Restriction against Deverbal -ed Adjectives in Resultatives* Akiko Miyata

1. Introduction

A great deal of attention has been focused on the resultative construction from various viewpoints. Examples of this construction are given in (1):

- (1) a. She wiped the table clean.
 - b. He broke the door open.
 - c. He hammered the metal flat.

This construction can be schematized structurally as follows:

(2) NP V NP XP.

XP is called the result predicate. It describes the state of the postverbal NP resulting from the subject NP's action denoted by the verb (V). Thus, in (1a), the result predicate *clean* describes the resultant state of the table as a result of the action of wiping it. As for the syntactic category, result predicates may be adjectives, as in (1), prepositional phrases, as in (3a), and nominal phrases, as in (3b):

- (3) a. The child broke the toy into pieces.
 - b. I painted my bicycle a pale shade of pink.

From the above fact, any syntactic category except verb phrase appears to occur in the XP's position of the resultative construction. In fact, however, XP is restricted in category: passive participles cannot qualify as result predicates, as often mentioned in the literature (cf. Green (1972), Randall (1983), Carrier and Randall (1989, 1992), Napoli (1992), Goldberg (1995), among others). Thus, the sentences in (4) are in clear contrast with those in (1).

- (4) a. *She wiped the table cleaned.
 - b. *He broke the door opened.
 - c. *He hammered the metal flattened.

No persuasive account has been given of the fact that passive participles are not used as result predicates. The purpose of this paper is to explore this issue. I will point out that we must investigate this problem in terms of the semantic property shared with causative constructions because, as we will see in section 3, the resultative construction is part of the causative construction and the exclusion of passive participles can be also observed in the *make*-causative construction.

The organization of this paper is as follows. In section 2, I will survey previous analyses, pointing out their insufficiency. In section 3, I will present my own analysis of the incompatibility of passive participles with the resultative construction including the *make/have*-causative constructions. In section 4, I will argue about cases in

which passive participles can appear in the resultative construction. Section 5 makes concluding remarks.

2. Previous Analyses

Many linguists have paid attention to the fact that passive participles and resultative constructions are mutually exclusive from various standpoints without arriving at a clear-cut explanation of the phenomenon at issue.

It was Green (1972) who first noted that passive participles are not available in the resultative construction. As she admits, she left open the question of why they are excluded from the result predicate. Simpson (1983b) and Carrier and Randall (1989, 1992) suggest that deverbal -ed adjectives have some aspectual property incompatible with the semantics of the resultative construction. What they mean by 'some aspectual property' is that a past participle describes a completed state, and therefore, if such a past participle appeared as a result predicate, it would be implied that the described change of state of the postverbal NP has already been in some particular state before the action denoted by the verb takes place. This would result in a semantic contradiction.

They suppose, however, that a passive participle expresses a completed state without any argument for their claim. Moreover, the very notion of 'a completed state' remains vague, since there are no clear-cut grounds for distinguishing what they call a completed state from a resultant state semantically. In view of the fact that the passive participle describes a resultant state (e.g., The window was *broken*.), there is no reason to exclude the possibility that the aspectual clash between passive participles and the resultative construction does not come about.

In the following sections, I will propose an alternative analysis of the phenomenon shown in (4) without recourse to the aspectual approach as developed by Simpson and Carrier and Randall. More specifically, I will account for the incompatibility of passive participles with the resultative construction in terms of the semantic property common to causative constructions.

3. Proposal

3.1. The Nature of the Resultative Construction

Before going into a consideration of the reason why passive participles are not compatible with the resultative construction, I will briefly review the analysis of the resultative construction proposed in Miyata (1997), where I explicated some semantic constraints on the resultative construction. Above all, the following constraint is directly relevant to the present discussion.

(5) Direct Change Constraint (henceforth DCC):

A change of state described by the resultative construction must be directly caused by the action denoted by the verb, and the resultant state described by the result predicate must be naturally inferred from the action.

Given this constraint, we can give a plausible account of the difference in acceptability between the sentences in (6).

