

NOTES ON CONTROLLABILITY*

1 INTRODUCTION

This paper is concerned with *controllability*, which has often been discussed as a defining feature of transitivity. In earlier works, the treatment of controllability was not straightforward since it is intuitively related to intentionality/volitionality, another critical feature of transitivity.¹ Lakoff (1977: 244) refers to these notions separately in his list of the prototypical features of transitivity, while the list given in Hopper and Thompson (1980: 252) only includes volitionality.² In recent works, however, various phenomena supporting Lakoff's intuition have been found. For example, Pardeshi (2002) argues that in Japanese, several types of non-intentional events can (or must) be encoded with the canonical transitive pattern of case marking because they are construed to be controllable. As a test for the presence of controllability, the negative imperative construction is commonly adopted (Bugenhagen 1989; Kageyama 1996; Chung 2005, etc.). This method is viable to a certain degree since the feature of controllability presupposes that some sentient entity is involved as the subject of control.

The aim of this paper is to elaborate Pardeshi's analysis based upon controllability. It will be first pointed out that a group of predicates behave in a way that Pardeshi's theory fails to predict. Then, considering Brennenstuhl's (1976) insights into Nonaction sentences in English, it will be claimed that controllability should be divided into two types: outcome control and preliminary control, the latter of which cannot be captured by the negative imperative test but by the possibility of semantic adjustment that they show in certain constructions.

The organization of this paper is as follows. Section 2 outlines the previous views on controllability. Section 3 critically considers Pardeshi's claim and seeks to refine the notion of controllability. Section 4 presents some other phenomena that the proposed analysis serves to explain. Section 5 concludes this paper.

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¹ I will use intentionality and volitionality as terminological variants, although some researchers distinguish them (e.g. Van Valin and Wilkins 1996).

² To be more precise, the notion of "degree of control" is mentioned in Hopper and Thompson (1980: 265), but it is meant to refer to the same thing as "volitionality."

2 DEFINITION OF CONTROLLABILITY AND RELATED CONCEPTS

The prerequisites for proposing any significant semantic feature are (i) a clear definition and (ii) a proper procedure for identifying that feature. Sections 2.1 and 2.2 will discuss the previous views on controllability with respect to these points. Section 2.3 will compare controllability and responsibility in order to further clarify the characteristics of the former.

2.1 Conceptual Definition by Pardeshi (2002)

The notion of controllability presupposes the involvement of a sentient entity in the described event; it captures a situation where a sentient entity can have a significant effect on the (non)-actualization of the event designated. It is worth noting that the notion of controllability can hardly be properly described without reference to its related concepts. For instance, Pardeshi (2002) attempts an elaborate definition of controllability by referring to *intentionality* and *desirability of outcome*:

... for human beings, the **outcomes** of some states of affairs are desirable, while others are not. Human beings, in general, intentionally bring about events yielding desirable outcomes and try to prevent or avoid those leading to undesirable consequences. For a state of affairs to be identified as **achievable** or **avoidable**, it must be conceptualized in the first place as **controllable**. (Pardeshi 2002: 138; emphases in the original)

One notable thing about this definition is that the notion of *avoidance* as well as *achievement* is involved. This is where controllability diverges from intentionality/volitionality, another crucial feature in the literature on transitivity (Hopper and Thompson 1980, etc.). In the most usual sense, as also implied in the definition above, intentionality is concerned only with *achievement* (or *realization*) of events. Therefore, if an event is the kind that one would want to avoid rather than to achieve, it is regarded as a “non-intentional event.” For example, building a house is an intentional event, while losing one’s key is a non-intentional event. In this spirit, Pardeshi defines non-intentional events with the two conditions as follows:

- (1) a. a human or quasi-human entity NOT acting intentionally
- b. a non-intended outcome (adapted from Pardeshi 2002: 127)

These conditions presuppose that the initiator of an event is a sentient entity that *has the potential to act intentionally*. Thus, events with non-sentient initiators (such as natural forces) are excluded from this category.

