Review* 7. 1-79.
- Kageyama, T. (1993). *Bumpo to gokeisei* [Grammar and word formation]. Tokyo: Hitsuji shoboo.
- Kindaichi, K. (1976). *Nihongo Dooshi no Asupekuto* [Aspect of Japanese Verbs]. Tokyo: Mugi shobo.
- Kuno, S (1973). *The Structure of Japanese*. Cambridge, Mass. MIT Press
- Levin, B and M. Rappaport-Hovav. (1998). Building verb meanings. In M. Butt and W. Geuder (eds.), *The Projection of Arguments: Lexical and Compositional Factors*. 97-134. Stanford: CSLI.
- Miyagawa, S. (1989). Light verbs and the eargative hypothesis. *Linguistics Inquiry* 20. 659-668
- Perlmutter, D. M. (1978). Impersonal passives and the unaccusative hypothesis. *BL54*. 157-189.
- Pustejovsky, J. (1991). The syntax of event structure. *Cognition* 41. 47-81.
- Ritter, E. and S. T. Rosen. (1998). Delimiting Events in Syntax. In M. Butt and W. Geuder (eds.), *The Projection of Arguments: Lexical and Compositional Factors*. 135-164. Stanford: CSLI.
- 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.

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