- (6) a. John wiped the table clean.
 - b. *John wiped the table dirty.

The state of the table's being clean can be seen as a natural consequence of the action of wiping the table, but the state of its being dirty cannot. Note that to wipe something is defined as "to rub its surface lightly, for example, with a cloth or your hand, in order to remove dirt or liquid from it" (COBUILD (1995: 1921)). That is, wiping is the action that we carry out in order to make something (or its surface) clean. No one wipes anything with the intention of making it dirty. One might say, however, that it can be imagined that a table becomes dirty as a result of being wiped. But in such a case, the table becomes dirty not because of the action of wiping, but because of the dirty cloth which was used to wipe the table. Therefore, it is inappropriate to use the adjective dirty in the resultative construction, for the state described by that adjective goes against what we perceive as a natural consequence of wiping. Thus, since (6b) does not satisfy the DCC in (5), it is not acceptable as a resultative construction.

A similar explanation applies to the ill-formedness of the following sentence:

- (7) *Midas touched the tree gold. (Simpson (1983a: 146))
- (7) is unacceptable as a resultative construction, even if an appropriate situation is set up; for example, Midas is a myth and he has the power of turning anything he touches into gold. The reason why (7) is not acceptable is that a change of state such that the tree turned into gold cannot be directly caused by the action of touching a tree; even though the change of state can be caused by Midas's special ability. Thus, (7) does not observe the constraint in (5), and therefore it is unacceptable as a resultative construction.³

It is clear from the above observation that it is the DCC that shows the essence of the resultative construction. Furthermore, from the DCC, we see that the resultative construction is part of causatives, for this construction includes two events and describes the change of state involved in the two events.

Then, there seem to be two types of approaches to the phenomenon in (4): one is to posit a constraint specific to the resultative construction, and the other is to account for it in light of general grammatical constraints assigned to the causative. As we

will see below, the exclusion of passive participles is not limited to the resultative construction but also is found in the *make*-causative construction. This fact indicates that we should take the second approach.

- 3.2. Passive Participles in Causatives
- 3.2.1. The Compatibility with Passive Participles

As Carrier and Randall (1989) point out, passive participles are barred from the make-causative construction, as in (8):⁴

- (8) a. *She made the table cleaned.
 - b. *He made the door opened.
 - c. *He made the metal flattened.

As shown in (8), the change of state cannot be expressed by passive participles. In (8a), for example, a change of state such that the table became clean can be expressed by the adjective *clean*, but not by the passive participle *cleaned*, as in (9):

- (9) a. She made the table clean.
 - b. He made the door open.
 - c. He made the metal flat.

Unlike the resultative and the *make*-causative construction, the *have*-causative construction may have a passive participle in it.

- (10) a. She had the table cleaned.
 - b. He had the door opened.
 - c. He had the metal flattened.

As the sentences in (10) show, the change of state can be expressed by passive participles in the *have*-causative construction. In (10b), for example, a change of state such that the door became open can be described by the passive participle *opened*.

Making a comparison between (4), (8), and (10), we see that the incompatibility of passive participles is not a general property of the whole class of causatives, but rather a property specifically observed in the resultative and the *make*-causative construction. Why, then, is the *have*-causative construction compatible with passive participles, but the *make*-causative and the resultative construction are not? I will argue that to find characteristics shared by the *make*-causative and the resultative construction, but not by the *have*-causative construction, clues to solve the difference in the acceptability of passive participles.

In the following subsections, I will first identify the factor that gives rise to the difference with respect to the behavior of passive participles between the *make*-causative and the *have*-causative construction. We will, then, demonstrate that the factor is also operative in the resultative construction.

3.2.2. Make/Have-Causative Constructions

Let us first look at the following sentences:

- (11) a. She had the waiter clean the table.
 - b. She made the waiter clean the table.