If intentionality/volitionality is a key feature of semantic transitivity (Hopper and Thompson 1980), it is quite predictable that some languages encode intentional and non-intentional events differently. In fact, according to Pardeshi (2002), Indic languages adopt that strategy (specifically, intentional events are marked transitively while non-intentional events intransitively). In Japanese, however, such a distinction cannot be observed. Compare:

- | | | | | |
|-----|-------------------------|------------|-----------|-------------------------|
| (2) | Taroo-ga | hon-o | yonda | [intentional event] |
| | Taro-NOM | book-ACC | read | |
| | 'Taro read a book.' | | | |
| (3) | Taroo-ga | saifu-o | nakushita | [non-intentional event] |
| | Taro-NOM | wallet-ACC | lost | |
| | 'Taro lost his wallet.' | | | |

Following the criteria given in (1), (2) certainly represents an intentional event and (3) a non-intentional event. Still, they both receive the canonically transitive case marking (i.e. nominative marker *-ga* for the subject and accusative marker *-o* for the object). Clearly, intentionality does not play a key role here. Therefore, Pardeshi claims that Japanese transitive encoding is sensitive to controllability, not intentionality. Under his definition, for instance, the “losing wallets” event is controllable, just as a “reading a book” event, since we can conceptualize it such that the outcome (i.e. losing one’s wallet) is avoidable if one takes proper steps in advance. This is of course true of intentional events such as (2); one can conceptualize it such that the outcome (i.e. reading a book) is achievable if one takes steps in advance.

Pardeshi observes that non-intentional events susceptible to the transitive encoding in Japanese can be subdivided into three classes: reflexive events (=4a), non-reflexive events (=4b), and extended non-reflexive events (=4c). The example in (3) belongs to the second category:

- | | | | | | | |
|-----|----|---|-------------|------------------|------------------|--|
| (4) | a. | mikka | maeni | kata-o | kowashita | |
| | | three days | before | shoulder-ACC | broke | |
| | | '(I) injured my shoulder three days ago.' | | | | |
| | | (adapted from Pardeshi 2002: 128) | | | | |
| | b. | Taroo-wa | mato-o | hazushita | | |
| | | Taro-TOP | target-ACC | missed | | |
| | | 'Taro missed the target.' | | | | |
| | | (adapted from Pardeshi 2002: 129) | | | | |
| | c. | ano | koujyou-ga | jiko-o | okoshita | |
| | | that | factory-NOM | accident-ACC | brought about | |
| | | 'That factory caused an accident.' | | | | |
| | | (adapted from Pardeshi 2002: 129) | | | | |

Hence, Pardeshi’s research supports the position that intentionality and controllability should be distinguished, which contrasts sharply with works where controllability is not treated as an independent feature (e.g. Hopper and Thompson 1980).

Distinguishing intentionality and controllability is by no means a brand new idea.

- b. mi paakiT haraw-l-a [Marathi]
 I wallet.N lose-PERF-N
 ‘I lost my wallet.’ (adapted from Pardeshi 2002: 131)
- (7) [reflexive non-intentional events]
- a. kodomo-ga ashi-o suberaseta [Japanese]
 child-NOM leg-ACC slipped
 ‘The child slipped on his leg.’
- b. *babce-ne pair phisal-aa-yaa [Hindi]
 child-ERG leg.M slip-CAUS-PAST.M
 ‘The child slipped on his leg.’ (adapted from Pardeshi 2002: 131)

As shown in (6), to encode non-reflexive non-intentional events, both Japanese and an Indic language, Marathi, adopt the transitive encoding. In the domain of reflexive non-intentional events, on the other hand, Japanese and Indic languages differ, as shown in (7): the latter tends to use the intransitive encoding while Japanese permits the transitive encoding. Pardeshi claims that the possibility of the transitive encoding should be tested by applying the formation of the negative imperative: If a predicate allows the formation, it can be encoded transitively; if not, it cannot. This is confirmed by the comparable (un)grammaticality between the sentences in (6) and (7) on the one hand and their negative imperative counterparts given in (8) and (9) on the other.

