

Hiromi Onozuka

*Doctoral Program in Modern Cultures and Public Policies, Tsukuba University, 1-1-1 Tennodai,  
Tsukuba-shi, Ibaraki-ken 305-0044, Japan*

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Abstract

Rappaport Hovav and Levin (1998) contend that result verbs disallow object deletion because of their lexical semantic properties. Their point is that the distinction between result verbs and manner verbs with their different event structure representation constitutes the important factor which dictates the possibility of the variation of argument realization, of which object deletion represents one instance. Responding to their claim, Goldberg (2001) presents the evidence which mainly concerns the object deletion of causative verbs (which correspond to result verbs) in English in order to show that the distinction is not substantial. The purpose of this paper is two-fold. One is to present several pieces of evidence for Goldberg's contention based on the behavior of causative verbs with respect to object deletion. It is made evident that causative verbs in fact behave even freer than Goldberg's principle predicts. The other purpose is to examine some aspects of Goldberg's principle and demonstrate that it has wider applicability than originally intended, which eventually indicates that the principle comprises a part of a general set of conditions on the object deletion in English. The conclusion is that object deletion is not so much sensitive to the distinction between causative verbs and non-causative verbs as Rappaport Hovav and Levin claim it to be and therefore, object deletion fails to be a good diagnostic tool for the differentiation of the two verb classes. In other words, causativity is not a good parameter for the possibility of object deletion.

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**1. Introduction**

Rappaport Hovav and Levin (1998) argues that the distinction between manner verbs and result verbs is crucial in accounting for the difference in elasticity which these two types of verbs exhibit with respect to the variation of the argument structure. In short, their point is that manner verbs are quite flexible and can take part in various constructions, while result verbs lack pliability and do not allow argument structure variation. One argument that Rappaport Hovav and

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\* E-mail address: nzk@sakura.cc.tsukuba.ac.jp (H. Onozuka)

Levin rest on is the possibility of object deletion. They give the following examples:

1. a. Phil swept.
- b. \*Tracy broke.

The contrast in (1) shows that (transitive) manner verbs allow object deletion, but result verbs do not.<sup>1</sup> On the other hand, Goldberg (2001) argues against Rappaport and Levin's claim and makes the convincing argument that this distinction is not essential and result verbs or what she calls causative verbs behave more flexibly with respect to argument variation. While her argument is also based on constructions other than that of object deletion, in this paper we will limit our attention to object deletion and present examples and discussion which will serve to support her contention. It will turn out that her principle is not a special set of conditions dealing only with causative verbs, but is a portion, most likely a core portion, of a general set of conditions on the object deletion in English.

This paper consists as follows: in section 2 we will introduce Goldberg's principle which governs the omission of the object of causative verbs and illustrate briefly how it works. The principle will be decomposed into several components called subprinciples for the sake of explanation. Section 3 will provide naturally occurring examples which involve the definite and indefinite object deletion of causative verbs and which appear not to be in harmony with the principle proposed by Goldberg. They serve to prove that the behavior of causative verbs with respect to object deletion is freer than that predicted by Goldberg's principle and that some causative verbs behave just like non-causative verbs. In section 4 we will pick out some components of Goldberg's principle, and examine the extent of their application and demonstrate that they are almost equally applicable to causative and non-causative verbs and thus have a property of a more general condition on the object deletion in English. In section 5, we will take a brief look at the response to Goldberg's proposal by Levin and Rappaport Hovav (1999) and Rappaport Hovav and Levin (2001) and establish that their assertion is untenable. Section 6 is a summary.

## **2 A review of Goldberg's (2001) principle**

Goldberg proposes a principle which is intended to explain the object deletion of causative

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<sup>1</sup> A similar semantic account can be found in Kiparsky (1997, pp.496-497). Based on the distinction between constitutive arguments and non-constitutive arguments, Kiparsky claims that the former cannot be omitted, while the latter are omissible. Constitutive arguments include affected arguments or patient arguments, and therefore as far as affected arguments are concerned, the discussion in the text will also have repercussions on Kiparsky's proposal.

verbs in terms of discourse prominence. Her principle is as follows:

## 2. The principle of Omission under Low Discourse Prominence

Omission of the patient argument is possible when the patient argument is construed to be deemphasized in the discourse vis a vis the action. That is, omission is possible when the patient argument is not topical (or focal) in the discourse, and the action is particularly emphasized (via repetition, strong affective stance, discourse topicality, contrastive focus, etc.).