As is well known, in the have-causative construction, the subject NP is understood to be an experiencer who undergoes the described change of state.⁵ In (11a), for example, the person referred to by she is taken to be an experiencer who underwent a change of state such that the waiter wiped the table. In the make-causative construction, on the other hand, the subject NP is generally taken to be the causer of the described change of state. Thus, (11b) implies that the person referred to by she caused a change of state such that the waiter wiped the table. We can verify the semantic properties of these two constructions by comparing the following sentences:

- (12) a. She had the table cleaned by the waiter.
 - b. * She made the table cleaned by the waiter.

As shown in (12), the have-causative construction can take a by-phase, while the make-causative construction cannot. In the case of the have-causative construction, someone except the referent of the subject NP can be introduced by the by-phrase, as shown in (12a). This means that the described change of state is caused not by the subject NP but by the person who is denoted by the by-phrase. Thus, in (12a), a change of state such that the table became clean was caused by the waiter, but not by the referent of the subject NP. Therefore, in the have-causative construction, the subject NP is understood to be an experiencer who undergoes the described change of state. We have observed in (8a) that passive participles are not licensed in the make-causative construction. Notice that the addition of a by-phrase does not improve the ill-formedness, as shown in (12b). This means that in this construction, it is the referent of the subject NP that causes the described change of state; the change of state is attributed to no one but the referent of the subject NP.

From the above observations, we can say that the *make*-causative and the *have*-causative construction are different in whether or not someone except the person referred to by the subject NP can be involved in the described change of state. This difference in meaning is responsible for the difference in behavior with respect to passive participles, as shown by the contrast between (8) and (10). We assume that this is due to the following restriction:

(13) Passive Participle Restriction in Causative (henceforth PPRC):

In causatives passive participles are restricted to describing the change of state caused by the person other than the one to which the subject NP refers.

The PPRC states that in causatives, the change of state described by passive participles is caused by someone except the person denoted by the subject NP, but not the referent of the subject NP.

Now that it is clear that the reason why passive participles cannot appear in the *make*-causative construction, we will verify whether this restriction applies to the resultative construction or not.

3.2.3. Resultative Constructions

Consider the examples in (4) again, repeated here as (14):

- (14) a. *She wiped the table cleaned.
 - b. *He broke the door opened.
 - c. *He hammered the metal flattened.

Recall that, as we have seen in section 1, in this construction, it is the referent of the subject NP that must be involved in the described change of state as an actor and no one else. The incompatibility of (14) is explained by the PPRC. Further support for the PPRC comes from the following sentences:

- (15) a. *She wiped the table cleaned by the waiter.
 - b. *He broke the door opened by her.
 - c. *He hammered the metal flattened by the blacksmith.

As shown in (15), the addition of the by-phrase does not affect the acceptability of the sentences in (14).

It follows from the above observation that passive participles are excluded from the resultative construction just because no one except the referent of the subject NP can be involved in the described change of state: passive participles in causatives imply that the described change of state is caused by someone except the referent of the subject NP, but not by that referent.

4. The Alleged Exceptional Cases

We have argued so far that passive participles are excluded from the resultative construction. There are, however, some passive participles which are licensed in the resultative construction, as shown in (16):

- (16) a. He hammered the door closed.
 - b. He kicked the door shut.

Green (1972: 89) just says that *closed* and *shut* are exceptions, but such a treatment is far from being sufficient. There are far more instances of passive participles allowed in the construction than Green would have expected, as shown in (17):

- (17) a. He drank himself drunk.
 - b. She worked herself *fatigued*.

- c. She ironed her skirt pleated.
- d. He walked himself confused.

From this observation, we cannot regard only *shut* and *closed* as exceptions any longer, since such passive participles do occur in the resultative construction more frequently than can be disregarded.⁶ The sentences in (16) and (17) seem to weigh against my analysis. A closer examination, however, will reveal that they are not counterexamples.