- (8) a. saifu o nakusu na
 wallet ACC lose PROH
 ‘Don’t lose your wallet.’
 b. paaKit harwu nakos (Pardeshi 2002: 139)
- (9) a. ashi o suberasu na
 leg ACC slip PROH
 ‘Don’t slip on your leg.’
 b. *pair naa phislaanaa (Pardeshi 2002: 141)

Pardeshi’s choice is not uncommon. The negative imperative formation often comes into play in accounting for phenomena involving controllability. Bugenhagen (1989) and Kageyama (1996), for example, use the negative imperative (or “prohibitive,” following Bugenhagen’s terminology) to reveal the semantic characteristics of experiential predications, which describe situations involving the Experiencer, rather than the Agent or Patient/Theme. Bugenhagen (1989: 88–89) argues that a test for the difference between totally passive states of affairs (involving Patient/Theme) and those in which the Experiencer has at least some small measure of control is whether or not their linguistic encoding may have the prohibitive modality:

- (10) *Don’t have a fever / be hungry / like hot bread.³

³ Bugenhagen (1989) marks these sentences with “??” to indicate semantic/pragmatic anomaly rather than grammaticality. In this paper I consistently use “*” to indicate semantic/pragmatic anomaly.

(adapted from Bugenhagen 1989: 87)

- (11) Don't be angry / be afraid / get upset / be surprised. (ibid.)

The oddness of (10) can be attributed to the inappropriateness of commanding someone to do something that is totally beyond their control. The naturalness of (11), on the other hand, indicates that the Experiencer exercises a minor degree of control over the occurrence of the denoted situation.

In a similar fashion, Kageyama (1996) remarks that experiential predicates cannot form natural imperatives, as shown in (12), while they are compatible with the negative imperative, as in (13). This is also true of experiential predicates of emotion, as contrasted in (14) and (15):

- (12) a. *Catch a cold.
 b. *Fracture your left leg. (Kageyama 1996: 88)
- (13) a. Don't catch a cold.
 b. Don't fracture your leg. (ibid.)
- (14) a. *Be angry!
 b. *Be sad!
 c. *Be nervous! (Ljung 1975: 141)
- (15) a. Don't be angry!
 b. Don't be sad!
 c. Don't be nervous! (ibid.)

These contrasts indicate that experiential predicates are different from predicates denoting more prototypical transitive situations, since the latter certainly allows both types of imperative.

- (16) a. Kill the chicken!
 b. Break the glass!
- (17) a. Don't kill the chicken!
 b. Don't break the glass!

Chung (2005: 45–46), following Kageyama (1996) and Pardeshi (2002), argues that intentionality and controllability should be distinguished as two independent features, proposing to use two types of imperatives as tests for them: the imperative for intentionality and the negative imperative for controllability, respectively.

Thus, it is virtually a general consensus among researchers that the negative imperative is a viable test for controllability.

2.3 On Responsibility and Controllability

Before turning to our discussion, some comments on the terminology “responsibility” are in order. At times “responsibility” is used in place of controllability (Nishimura 1993; Pardeshi 2002). More precisely, it is assumed in such studies that controllability *underlies* responsibility. However, this is at variance with the notion of responsibility as discussed in earlier works (Lakoff 1977; van Oosten 1986).

Lakoff (1977) and van Oosten (1986) apply the notion of responsibility to non-human as well as human entities, attempting to explain the semantic constraints on the subject of the middle construction (e.g., *This book sells well* vs. **This book buys well*). Crucially, it is argued that responsibility is a crucial feature of the *subject*. A middle construction is possible when its subject denotes an entity that can be construed to be responsible for the realization of the event designated. It is obvious that responsibility is applicable to non-human entities since the subject position of a middle construction is dominantly artifacts. Nishimura and Pardeshi, on the other hand, limit the usage of this term to human entities. This is a matter of course since controllability, which is supposed to underlie responsibility in their definition, is applicable only to human entities, as discussed earlier.

Thus, Nishimura (1993) and Pardeshi (2002) use the term “responsibility” in a narrower sense than Lakoff (1977) and van Oosten (1986).⁴ This is why we should persist with “controllability” rather than “responsibility” in this paper.

