

WHEN CAUSATIVES MEAN PASSIVE:
A CROSS-LINGUISTIC PERSPECTIVE*

Causative constructions sometimes express a passive sense, as in *John had his watch stolen* or *Jean s'est fait voler sa montre*, resulting in a potential passive/causative ambiguity. This is a highly general phenomenon cross-linguistically, being observed not only in English and French, but also in Korean, Mongolian, and Japanese. Simply stipulating that verbs such as *have* or *faire* are ambiguous with respect to the thematic content of their external argument, say, between Agent and Patient, is inadequate since it does not explain why it has to be these particular roles that alternate in this particular environment and why, as observed in this article, the passive sense is possible only when the subject is pragmatically related to the object. We argue that a deeper understanding of the nature of these observations can be obtained if we assume the kind of approach to thematic roles and argument structure that Jackendoff (1990) advocates, especially his proposal to separate the "Action Tier" from the "Thematic Tier." The passive and causative senses are shown to share a basic conceptual structure, from which the full representations of the two senses are derived by a set of general principles interpreting the affectedness relations between Things and Events.

1. INTRODUCTION

Linguists working on the causative constructions sometimes speak of the "causative situation," composed of two events, E_1 and E_2 , such that, in the mind of the speaker, E_2 occurs after E_1 and the very occurrence of E_2 is dependent on E_1 (i.e., E_1 "causes" E_2). As discussed in Shibatani (1976, 1–2), analyzing causatives in these terms is useful in distinguishing simple transitives such as *John kicked the ice (but nothing happened to it)* from such sentences as *John melted the ice (but nothing happened to it)*, where the parenthesized part is legitimate in the former but not in the latter. Since the sentence *John melted the ice* implies two events, the causing event and the caused event, it is not legitimate to continue the sentence by denying the existence of the caused event. The same applies to syntactically complex cases like *I caused John to go (but I don't think he went)*.

On the other hand, we do not usually speak of the "passive situation" defined in similar terms. One reason for this is that the analysis of passives simply does not require any recourse to such terms, because the situation described by a passive sentence usually contains a single event, the same event, in fact, that could be described by the corresponding active sentence. Thus, while the active sentence *Mary hit Bill* and the passive

sentence *Bill was hit by Mary* describe the same situation, what the causative *John made Mary hit Bill* describes is something different. And in general, we feel that the passive and the causative constructions are used to describe rather different situations.

What is interesting about human beings, however, is the fact that they sometimes express the passive and causative senses by one and the same construction. In English, for example, the passive/causative ambiguity shows up in such sentences as (1),

- (1) John had his watch stolen by Mary.

which can either mean that John had Mary steal his watch, which we call the causative reading, or that John's watch was stolen by Mary, which we call the passive reading. Under the former reading, *John* is the causer of the event, but under the latter, *John* is anything but the causer: perhaps "affectee" is a good informal characterization of its semantic role.

In the next four sections of this paper, we will argue that (i) the sort of ambiguity observed in (1) is a highly general phenomenon cross-linguistically, being observed, in particular, in Korean, French, Mongolian, and Japanese, (ii) the passive sense is possible only when certain conditions are met, and (iii) one of the conditions, which seems to be valid for all the languages under discussion, can be defined by using the notion that is independently motivated in Japanese syntax. We will then argue in the last section that a deeper understanding of the nature of these observations can be obtained if we assume the kind of approach to thematic roles and argument structure that Jackendoff (1990) advocates, especially his proposal to separate what he calls the "Action Tier" from the "Thematic Tier."

The construction shown in (1), or its counterparts in other languages, usually corresponds to two different constructions in Japanese, depending on the sense that is meant to be expressed. Thus, if (1) is used with a causative sense, (2a) is used in Japanese, but if it is meant as a passive, (2b) is used:

- (2) a. John-ga Mary-ni tokei-o nusum-ase-ta.
 John-Nom Mary-Dat watch-Acc steal-Cause-Pst
- b. John-ga Mary-ni tokei-o nusum-are-ta.
 John-Nom Mary-BY watch-Acc steal-Pass-Pst

(2a) is a regular causative construction, and (2b) is a passive, with the direct object surfacing as such, which is usually referred to as the "indirect passive" construction in Japanese grammar. The latter is not a very

common construction among languages. A sentence like (3a), for example, does not have a direct counterpart in English (3b), French (3c), and many other languages:

- (3) a. John-ga torakku-ni kuruma-o tubus-are-ta.
 John-Nom truck-BY car-Acc crush-Pass-Pst
 b. *John was crushed his car by a truck.
 c. *Jean a été broyé sa voiture par un camion.

Both English and French, however, have a means to “fill in” this gap, and that is the causative construction:

- (4) a. John had his car crushed by a truck.¹
 b. Jean s’est fait broyer sa voiture par un camion.

So there is an important correlation between the indirect passive construction in Japanese and the causative construction in English, French, and other languages. For this reason, and for others that will become clear below, we begin with some discussion of the indirect passive construction.