As we have seen in section 1, in the resultative construction, the adjective is one of the categories that describe the resultant state. From the examples in (16) and (17), we notice that when their pure adjective counterparts do not exist, passive participles instead are used as adjectival equivalents in order to express the resultant state in the resultative construction. Thus, the reason why passive participles such as *closed*, shut, drunk, fatigued, pleated, and confused can appear in the resultative construction, as shown in (16) and (17), is of a morphological nature rather than of a semantic one. There are no corresponding pure adjectives which would express the states of being closed, drunk, shut, fatigued, pleated, and confused. Passive participles of this sort are used to describe the resultant state in the resultative construction. This is verified by the following examples, as in (18):

- (18) a. She wiped the table clean/*cleaned.
 - b. He broke the door open/*opened.
 - c. He hammered the metal flat/*flattened.
 - d. He shot her dead/*died.
 - e. She ate herself sick/*sickened.
 - f. She polished the floor shiny/*shinned.

As shown in (18), when their pure adjective counterparts exist, passive participles are not used to express the resultant state in the resultative construction. At present, however, I have not worked out the mechanism of the derivation from passive participles to adjectives in detail. A full discussion of this topic will be relegated to my future research.⁷

5. Concluding Remarks

In this paper, we have considered the reason why passive participles are incompatible with the resultative construction. We have seen that the resultative construction is not the only one that excludes passive participles. The make-causative construction excludes them, too. By contrast, the have-causative construction accepts them. By comparing the make-causative and the have-causative construction, we have argued that passive participles in causatives imply that the

described change of state is caused by someone except the person denoted by the subject NP. This line of argument has led us to the proposal that in the case of the resultative construction, the resultant state of the postverbal NP cannot be described by passive participles, since no one but the referent of the subject NP takes part in the described change of state as an actor.

In addition, we have considered the cases in which some passive participles can appear in the resultative construction: they can appear in this construction only if pure adjective counterparts do not exist morphologically.

NOTES

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- As for deverbal -ed adjectives such as cleaned, opened, and flattened, as shown in (4), some linguists regard them as past participles and others understand them as passive participles. At present, it is not clear whether they should be regarded as past participles or as passive participles. In this paper, I call them passive participles for expository purposes.
- ² As Carrier and Randall (1989, 1992) point out, present participles cannot appear in resultative constructions, either, as shown in (i):
 - (i) a. *She wiped the table cleaning.
 - b. *He broke the door opening.
 - c. *He hammered the metal flattening.

This phenomenon is beyond the scope of the present paper.

- ³ It is worth noting that such situations as those in (6b) and (7) can be expressed by using *make*-causative constructions, as in (ii):
 - (ii) a. John made the table dirty (by wiping it).
 - b. Midas made the tree gold (by touching it).

From the above observation, we can say that in the case of the *make*-causative construction, the responsibility for the change of state need not be ascribed to the action denoted by the verb. Unlike the resultative construction, then, the constraint in (5) is not operative in the *make*-causative construction. This means that the DCC in

- (5) is peculiar to the resultative construction.
- ⁴ Carrier and Randall (1989: 52) also point out that present participles are not compatible with *make*-causative constructions, either, as in (iii):
 - (iii) a. *The portion made the princess starved/starving.
 - b. *The washer made the sweater stretched/stretching.

The question of how this fact should be explained must await further investigation.

- ⁵ Chomsky (1965: 21-22) points out that the following sentence implies that someone except the person denoted by the subject NP can be involved as an actor in the described change of state (a book was stolen).
 - (iv) I had a book stolen.

As a causative, this sentence is ambiguous between (i) I had a book stolen from my car when I stupidly left the window open, that is, someone stole a book from my car, and (ii) I had a book stolen from his library by a professional thief who I hired to do the job, that is, I had someone steal a book.

- ⁶ Most of these passive participles can appear in the *make*-causative construction, as in (v):
 - (v) a. He made the door shut.
 - b. He made himself drunk.
 - c. She made herself fatigued.
 - d. She made her skirt pleated.
 - e. He made himself confused.

Basically, the analysis we have applied to the resultative construction can carry over to these passive participles in the *make*-causative construction.

Notably, the passive participle *closed* cannot appear in *make-causative* constructions, as shown in (vi):

(vi) *He made the door closed.

I now leave the problem as an open question.

⁷ See Randall (1983) and Kageyama (1996) for further discussion of the derivation from past participles to adjectives.

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