3 DISCUSSION

3.1 Counterexamples to Pardeshi (2002)

There is a class of predicates that constitutes counterexamples to Pardeshi’s claim:

- (18) a. Taroo-wa sono hon-o mitsuketa
Taroo-TOP that book-ACC found
‘Taro found the book.’
b. Jiroo-wa jiken-o mokugekishita
Jiro-TOP accident-ACC witnessed
‘Jiro witnessed an accident.’
c. Saburoo-wa sono riron-o rikaishita
Saburo-TOP that theory-ACC understood
‘Saburo understood that theory.’
(19) a. *sono hon-o mitsukeru-na
That book-ACC find-PROH
‘Don’t find the book.’

⁴ A possible source of this confusion might be attributed to the difference in transitive encoding between English and Japanese; English extensively allows inanimate entities as subjects of transitive sentences while Japanese usually does not.

- b. *jiken-o mokugekisuru-na
 accident-ACC witness-PROH
 'Don't witness an accident.'
- c. *sono riron-o rikaisuru-na
 That theory-ACC understand-PROH
 'Don't understand that theory.'

As shown in (18), these predicates are marked transitively, but they cannot undergo the formation of natural negative imperatives, as in (19).⁵ This means that these predicates receive the transitive case marking even though they denote non-controllable events, which is clearly at odds with Pardeshi's account. In light of his definition of non-intentional events given in (1), the predicates in (18) certainly denote non-intentional events. For example, a person who witnesses an accident must be human and s/he would never intend in advance that outcome. Thus, his account incorrectly predicts that these predicates are compatible with the prohibitive mood.

According to Pardeshi's three-way sub-classification of non-intentional (and controllable) events given in (4), the predicates in question should be classified as non-reflexive events. Still, they show a different behavior from other members of the category such as "forget NP," "lose NP," and so forth. Semantically speaking, predicates of this class denote, as listed in (20), events relating to the initiator's (accidental) finding or discovering of something, which is quite different from what the other non-reflexive predicates denote. Henceforth, this class of predicate will be called "F(ind)-predicates."

(20) F-predicates in Japanese:

mitsukeru ("find"), *mokugekisuru* ("witness"), *mikakeru* ("see"),
rikaisuru ("understand, comprehend"), *hakkensuru* ("discover"), ...

To seek a proper account of the semantic constraints upon the canonical transitive marking in Japanese, therefore, it is essential to observe the semantic structure of the F-predicates. To that end, it is helpful to look into the distinction between "Action" and "Nonaction" sentences in English, which was proposed in Brennenstuhl (1976).

3.2 "Nonaction" Sentences in English and Two Subtypes of Controllability

Brennenstuhl (1976) argues that simple active sentences with human subjects can be further subcategorized into two classes: Simple Action Sentences and Simple

⁵ (19a) might be usable in a context where the speaker and addressee actually know where the book is and the former is asking the latter not to do the actual act of finding or to pretend not to know where it is (Hideki Mori, p.c.). Still, this is too deviant a usage from the original meaning of the verb *mitsukeru* "find" to conclude that it is compatible with the negative imperative. As to the pretend-reading of the imperative, see Brennenstuhl (1976).

Nonaction Sentences. This distinction, for example, can be manifested by the contrast given below:⁶

- (21) a. What is Bob doing? Bob is looking for Bill.
 b. What was Bob doing? *Bob found Bill. (Brennenstuhl 1976: 59)

Finding something is not a normal activity like looking for something but rather it *occurs* to a person. It is this semantic intuition that underlies the distinction in question. Simply stated, “Nonactions cannot be done intentionally, for some purpose or at will” (p. 62). A few examples for each category are given below:

- (22) predicates of “Action” sentences (sampled from Brennenstuhl 1976):
dream, kick, look for NP, run, show grief, solve NP, study NP, swim, write a letter, ...
 (23) predicates of “Nonaction” sentences (sampled from Brennenstuhl 1976):
arrive, blush, comprehend NP, cut oneself on a knife, enjoy oneself, find NP, get accepted, forget NP, grieve, hurt oneself, lose one’s temper, mishear NP, miss NP, recover from NP, remember NP, see NP, spill NP, succeed, sweat, understand NP, win NP, ...