Here we would like to decompose it into several components as shown in (3) for the sake of convenience. In fact, these components are stated in the forms Goldberg herself does in the course of her discussion. They are eventually reduced into the principle (2).<sup>2</sup>

3. a. the indefinite and nonspecific patient argument must be predictable from the verb and the sentence context
- b. the patient argument must not be construed as topical or focal
- c. the action of the verb must be construed as emphasized

(3a) applies to the so-called indefinite object deletion (Allerton (1975)) or "lexically conditioned" object deletion (Fellbaum and Kegl (1989)).<sup>3</sup> (3b) is relevant to both indefinite

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2 We may note that although we will be explaining and examining Goldberg's principle in terms of its preliminary formulations called here as subprinciples, upon closer examination it turns out that the final version, that is, the principle (2), allows an interpretation which makes a prediction different from Goldberg's preliminary account with regard to the matching of two types of object deletion and the specific types of emphasis. We are not sure if Goldberg is aware of this, but it is obvious that at least some interpretation must be avoided. For example, as explained in the text, with respect to definite patient object deletion, the emphasis needed is supposed to be limited to contrastive emphasis and therefore, as shown in (6), the emphasis of action by repetition or genericity does not permit definite patient object deletion. However, the principle (2), as it stands, does seem to allow (6) because there various kinds of emphasis is integrated into a single set of requirements and it looks as if the emphasis by repetition can license definite patient object deletion. Obviously, this possibility has to be precluded.

3. We are going to use the term "indefinite object deletion" in the following discussion just for the sake of convenience, although we are aware that the term "lexically conditioned object deletion" is more appropriate in general, because the latter seems to be able to cover a wider range of cases, especially cases in which implied objects are conditioned by verbs but are definite. For example, *eat* implies a definite meal in some context (Olsen and Resnik (1997, p.329)) and *nod* implies "one's head" (Rice (1988:205)) where *one* is interpreted as coreferential with the subject resulting in an implicit definite object.

object deletion and what we will call definite object deletion<sup>4</sup> As a matter of fact, (3a) is eventually subsumed under (3b) as a non-focal constraint. Thus, the satisfaction of (3a) entails the satisfaction of (3b). Here, we will keep the two separated just for the sake of explanation, although with that the explanation might become somewhat redundant. In essence, what (3b) demands is that the patient argument should not be prominent in the discourse. (3c) is a simplified statement which corresponds directly to the last part of the principle that concerns emphasis, which, according to Goldberg, is manifested in various manners. It also has a bearing on both types of object deletion. Note the following statement by Goldberg (2001, p.154): "if the action is particularly emphasized (by repetition, contrast, etc.), it is possible to omit arguments that are both predictable (non-focal) and non-relevant (non-topical)." We are going to call each of these components in (3) as a "subprinciple" in the following discussion.

Now we would like to present some examples involving indefinite object deletion, in order to illustrate how the principle works.

First, observe the following examples from Goldberg (2001, pp.506-507):

4. a. Tigers only kill at night.
- b. The tiger killed \*(some animal).
- c. ??Pam killed yesterday.

According to Goldberg, (4a) is acceptable because it satisfies the subprinciples (3). It fulfills (3a) because the deleted indefinite object is predictable from the verb and the sentence context and as a result, it also meets the non-focal requirement of (3b). (3c) is satisfied by the generic reading associated with (4a). The following examples will be accounted for in the same way as (4a) (underlining added).

5. a. Each time out she appears to set herself a fresh and testing challenge: to take the reader inside an ever more elusive psychological state, to find a new way of presenting her story, to avoid repeating herself ever and to work toward resolutions that always surprise but never seem arbitrary or unconvincing  
(Los Angeles Times, November 21, 1993)
- b. "When you have a fire, you won't have a magician to fix it," he told his young audience.  
    "Fire destroys."  
(Philadelphia Inquirer, October 11, 1998)

On the other hand, (4b) and (4c) are unacceptable. The reason is that they do not express either an iterative action nor a generic action and therefore, they cannot meet the requirement of

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4. For the discussion of this type of object deletion, see Allerton (1975), Fillmore (1986) and Fellbaum and Kegl (1989).

emphasis imposed by (3c).

Next, consider (6), an example taken from Goldberg which also involves the causative verb *kill* with an implicit indefinite object and are acceptable satisfying the principle (2):

6. Why would they give this creep a light prison term!? He murdered!

(6) satisfies (3a) and (3b) in that the deleted object of the verb *kill* is indefinite, nonspecific and predictable. However, according to Goldberg, (6) is different from (4a) in the way its action is emphasized. Here, the action of murdering is emphasized because the speaker takes a strong affective stance on the action.

In this section, we have illustrated how Goldberg's principle works using some representative examples of the object deletion of causative verbs. In the next section we will provide examples which seem to lie beyond the reach of Goldberg's principle and indicate that sometimes causative verbs behave freer than predicted by the principle.