2. SOME DIFFERENCES BETWEEN JAPANESE AND KOREAN

Indirect passives in Japanese are of two types, represented by (5) and (6):

- (5) gakusei-ga sensei-ni te-o tukam-are-ta.
 student-Nom teacher-BY hand-Acc catch-Pass-Pst
 ‘The student was caught by the hand by the teacher.’
 (6) gakusei-ga kodomo-ni nak-are-ta.
 student-Nom child-BY cry-Pass-Pst
 ‘The student was affected by the child’s crying.’

(5) is a transitive indirect passive and (6) is an intransitive indirect passive, and they share the property that the subject is not a thematic argument of the verb.²

Although, as mentioned, not many languages have been reported to have this type of passive, we do find examples like those given in (7) in Korean:³

- (7) a. haksayng-i sensayngnim-eykey son-ul
 student-Nom teacher-BY hand-Acc
 cap-hi-ess-ta.
 catch-Pass-Pst-Plain
 ‘The student was caught by the hand by the teacher.’

- b. John-i Mary-eykey moca-lul pes-ki-ess-ta.
 John-Nom Mary-BY hat-Acc take off-Pass-Pst-Plain
 'John had his hat taken off by Mary.'

(7a) is identical to (5), almost morpheme to morpheme, and (7b) is also naturally translated as an indirect passive in Japanese. As far as examples like these are concerned, therefore, Korean looks very much like Japanese.

There are, however, some interesting differences between the two languages, of which the following is relevant to our discussion: unlike Japanese, Korean does not have *intransitive* indirect passives. For example, from the simple intransitive clause given in (8a), we cannot form (8b), which directly corresponds to the well-formed Japanese example given in (6) above:

- (8) a. ai-ka wul-ess-ta.
 child-Nom cry-Pst
 'The child cried.'
- b. *haksayng-i ai-eykey wul-li-ess-ta.
 student-Nom child-BY cry-Pass-Pst

This restriction is very general and well-known in Korean syntax.⁴

In addition to transitive indirect passives, Japanese and Korean of course have regular direct passives such as those given in (9), where the Korean example given in (b) is from Song (1967) with slight modification:

- (9) a. doroboo-ga keikan-ni torae-rare-ta.
 thief-Nom policeman-BY catch-Pass-Pst
- b. totwuk-i swunkyeong-eykey cap-hi-ess-ta.
 thief-Nom policeman-BY catch-Pass-Pst-Plain
 'The thief was arrested by a policeman.'

Possible passive forms in the two languages can now be summarized as in (10):

(10)						J	K
Direct	(a)	NP _{Nom}	NP _{BY}	<i>e</i>	V _t -Pass	√	√
Indirect	(b)	NP _{Nom}	NP _{BY}	NP _{Acc}	V _t -Pass	√	√
	(c)	NP _{Nom}	NP _{BY}		V _i -Pass	√	*

(10a) shows the structure of a direct passive, which is possible in both J(apanese) and K(orean). (10b) represents the structure of a transitive indirect passive, and again this is possible in both languages (but see below). As mentioned, however, the intransitive passive shown in (10c) is not possible in Korean.

This observation alone is interesting enough, raising an important problem for Japanese-Korean comparative syntax. However, we believe (10) is not a complete paradigm because there is another significant difference between Japanese and Korean that is missing from (10). The difference in question can be observed in (11a) and (11b):

- (11) a. John-i Mary-eykey melithel-ul kkakk-i-ess-ta.
 John-Nom Mary-BY hair-Acc cut-Pass-Pst-Plain
- b. John-ga Mary-ni kami-o kir-are-ta.
 John-Nom Mary-BY hair-Acc cut-Pass-Pst
- ‘John had his hair cut by Mary.’

Both of these express the passive idea “John had his hair cut by Mary” (see note 1 above), where *hair* belongs to John; in the Japanese example, *hair* can also be interpreted as belonging to Mary, so that the sentence is in fact ambiguous. Now, in the Korean example, *hair* can *only* be interpreted as “John’s hair,” excluding the possibility of interpreting it as Mary’s or anyone else’s. Even a right context cannot make this interpretation possible: thus, the following example, which should be perfect had *hair* been interpreted as belonging to Mary, is not acceptable — it simply sounds strange:

- (12) Yengcheli-nun Swunca-uy melithel-i coh-un teyto,
 Yengchel-Top Swunca-Poss hair-Nom like-Pst though
- Swunca-eykey melithel-ul kkakk-i-ess-ta.
 Swunca-BY hair-Acc cut-Pass-Pst-Plain
- ‘Yengchel liked Swunca’s hair but she cut her hair (against his wish).’

By contrast, the Japanese counterpart of (12) given in (13) is grammatical and makes perfect sense:

- (13) Taroo-wa Hanako-no kami-ga sukidat-ta noni,
 Taroo-Top Hanako-Poss hair-Nom like-Pst though
- Hanako-ni kami-o kir-are(-te simat)-ta.
 Hanako-BY hair-Acc cut-Pass(‘it turns out’)-Pst
- ‘Taroo liked Hanako’s hair but she cut her hair (against his wish).’