For the present purposes, what should be noted are (i) that non-action predicates are not equivalent to so-called stative predicates, and (ii) the category of Nonaction includes predicates of non-intentional (but controllable) events as defined in Pardeshi (2002), as well as those of non-intentional, uncontrollable events (including the F-predicates); predicates such as “mishear NP” belong to the former category and those such as “find NP” to the latter.

As to the first point, it is obvious from (22) and (23) that the distinction under discussion crosscut the Vendlerian four-way aspectual distinction; all of the four possibilities can be found in either list. Concerning the second point, Brennenstuhl alludes to the subdivision of Nonaction sentences by observing that some are available in the form of the negative imperative and others are not:

- (24) a. *don’t hurt yourself, don’t catch a cold, don’t forget, don’t spill the milk, don’t misunderstand, don’t lose your key, ...*
 b. **don’t bleed, *don’t digest, *don’t find them, *don’t lose your hair, *don’t see, *don’t comprehend, *don’t become older, *don’t itch, *don’t blush, *don’t reach the top, *don’t receive presents, *don’t win the game, ...* (mainly cited from Brennenstuhl 1976: 63)

Brennenstuhl (1976) accounts for this distinction by appealing to the notion of “avoidability of undesirable Nonactions,” which causes the impression of

⁶ Brennenstuhl (1976) provides seven more tests as procedures to reveal the Action–Nonaction distinction, although I will not go into them here for reasons of space.

responsibility on the part of the actor. This sounds surprisingly similar to Pardeshi's (2002) account.

However, Brennenstuhl (1976: 63–64), unlike Pardeshi (2002), takes into consideration the notions of “successes” and “mistakes and failures”: mistakes and failures denote “breakdown of control” while successes “are beyond control because one cannot help to arrive there if one strives for a goal, is able to reach it, makes no mistakes and meets no sudden hindrances which cannot be overcome.”⁷ Put differently, mistakes and failures presuppose the presence of controllability while successes do not. With these in mind, it is clear that all the predicates in (24a) denote mistakes and failures; they indicate undesirable outcomes that are to be avoided. As to successes, on the other hand, it is not the case that all the predicates in (24b) denote them. On purely intuitive grounds, one might pick out “reach the top,” “comprehend NP,” “find NP,” and “win the game” as predicates of success. To investigate what actually underlies this intuition, however, the notion of controllability as defined in Pardeshi (2002) is not useful, since, for example, both finding something and losing one's hair are not compatible with the negative imperative, i.e., they are both not controllable actions.

To solve this problem, I propose the distinction between *outcome control* and *preliminary control*. The former is the distinctive feature for predicates of mistake/failure, while the latter characterizes those of success. The outcome control means that one can exercise a degree of control over the *realization* and/or *non-realization* of the event in question.⁸ Actually, this corresponds to controllability as defined in Pardeshi (2002). On the other hand, the notion of preliminary control does not concern the (non)-realization of the denoted event, but rather it is exercised over the stage preceding the realization of that event. Thus, the outcome control entails preliminary control, but not vice versa.

To illustrate the point, let us compare “miss NP” and “find NP,” which denote failure/mistake and success, respectively. The former involves the outcome control; it implies that the initiator can exercise control over the (non)-realization of the outcome. The denotation of “find NP,” in contrast, may involve only the preliminary control, which can be associated with the initiator's *searching process toward finding the target*. This predicate cannot directly refer to the control over the realization of the designated event, because the result is ultimately beyond the initiator's control; people often look for something hard and cannot find it eventually; conversely, people sometimes find something accidentally even when they are not looking eagerly for it. It is this difference that is made explicit by the negative imperative test (*Don't miss NP* vs. **Don't find NP*). Hence, in the present theory, that a predicate is available in a negative imperative form indicates the presence of outcome control. Thus the predicates of mistake/failure exemplified in (25a) can be characterized by the presence of outcome control.

Turning now to the predicates in (25b), what distinguishes predicates of “reach the top,” “comprehend NP,” “find NP,” and “win the game” from the others is the

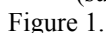
⁷ Ryle (1949: 125, 143–145) makes insightful remarks on success and failure, although he does not refer to the notion of control(lability).

⁸ See Klaiman (1991: 115–116) for an artful description of the notion of outcome control, although she does not propose any test for it.