### 3. More flexible behavior of causative verbs

In the following discussion several examples of definite object deletion and indefinite object deletion will be presented which do not seem to be compatible with Goldberg's principle. These examples are taken from a corpus of naturally occurring tokens we have gathered. It must be noted at the outset that our real intention of providing them does not lie in challenging the correctness of the principle. Rather, our main objective here is to demonstrate that they can be taken as additional evidence for the elasticity of causative verbs and thus they will provide further confirmation for Goldberg's contention.

#### 3.1. Definite patient object deletion and the contrastive emphasis

As for the deletion of the definite object, Goldberg (2001, p.508) notes that "definite patient arguments cannot generally be omitted, even if the action is construed as repeated' and gives the following examples:

7. a. When it comes to tasty ducks, tigers love to kill \*(them).
- b. They always buy expensive things and then give \*(them) away.

Further, Goldberg (2001, p.515) adds that "a narrow emphasis on the paired actions is necessary to license this type of omission (the omission of apparently highly topical definite patient arguments--H.O.)." Observe the following:

8. A: Let's get all of these ugly dishes out of here before your date arrives.
- B: OK, you break and I'll sweep.

C: You wash, I'll dry.

9. Pear: shared with her - I cored, she sliced.

(<http://feralliving.surreally.com/archives/000750.html>)

The examples in (8) are Goldberg's own and she says that if the contrastive emphasis brought in by the parallel structure found in (8B) and (8C) is absent in the same context, the omission of the definite object is generally impossible, as shown in (10):

10. Ok, you break \*(them).

According to Goldberg (2001, p.517), the paired actions involved in (8B) and (8C) yield "a situation in which the omitted definite arguments are not construed as topical" and "when the action is a narrow contrastive focus, which clearly insures a high degree of emphasis, the patient argument receives a correspondingly low degree of prominence in the discourse: even definite arguments are not construed as topical," satisfying the subprinciple (3b).

### 3.2. Cases where contrastive emphasis seems unnecessary

There are examples which appear to indicate that the definite object of a causative verb can be deleted even outside of the domain of Goldberg's principle. Observe the following (underlining added):

11. Later, Dorsey found out that Mrs. Holmes killed her husband and buried him in a grave by a pond. She said at her trial she killed because if she couldn't have him no [*sic*] could.

(<http://www.blearn.com/e10/mysteries/solution5472.html>)

12. The corn pricked his ears and said, "Listen my dears!

I have heard every word you have said,

For I am so tall, I look down on you all -

I'm the king of the whole garden bed!"

The celery said, "Look! Here comes the cook.

We'll let her wise judgement decide

Which one she may choose - the rest of us loose."

"Fair enough! We agree!" they all cried.

The cook came along with a smile and a song.

The vegetables she viewed as a group.

She cut and she sliced with her sharp paring knife,

And they all went into the soup.

(<http://www.sayit-n-herbs.com/stillroom/stillroom.asp>)

13. I wonder which type of cut causes the most bruising? I had a 10 inch bikini cut, and my stomach looked like the Dr used a crowbar on it to tenderise it before she cut. I might have

been better off with the vertical cut - more room to work and maybe less pulling on the muscles? (<http://www.hystersisters.com/vb2/showthread/t-29152.html>)

14. One of the most difficult overhauling operations I had after a fire was extinguished was a cellar oil fire that heated the concrete ceiling above and spread fire to the floor above. After the oil burner fire was easily extinguished, we discovered that the fire had heated the concrete floor and ignited the wood framing of the first floor. We began to cut open a finished oak floor and the sub-floor. Smoke was seeping up through the wood as we cut. Fire had spread to wood 2x2 strips of wood embedded in the concrete above the oil burner.  
(<http://www.workingfire.net/engine11.htm>)
15. A year passed and the snow again began to fall. One night the young man heard a tapping on the door and he opened to see what it was. It was a woman. She said, "I'm caught in the snow. Is there anyway I could stay here tonight?" The young man was nice enough to let her stay and eat with him. She said her name was Oyuki. They talked and talked. As time passed by they grew to like each other and were married. A few years later they had a child.  
(<http://www.yuki-onna.co.uk/>)
16. That had been an hour ago, then the flow of customers abated, and Sarah was left to mind the shop on her own until closing. On an ordinary day, Sarah might have closed early, but as it was Christmas Eve, she could count on at least one straggler to burst through the door before she could make her way home to her own Christmas preparations.  
([http://www.academyofbards.org/fanfic/c/carolaeriksson\\_chocolate.html](http://www.academyofbards.org/fanfic/c/carolaeriksson_chocolate.html))
17. Mack and Johnson forced their way into the store and held employees hostage as they robbed and fired shots into furniture and telephones.  
(Detroit Free Press, December 15, 1995)
18. It was my son's car when he was 15. We painted and fixed it up some and then he sold when he was 17.  
(<http://www.mustangsandmore.com/ubb/ekbeanctr.html>)

The underlined verbs in the above examples are all causative verbs and each of them implies a definite object recoverable from the preceding context. (11) involves the causative verb *kill* and the deleted object is "her husband." The examples (12)-(14) have the verb *cut*, the deleted objects being "the vegetables," "my stomach," and "the wood," respectively. The examples (15) and (16) involve the causative verbs *open* and *close*.<sup>5</sup> The deleted objects are "the door" in (15), "the store" in (16). In (17) the causative verb *rob* which implies as its object "the store" or "the employees." Lastly, "his car" which is the object of the causative verb *sell* is deleted in (18).