The presence or absence of preliminary control might be tested by *decide to* or *try to* construction. In these environments, a verb is forced to refer to a preliminary stage that preceded the final stage (i.e. outcome) it lexically encodes. Predicates of success are generally susceptible to this conceptual adjustment, while other non-intentional, non-controllable predicates are not. Compare:

- In (26a), for instance, *solve* means “work towards the solution” rather than “getting at the solution” (cf. Brennenstuhl 1976: 60). The predicates such as *bleed*, *blush*, *digest*, or *lose one’s hair* are not accepted in these constructions since they cannot evoke any preliminary stages.

To sum up, we have subclassified non-intentional predicates (or Nonaction predicates) into predicates of failure/mistake, predicates of success, and the rest. They are characterized and distinguished from one another by the combinations of three features: intentionality, outcome control, and preliminary control. The overall picture is summarized in Figure 1.



⁹ By the terms such as “preceding process” or “preliminary stage,” I mean the same thing as Smith’s (1997) preliminary stage, which was introduced to account for the interpretation that certain achievement verbs exhibit in the progressive form (e.g., *They are reaching the top*).

From this, the following implicational hierarchy follows.

- (28) intentionality > outcome controllability > preliminary controllability > lack of controllability

If a predicate with a feature on this scale is compatible with a transitive encoding device X, it entails (i) that any predicate with any feature on higher ranks also receives X or any other device that indicates higher transitivity than X, and (ii) that any predicate with any feature on lower ranks can never be encoded with a device indicating higher transitivity than X.

3.3 Transitive Encoding in Japanese

Now we are in a position to reconsider the F-predicates and the transitive encoding in Japanese. Let us observe again the examples of the F-predicates in (18), repeated here as (29):

- (29) a. Taroo-wa sono hon-o mitsuketa
 Taroo TOP that book-ACC found
 ‘Taro found the book.’
 b. Jiroo-wa jiken-o mokugekishita
 Jiro-TOP accident-ACC witnessed
 ‘Jiro witnessed an accident.’
 c. Saburoo-wa sono riron-o rikaishita
 Saburo-TOP that theory-ACC understood
 ‘Saburo understood that theory.’

Building upon the criteria outlined in section 3.2, we can now categorize these as “success” predicates since they are compatible with the V-*yootosuru* (“try to”) construction:

- (30) a. Taroo-wa sono hon-o mitsuke-yootoshi-ta
 Taro-TOP that book-ACC find-try-PAST
 ‘Taro tried to find the book.’
 b. Jiroo-wa jiken-o mokugekishi-yootoshi-ta
 Jiro-TOP accident-ACC witness-try-PAST
 ‘Jiro tried to witness an accident.’
 c. Saburoo-wa sono riron-o rikaishi-yootoshi-ta
 Saburo-TOP that theory-ACC understand-try-PAST
 ‘Saburo tried to understand that theory.’

The sentences in (30) make sense since the preliminary stages toward the denoted eventualities can be easily evoked. The sentence (31b), for example, induces us to conceptualize efforts on the part of the initiator (i.e. *Jiro*) such as going to places where accidents are expected to happen. Therefore, we can conclude that the “cut-off point” for the canonical transitive encoding in Japanese is not outcome control but preliminary control.

It must be noted at this point that not all the predicates of success in English as discussed in section 3.2 correspond to the F-predicates in Japanese. Some Japanese counterparts of the success predicates in English receive the non-canonically transitive case marking pattern whereby the object is marked with the dative case marker *-ni* instead of *-o*:

- (31) a. Taroo-ga shiai-{ni/*o} katta
 Taro-NOM game-DAT/*ACC won
 ‘Taro won the game.’
 b. Jiroo-ga chojo-{ni/*o} tadoritsuita
 Jiro-NOM summit-DAT/*ACC reached
 ‘Jiro reached the summit.’

Still, these predicates behave like the F-predicates in that they are not compatible with the prohibitive mood:

- (32) a. *shiai-ni katsu-na
 game-DAT win-PROH
 ‘Don’t win the game.’
 b. *choojoo-ni tadoritsuku-na
 summit-DAT reach-PROH
 ‘Don’t reach the summit.’