Now let us examine these examples in terms of Goldberg's principle. The subprinciples which have relevance to them are (3b) and (3c). First, we take up (3c), which in these cases requires that the object should be emphasized by contrast. It should be noted that all the relevant sentences

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<sup>5</sup> See Fillmore (1986, pp.101-102) for the use of the verbs *open* and *close* in definite object deletion.

in the above examples do not seem to contain the kind of emphasis required by (3c). Even in (12) where the relevant sentence does have paired actions, *She cut and she sliced*, it does not seem to carry a contrastive meaning like that found in (8). Thus, the examples in (11)-(18) indicate that there are cases in which definite object deletion is allowed without meeting the subprinciple (3c), and hence the principle (2).

Next, we turn to the subprinciple (3b). If there is indeed no emphasis associated with the examples in (11)-(18), which appears to be true, they presumably fail to fulfill (3b) too.<sup>6</sup> Notice that according to Goldberg's explanation the failure of (3c) automatically results in the failure of (3b), since (3c) plays a role of reducing the prominence or, in the case of definite object deletion, topicality of the patient argument to be deleted.

Thus it has been shown that there are cases of the definite object deletion of causative verbs which do not seem to conform to Goldberg's principle. In light of the principle, it might be possible that the examples in question are suggesting that sometimes the requirement of emphasis is relaxed. In other words, it might well be the case that the emphasis in question, that is, contrastive emphasis, is actually unnecessary in some cases of definite object deletion. It is important to note that in the definite object deletion of non-causative verbs, there are also cases in which this condition is not required, as seen from the following examples, which seem to be similar to the examples (11)-(18) in that there are no special emphases involved (underlining added).<sup>7</sup>

19. "The little glass fibers got into their skin and they started scratching the red spots on their arms," Tolbert said. "They washed until the itching stopped."

(Miami Herald, December 19, 1996)

20. Mrs. Medlock: There's your breakfast.

Mary: I'm still in my nightgown.

Mrs. Medlock: You can change after you've eaten. There are new clothes in the wardrobe.

Mary: Who'll dress me?

Mrs. Medlock: Can't you?

Mary: Of course not. My ayah dressed me.

(From the movie *The Secret Garden*.)

21. I have several other hobbies other than photography, one is working with wood. Back in New York with the help of my wife Terri, we added a second floor onto our house and basically remodeled the entire house. We lived for about 3 years without finished walls, or floors. One

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<sup>6</sup> Notice that if our understanding is correct, Goldberg's principle contains only one way of emphasizing the action with regard to definite patient object deletion and it is contrastive emphasis. The other ways of emphasis seem to be concerned only with indefinite patient object deletion.

<sup>7</sup> As will become clear later, the condition in question is relevant to the definite object deletion of non-causative verbs as well.

winter we heated with a wood stove because the heating system was not completed. There was only 1 original interior wall when we were done. We installed new plumbing, wiring, a central vacuuming, whole house intercom system, cable and telephone in every room, new heating and made it just the way I wanted it.<sup>8</sup>

(<http://www.imagesofvision.com/pers.htm>)

22. Roth, who said he had a glass and a half of wine before and during dinner, was given a field sobriety test. He passed and was not given a breathalyzer test.

(Miami Herald, November 3, 1996)

23. Discovery World is a science and technology museum, and virtually every exhibit is hands-on; kids are welcome to touch, pull, push and manipulate.<sup>9</sup>

(Detroit Free Press, July 23, 1995)

The above observation has revealed, we suspect, that sometimes causative verbs allow their object to be deleted without satisfying the requirement of contrastive emphasis. Thus, causative verbs, it has turned out, show more elastic behavior than that predicted by Goldberg's principle. Besides, this behavior is very similar to that of non-causative verbs exemplified in (19)-(23). By the way, we will return to the requirement of contrastive emphasis later because it is after all necessary for object deletion regardless types of verbs involved.

### 3.3. Indefinite object deletion and the emphasis by repetition or genericity

As already observed in section 2, according to Goldberg, the indefinite object deletion of causative verbs usually requires the emphasis of the action through repetition or genericity.<sup>10</sup> However, at least some causative verbs do not seem to need the emphasis in question, as seen in the following (underlining added):

24. They've kicked him out of the house. They've ordered him to sleep in the garage and in the streets. They turned him in when he stole from them to buy drugs. But one thing Philip and Roberta Roberts have never done is given up on their son, Scott, now 34.

(Los Angeles Times, June 17, 1998)

25. She then programmed her favorite songs and pressed play. While she changed, dried her hair,

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8 The verb *heat* is a degree achievement verb (see Hay, Kennedy and Levin (1999) and Levin (2000)) and here it is treated as a non-causative verb because we cannot decide in this context whether the act of heating the house has reached the desired endpoint or not.

9 The deleted or implied objects of these examples are "their arms," "your breakfast," "our house," "the test," and "the exhibits," respectively.

10 As can be seen from the description of principle (2), this is actually only one part of the emphases called for in the indefinite object deletion of causative verbs.

and brushed her teeth, she listened to "Everything I Own", "Sailing", and "God Must Have Spent...".

(<http://www.nsyncfansover21.com/fanfic/girlshavingfun.html>)

The causative verbs in the above examples imply indefinite objects: *stole* in (24) implies "money," and *changed* in (25) "clothes."<sup>11</sup> They both seem to be describing a single action in the past and hence without the emphasis by repetition or genericity. Further, it appears that other kinds of emphasis, for example, discourse topic and strong emotional stance referred to by Goldberg which are said to serve to license the indefinite object deletion of causative verbs are not associated with these examples.

Here again non-causative counterparts can be found, as seen in the following (underlining added):

26. I ate at the Aztec World Cafe in the Las Olas Riverfront complex in Fort Lauderdale and had the most incredible dip. I believe it was a variation of a spinach-artichoke dip, but it also had crab meat. I would love to serve this dip at my next dinner party.

(Miami Herald, December 31, 1998)

27. She traveled about two blocks before the baby slid off, and she drove five miles before realizing what had happened, Klimek said.<sup>12</sup>

(Philadelphia Inquirer, December 22, 1997)

28. Survivors of the sinking of the USS Indianapolis watch as a memorial to the ship and the 880 crewmen who died is dedicated in Indianapolis on Tuesday. The Japanese torpedoed the ship near the end of World War II. Survivors endured for three days in shark-infested waters before being rescued.

(Detroit Free Press, August 3, 1995)

29. We hiked to a deserted corner of the bay and met our instructor, who explained that our air tanks would float on the surface in rubber rafts while we swam 20 feet below and breathed through long hoses.

(Miami Herald, June 28, 1998)

As Goldberg herself notes (pp.517-518), in non-causative verbs the requirement of the emphasis of the action is relaxed and they don't need the emphasis by repetition or genericity nor other types of emphasis and we presume that the examples in (26)-(29) are exactly instantiating such

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11 See Allerton (1975, p.218) for the indefinite object deletion of the verb *open*.

12 It might be the case that in this example the verb *drove* itself is a discourse topic, but that only indicates that non-causative verbs share one of the requirements of emphasis needed for causative verbs.

a case.<sup>13</sup>

The observation made in this section points to the fact that one particular type of emphasis that is assumed to be essential for the indefinite object deletion of causative verbs is not always present, just like in the case of non-causative verbs. This will give additional confirmation for Goldberg's view.

### 3.3. Summary

To summarize, we have shown that in the definite object deletion and indefinite object deletion of causative verbs, there are cases which do not seem to follow Goldberg's principle. The points are that at least in some cases the emphases supposed to be needed are absent. This means that causative verbs behave more flexibly with regard to definite and indefinite object deletion than in the way Goldberg's principle predicts. We understand that this offers further support for Goldberg's position that causative verbs are not so different from non-causative verbs in so far as the possibility of object deletion is concerned.

## 4. Wider applicability of the principle

In the previous sections, it has been demonstrated that at least some causative verbs permit their objects to be deleted in the context not specified in Goldberg's principle and that the contexts in question do not seem to be much different from the ones in which the objects of non-causative verbs can be deleted. This gives evidence that in fact in so far as object deletion is concerned some causative verbs pattern just like non-causative verbs.

In this section, we are going to take up some specific components of the principle and examine their functions a bit carefully and make it clear that they have wider applicability than originally assumed. The points to be discussed are: first, the effect of the interaction of the subprinciples (3b) and (3c), which brings about the reduction of prominence in definite patient object deletion; second, the contrastive emphasis considered to be essential for definite patient object deletion, which is specified in (3c); third, the subprinciple (3a); lastly, the emphasis by repetition or genericity involved in the subprinciple (3c). Based on these examinations, we would like to argue that in all probability Goldberg's principle has a potential to constitute a major part of a general condition governing the object deletion in English.