Hence, the presence of controllability (whether outcome or preliminary) says nothing about the degree of prototypicality that each sentence exhibits. This is further evidenced by the existence of non-intentional controllable predicates with the *-ni* marked objects, as exemplified below:

- (33) a. Taroo-ga mizo-{ni/*o} hamatta
 Taro-NOM ditch-DAT/*ACC fell
 ‘Taro fell into a ditch.’
 b. mizo-ni hamaru-na
 ditch-DAT fall-PROH
 ‘Don’t fall into a ditch.’

The predicate *mizoi ni hamaru* “fall into a ditch,” which clearly denotes a non-intentional event, passes the negative imperative test, i.e., it shows (outcome)

controllability. Still, the object must be marked with the dative particle *–ni*. Thus, the distribution of *–ni* objects and *–o* objects cross-cuts that of two types of controllability.

Last but not the least, treating examples in (31) and (33) as transitive sentences might be at odds with the traditional view whereby the label “transitive verb” has been restricted to the two-place predicates with the non-subject NPs marked with the accusative case marker *–o*. Under this view, if the non-subject NPs are marked with particles other than *–o*, the predicates are classified as “intransitive verbs.” However, if one adopts the assumption that transitive sentences constitute a prototype category (Hopper and Thompson 1980; Tsunoda 1985, 1991; Jacobsen 1992), our choice is preferable, since *–ni* objects in (31) are virtually obligatory; the sentences take on elliptical flavor when the object arguments are not explicitly mentioned:

- | | | | | |
|------|----|--------------------------|--------------|-------------|
| (34) | a. | Taro ga [e] katta | [elliptical] | (cf. (31a)) |
| | b. | Jiro ga [e] tadoritsuita | [elliptical] | (cf. (31b)) |
| | c. | Saburoo ga [e] hamatta | [elliptical] | (cf. (32a)) |

Thus, we suppose that dative object transitive sentences are less prototypical instances of the transitive sentences (cf. the transitivity scale of two-place predicates proposed in Tsunoda 1985, 1991).

To summarize, we have discussed two points about transitive encoding in Japanese: (i) it is sensitive to the presence or absence of preliminary controllability, rather than outcome controllability, and (ii) controllability alone does not predict anything about whether the object is marked with the accusative marker *–o* or other particles (mainly *–ni*).

4 CASES WHERE OUTCOME CONTROL MATTERS

In section 3, we saw that Japanese transitive encoding is not sensitive to the difference between outcome and preliminary controls. In this brief section, we will observe the phenomena that are describable by the presence or absence of outcome control. In section 4.1, we will take up Lhasa Tibetan, a language where the transitive encoding reflects the difference between the two types of controllability. Section 4.2 focuses on a Japanese verb *mistukaru* and observes how outcome control affects its interpretation and argument structure.

4.1 Lhasa Tibetan

As seen in section 3.3, the significant cut-off point for Japanese transitive encoding lies between preliminary control and total lack of control. But the hierarchy

in (28) predicts that some languages are sensitive to the difference between outcome control and preliminary control. Lhasa Tibetan would be one such language. According to DeLancey (1985), both “lose” and “find” are non-volitional (non-intentional) in this language, and both are transitive in that two syntactic arguments are required. Building upon our classification presented in section 3.2, therefore, “lose” is a predicate of failure/mistake and “find” a predicate of success. Interestingly, these predicates differ in case marking of the initiator of the event: “lose” requires the ergative case for the loser while “find” assigns the dative case to the finder:

- (35) a. k'o-s deb brlags soñ
 he-ERG book lost PERF/EVIDENTIAL
 ‘He lost the book (first-hand knowledge).’
 b. k'o-la deb rñed soñ
 he-DAT book find PERF/EVIDENTIAL
 ‘He found the book (first-hand knowledge).’ (DeLancey 1985: 55)

DeLancey ascribes this difference to the presence or absence of controllability (“outcome controllability,” in the present study):

The significant difference between losing and finding is that finding must be a fortuitous event, while losing can be controlled. That is, one cannot guarantee finding a lost object; one can only look and hope. One can, however, guarantee *not* losing something; someone who exercises sufficient care will not lose things, so that the carelessness which results in loss constitutes a lapse of control. (DeLancey 1985: 55; italic in the original)

It is thus clear that this discrepancy in case-marking represents the difference between the two types of controllability.