### 4.1. Prominence and the deletability of the definite object of causative verbs

As has been observed so far, the notion of prominence plays an essential role in Goldberg's

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<sup>13</sup> Except, perhaps, (27), where, as pointed out in note 12, the action of driving seems to be a discourse topic and hence the verb *drive* may have emphasis according to Goldberg's viewpoint.

principle. Intuitively, it is reasonable to argue that prominent elements should not be deleted. Goldberg assumes that topicality is regarded as one of the realizations of this notion. Specifically, highly topical elements are also highly prominent. In this section, we would like to consider the relation between prominence and the definite object deletion. As we have seen in section 2, the subprinciple (3c) works so as to create the context which satisfies the subprinciple (3b). With respect to the definite object deletion of causative verbs, the emphasis required by (3c) is thought to be produced by the contrastive emphasis.

The subprinciple (3b) dictates that the definite patient object must not be deleted when it is highly topical in the discourse. Its effect can be seen in the following conversations, where the antecedents of deleted objects are clear topics and therefore are infelicitous.

30. a. What happened to that carrot?--I chopped \*(it).  
b. What happened to that gazelle?--The tiger killed \*(it).

Goldberg states that in (30), the noun phrases "that carrot" and "that gazelle" are both topical in these discourses and consequently, are not deletable after the causative verbs *chopped* and *killed* respectively. We assume that her observation is correct.

#### 4.2. Non-causative verbs in the same context

Now, consider the following example containing the verb *eat*:

31. What happened to my sandwich?--Fido ate \*(it).

(31) is parallel in form with (30). Originally, (31) was provided by Fillmore (1986) to show that the verb *eat* implies an indefinite object and the deleted object is "obligatorily disjoint in reference with anything saliently present in the pragmatic context" (Fillmore, 1986, p.97). Thus (31) is not felicitous with the deleted object understood as "my sandwich" which is represented as the pronoun *it* in the parentheses. However, if we take into consideration the possibility of definite object deletion with the verb *eat*, it will turn out that (31) can be given an additional interpretation because it has the same status with (30) under definite object deletion.<sup>14</sup> That is,

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<sup>14</sup> See, for example, the following and the example (20) already given in the text for the definite object deletion of the verb *eat*.

- (i) "What difference does it make how she died?" I tried biting the seal on the cellophane. Was this kiddie-proof, like poison? Dietz held his hand out for the wrapped sandwich and I passed it across the desk to him. "Suppose she was murdered? Suppose she was the victim of a hit-and-run accident?" He freed the sandwich and gave it back to me. "You've got a point," I said. I paused to eat while I reread the information. (Grafton, S., 'M' is for Malice. Pan Books, London, 1997)

(31) can also be understood as representing a violation of (3b). In fact, this subprinciple also applies to the object deletion of non-causative verbs other than the verb *eat*, as shown in the following:

32. a. What about the gold medal?--Mary won \*(it).  
b. What happened to the bill?--John paid \*(it).  
c. What has happened to the floor? It's very clean.--Jane swept \*(it)<sup>15</sup>.

The verbs in (32) are all verbs which allow definite object deletion. See Fillmore (1986, p.100) for *win*, and Lehrer (1970, p.252) for *pay*. For *sweep*, observe the following example (underlining added):

33. I helped mommy clean the floor. I chased the broom while she swept and then I played attack with the dust bunnies. They sure do like to run away fast.  
(<http://www.skittlescam.com/diaries/ent/000193.php>)

The examples in (30) and (31) demonstrate clearly that like the prominent patient objects, the prominent objects of non-causative verbs are hampered from being deleted.

#### 4.3. Summary

So long as the examples in (30)-(32) are concerned, prominence seems to be working as a general condition prohibiting definite object deletion without regard to whether verbs are causative or not. Obviously, this fact shows that Goldberg's principle is not limited to causative verbs, but has a wider range of applicability, extending its scope to non-causative verbs.<sup>16</sup>

#### 4.4. Contrastive emphasis

In section 3, we have dealt with the contrastive emphasis which is supposed to be needed in the case of definite object deletion. There, it has been made clear that this emphasis is not always necessary. This requirement is included in the subprinciple (3c). We should note that this kind of

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<sup>15</sup> According to one of our informants, the following discourse is not so bad as those in (32).

- (i) What happened to my offer?--They accepted (it).

The verb *accept* allows contextual or definite object deletion (Fillmore, 1986). It is not clear why (i) is different from (32) in acceptability. It might be the case that in some cases even a clear topical element can delete.