4.2 Mitsukaru in Japanese

Formally, a Japanese verb *mitsukaru* (“get found”) is the intransitive counterpart of *mitsukeru*, a two-place predicate (F-predicate) that receives the canonical transitive encoding, as mentioned earlier. However, a closer inspection reveals that *mitsukaru* is associated with two types of interpretation in terms of transitivity. First, let us observe the following contrast:

- (36) a. takara-ga (*tankenka-ni) mitsukatta
 treasure-NOM (explorer-DAT) get found

- Lit. ‘The treasure got found by an explorer.’
 (cf. *tankenka ga takara o mitsuketa* (‘An explorer found the treasure’))
- b. *Taroo-ga Jiro-ni mitsukatta*
 Taro-NOM Jiro-DAT got found
 Lit. ‘Taroo (carelessly) got found by Jiro.’

These sentences are different in whether the finder can be overtly mentioned with *-ni*. This difference can be attributed to the outcome controllability on the part of the entity marked with *-ga*. In (36a), the treasure is not a sentient entity and can never exercise any control over the occurrence of the event designated. In (36b), on the other hand, Taro is human and can be construed to have a certain degree of control over the actualization of the denoted event. This is confirmed by the fact the sentence can undergo the formation of the negative imperative:

- (37) *Jiro-ni mitsukaru -na*
 Jiro-DAT get found-PROH
 Lit: ‘Don’t get found.’

Furthermore, (36b), unlike (36a), entails that Taro unintentionally caused an undesirable outcome; the realization of the event is attributed to Taro’s inadvertence. Thus, based on our classification proposed in section 3.2, *mitsukaru* in (36b) is a predicate of failure/mistake. In contrast, (36a) has no such connotation; it neutrally describes the realization of an event. In terms of transitivity, (36b) is slightly more transitive than (36a), which is close to a purely intransitive sentence. This contrast is made explicit by the ellipsis test:

- (38) a. *takara ga mitsukatta* [not elliptical] (cf. (36a))
 b. *Taroo ga mistukatta* (with the entailment that Taro’s carelessness caused the event) [elliptical] (cf. (36b))

Without any preceding context, (38b) creates a sense that another core participant (i.e., the finder) is missing, whereas (38a) does not. Hence, cases with outcome controllability receive the encoding indicating higher transitivity than those without it. This fact supports the hierarchy (28).

5 CONCLUDING REMARKS

This paper has discussed the notion of controllability. In section 2, two main points from the previous studies were discussed: (i) controllability is different from intentionality/volitionality in that the former is present even when the latter is absent,

and (ii) the availability of the negative imperative (or “prohibitive modality”) works as a test for the presence of controllability. Building upon these, Pardeshi claimed that the reason why non-intentional events can be expressed with the canonical transitive case-marking in Japanese is that controllability, not intentionality, is the key feature for the transitive encoding.

In section 3, we pointed out the existence of a class of predicates (i.e. F-predicates) in Japanese that Pardeshi’s theory misses: transitive predicates of non-intentional events that cannot undergo the formation of the negative imperative. To capture this anomaly, I proposed to subdivide control into two classes: outcome control and preliminary control; outcome control corresponds to the control meant in the previous studies on controllability, and preliminary control is the intermediate category between the outcome control and total lack of control. Under this view, Japanese transitive encoding is analyzed to be sensitive to the gap between preliminary control and lack of control, rather than that between outcome and preliminary control. Finally, section 4 provided some other phenomena where the presence or absence of outcome control plays a key role, which supports the proposed distinction between outcome control and preliminary control.

I hope that this brief discussion has contributed to the research on transitivity in general.

ABBREVIATIONS

ACC=accusative, CAUS=causative, DAT=dative, ERG=ergative, M=masculine, N=neuter, NOM=nominative, PAST=past tense, PROH=prohibitive, PERF=perfective, TOP=topic

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