<sup>16</sup> Levin and Rappaport Hovav themselves admit that the principle is also relevant to non-causative verbs. See the discussion in Section 6.

contrastive emphasis has often been proposed as one of the conditions on object deletion; see, for example, Rice (1988) and Fellbaum and Kegl (1989). It is interesting to notice, however, that when this condition is referred to, the examples presented usually involve non-causative verbs.<sup>17</sup> Therefore, it can be said that the distinction between causative verbs and non-causative verbs is not relevant. Observe the following (underlining added):

34. a. Martha cooked and cleaned while Mary entertained.

b. Billy Jo washed and Bobby Jo dried.

c. He paints, she pots; he sculpts, she draws.<sup>18</sup>

35. But things haven't been the same since that grand experiment five years ago. On the up side, we appreciate what the other person does. And having crossed the rigid line between his chores and hers, we've never gone back entirely. Today, when pushed, she'll mow and I'll sew. (Detroit Free Press, September 18, 1994)

It is evident that these examples are associated with contrastive emphasis. In addition, it must be noted that the underlined verbs are all non-causative verbs. Therefore, this emphasis appears to cover both classes of verbs. It is not a special condition imposed on causative verbs only. It is worthwhile to point out that according to Fellbaum and Kegl (1989, pp.94-95), many non-causative verbs, such as *push* and *pull*, allow their object to be deleted if they appear in the context of contrastive emphasis, as shown in the following:

36. You push, I pull.<sup>19</sup>

We can add one more example.

37. I'll lead and you follow. (Dixon (1991, p.289))

Thus, it is obvious that the requirement in question which is a part of the subprinciple (3c) is not at all specialized in causative verbs.

#### 4.5 The subprinciple (3a)

We repeat (3a) below for the ease of reference.

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17 Notice incidentally that (8C) given in section 3.1. also involves non-causative verbs.

18 The examples in (34) are taken from Rice (1988, p.206).

19 According to Allerton (1975, p.214), these verbs are among those to which contextual object deletion (that is, definite object deletion) typically applies.

3. a. the indefinite and nonspecific patient argument must be predictable from the verb and the sentence context

This is a subprinciple that ensures the predictability and hence nonprominence of deleted patient objects. However, looked at from a different angle, it can be taken to be pertinent to the recoverability of indefinite patient objects which are often designated as *something*, *someone*, *things*, *people* or *stuff*. It is very important to point out that a similar condition is necessary for indefinite non-patient arguments or the deleted indefinite objects of non-causative verbs. Also, we need a similar recoverability condition for the deletion of definite objects. Thus, corresponding to (3a), a relevant general condition would be stated like this:

38. the deleted object must be predictable from the verb and the context

That the verb and the context play important roles in predicting the deleted object has been pointed out in various previous studies on object deletion. Here, "context" means sentential and pragmatic context. Pragmatic context or information is necessary not only for definite object deletion but also for indefinite object deletion. See, for example, Haegeman (1987), Brisson (1994) and Resnik (1996) for the latter point. Thus we can see that (3a) is just a subpart of a general condition concerning recoverability.

4.6. The emphasis by repetition or genericity

That the emphasis by repetition or genericity is necessary for causative verbs has already been shown by the examples (4a) and (5). Again, this emphasis is also common among non-causative verbs. Observe the following (underlining added):

39. I immediately immersed myself in my new life, asking a million questions about a million different things and watching how my Japanese host family did everything: eat, sleep, read, talk and just about anything else.

(Los Angeles Times, December 23, 1993)

40. That guy fits the profile of a person most likely to drink and drive during the Christmas/New Year's season, according to a new poll reported by the Detroit Free Press.

(Philadelphia Inquirer, December 25, 1997)

41. The mother of the family always sews and she was making the little girl a sweater. She was getting her yarn from a spool.

([http://bg016.k12.sd.us/Tangram/family\\_rabbit.htm](http://bg016.k12.sd.us/Tangram/family_rabbit.htm))

*Eat* and *read* in (39), *drink* and *drive* in (40), and *sews* in (41) express habitual acts involving repetition. Significantly, with some non-causative verbs indefinite object deletion does not seem to

be licensed without this emphasis, as shown in the following:<sup>20</sup>

42. a. \*Bill invented (something). (Mittwoch (1971, p.255))

b. "I always invent to obtain money to go on inventing."

<http://www.state.nj.us/state/history/tomedison.html>

Thus, we can see clearly that the emphasis of the action by repetition or genericity is pertinent to the indefinite object deletion of both causative and non-causative verbs.

#### 4.8. Summary

The discussion so far seems to be converging on one and single point. That is, Goldberg's principle is far from special and most likely it is not only a part of a set of conditions governing the object deletion in English, but also it makes up the core part of the conditions.<sup>21</sup>

### 5. Discussion: Rappaport Hovav and Levin's response to Goldberg's criticism

Goldberg formulates her principle in the course of the attempt to prove that causative verbs are not so different from what Rappaport Hovav and Levin (1998) call manner verbs with respect to the possibility of variation in argument structure and challenge drawing a distinction between the two classes of verbs with respect to argument realization. Rappaport Hovav and Levin's original claim was very strong and its content was that result verbs (i.e., causative verbs) do not permit object deletion in any context. However, responding to Goldberg's criticism, Levin and Rappaport Hovav (1999) and Rappaport Hovav and Levin (2001) has toned down their original statement

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<sup>20</sup> It is interesting to note that the emphasis by repetition or genericity is relevant to definite object deletion as well. For example, although the verb "visit" prohibits object deletion according to Rice (1988, p.206), it seems to allow definite object deletion under the relevant emphasis, as shown in (ii).

(i) The Pope visited \*(Mary/Louisville/SOMEONE/SOMEPLACE).

(ii) a. okay. so this site is retired. but i hope this doesn't mean you won't continue to visit... please always visit. i made this site for you, not for myself, and so just because I'm stepping back, doesn't mean this site needs to wither and die. (<http://www.angelfire.com/il2/benfoldsfive/>)

b. We know that it isn't as good as the real thing, but we hope that with this site, we can keep you informed with the latest happenings in our lives. We will be updating frequently, so visit often!  
(<http://www.thisrainbowfamily.com/>)

<sup>21</sup> As we have observed in section 3, Goldberg's principle seems to be in need of some relaxation to deal with the cases discussed there. Furthermore, a comprehensive principle governing the object deletion in English would require some additional conditions. For example, a pragmatic principle which concerns the degree of subjection to object deletion, like the one proposed by Resnik (1996), will be necessary. In addition, indefinite object deletion involves a pragmatic device which deals with those verbs which allow rather specialized objects to be deleted, which is discussed by Haegeman (1987).

and they assert that Goldberg's principle consists of special conditions and these special conditions are not always necessary for "verbs of surface contact and motion and other verbs having an event structure with a single subevent" (Rappaport Hovav and Levin, 2001, p.779) to appear without their objects. That is, non-causative verbs can delete their objects in the contexts other than those specified in Goldberg's principle, although they may also subject to the same principle as causative verbs do. Therefore, for Levin and Rappaport Hovav, what really distinguishes causative verbs and non-causative verbs (or result verbs and manner verbs, in their terminology) is the possibility of object deletion in the contexts which do *not* satisfy Goldberg's principle. In these contexts, it is presumed that causative verbs do not allow object deletion, while non-causative verbs do. Thus, Levin and Rappaport Hovav maintain that their distinction is still valid. However, again their claim does not seem tenable, for the examples given in section 3 have revealed that even causative verbs permit object deletion in the contexts which are not bound by Goldberg's principle and in which non-causative verbs also allow object deletion. Further, we believe that it has become very clear from our observations that it is rather misleading to call Goldberg's principle as special because it is not at all special. One might suppose that causative verbs themselves are special, but that would not be born out either, as amply demonstrated in the discussion so far. Therefore, pace Levin and Rappaport Hovav, from the perspective of Goldberg's principle, it can be said that contexts in which causative verbs and non-causative verbs are found with object deletion cannot be split so unequivocally and rigidly.

## 6. Concluding remarks

We hope to have established that the examples of the object deletion that we have presented support Goldberg's case against Rappaport Hovav and Levin's proposal. We also hope to have demonstrated that Goldberg's principle has a potentiality of becoming a core portion of a general condition of the object deletion in English. We believe that as far as the possibility of object deletion is concerned, the distinction between causative verbs and non-causative verbs has very little effect, if any. Therefore, one conclusion we can get seems that object deletion is not a reliable diagnostic tool for distinguishing the two verb classes in question.

It is very important to notice that just as there are differences among non-causative verbs with regard to the degree of susceptibility to object deletion (e.g., *eat, drink* vs. *like, make*), there are similar differences among causative verbs (e.g. *cut, open* vs. *break, lock*).<sup>23</sup> Therefore, even if the number of the causative verbs which allow object deletion turned out to be relatively few, it should not be taken as undermining our claim. What is significant is that there are causative verbs which pattern like non-causative verbs with respect to object deletion. We know from the existing research on the object deletion in English that there is the distinction between those verbs which

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23 According to Fillmore (1986, p.98), the verb *lock* does not permit definite object deletion even if the pragmatic context plainly warrant the recoverability.

are subject to object deletion rather obediently and those which are not, but it does not correspond to the distinction between causative verbs and non-causative verbs. In other words, causativity does not work as a useful parameter for predicting the possibility of object deletion.

### **Acknowledgements**

I would like to express my hearty appreciation to Priscilla Ishida and Kevin Varden for providing the grammatical judgements and valuable comments on the examples presented here. All errors are my own.

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