The difference between Japanese and Korean observed in (11) seems to hold quite generally, as the following and many other examples demonstrate:

- (14) a. John-i Mary-eykey sonkalak-ul cal-li-ess-ta.
 John-Nom Mary-BY finger-Acc cut-Pass-Pst-Plain
 b. John-ga Mary-ni yubi-o kir-are-ta.
 John-Nom Mary-BY finger-Acc cut-Pass-Pst
 ‘John was affected by his finger being cut by Mary.’
- (15) a. John-i Mary-eykey sukheethu-lul cap-hi-ess-ta.
 John-Nom Mary-BY skirt-Acc catch-Pass-Pst-Plain
 b. John-ga Mary-ni sukaato-o tukam-are-ta.
 John-Nom Mary-BY skirt-Acc catch-Pass-Pst
 ‘John was affected by his skirt being grabbed by Mary.’

In each case, (a) is a Korean example and (b) a Japanese one; they share the translation given under the (b)-example, which is the only interpretation possible for the Korean example, i.e., the accusative phrase must be understood as belonging to the nominative phrase in Korean (or at least the subject must be pragmatically related to it); the Japanese example, by contrast, permits another reading in which the accusative phrase belongs to Mary.

If we now add this observation to (10), what emerges is the pattern summarized in (16):

(16)					J	K
(a)	NP _{Nom}	NP _{BY}	<i>e</i>	V _t -pass	✓	✓
(b)	<i>NP_{Nom}</i>	NP _{BY}	<i>NP_{Acc}</i>	V _t -pass	✓	✓
(b')	NP _{Nom}	<i>NP_{BY}</i>	<i>NP_{Acc}</i>	V _t -pass	✓	*
(c)	NP _{Nom}	NP _{BY}		V _t -pass	✓	*

Here, as in (10), (a) and (c) represent the structures of a direct passive and an intransitive passive, respectively. (b) shows the structures of a transitive indirect passive, in which the direct object is “related” to the subject (indicated by the italics — a convention we will use throughout), and this is grammatical in both Japanese and Korean. (b') is the same transitive indirect passive, but this time the direct object is related to the BY-phrase, which is possible in Japanese but not in Korean.

Superficially, therefore, it appears that Korean is here making a distinction Japanese does not make. However, a similar distinction seems to manifest itself in Japanese too: it is only the manner of manifestation that is different. Since this is related to the so-called “adversative interpretation” in Japanese passives, let us first take a look at this phenomenon.

3. EXCLUSION, ADVERSITY AND INTRANSITIVE PASSIVES

There are indirect passives in Japanese which carry the sense of adversity. Although the precise origins of this sense still need to be investigated, previous works dealing with this matter, including in particular Wierzbicka (1979), Kuroda (1979), Oehrle and Nishio (1981), and Kuno (1983), identified several important generalizations, of which the following is relevant to our discussion: “Japanese treats actions which affect us without involving us in one way and those which both affect and involve us another” (Wierzbicka (1979, 128)), and adversity is a phenomenon typically observed in the former case. Here, however, we must distinguish two somewhat different types of adversity, which we call “lexical adversity” and “adversity by exclusion,” the former induced by the pragmatic force of the state of affairs expressed by the verb phrase, the latter by some principle of which Wierzbicka’s generalization is a realization (i.e., if you are affected by an event without being involved in it, then you are adversely affected).

Consider (17), for example, where *John* is understood to be adversely affected by Mary’s hitting his child:

- (17) John-ga Mary-ni kodomo-o ker-are-ta.
 John-Nom Mary-BY child-Acc kick-Pass-Pst
 ‘John was affected by his child’s being kicked by Mary.’

The adversative sense here is a case of lexical adversity, induced by the pragmatic force of the event described by the verb phrase (“one’s child being kicked by someone”), so that a different choice of verb makes the sentence non-adversative, as in (18):

- (18) John-ga Mary-ni kodomo-o home-rare-ta.
 John-Nom Mary-BY child-Acc praise-Pass-Pst
 ‘John was affected by his child’s being praised by Mary.’

A natural interpretation of this sentence, as well as of (17), is to understand the direct object *child* as John’s child. With this reading (18) permits a neutral interpretation without any adversative connotation, which shows

that the verb *ker-* 'to kick' is responsible for the adversity observed in (17).

Notice, however, that if *kodomo* in (18) is understood as Mary's child or some other person's than John's, (18) quickly becomes adversative. This difference can also be observed in the following examples, where the relationship between *John* and *the child* is explicitly indicated:

- (19) a. *John-ga Mary-ni zibun-no kodomo-o home-rare-ta.*
 John-Nom Mary-BY self-Poss child-Acc praise-Pass-Pst
 'John was affected by his own child's being praised by Mary.'
- b. *John-ga Mary-ni zibun-no kodomo-o home-rare-ta.*
 'John was affected by Mary's praising her own child.'
- c. *John-ga Mary-ni Bill-no kodomo-o home-rare-ta.*
 John-Nom Mary-BY Bill-Poss child-Acc praise-Pass-Pst
 'John was affected by Mary's praising Bill's child.'

(19a), which explicitly indicates that the child is John's child, has a non-adversative reading whereas (19b) and (19c) require adversative interpretation,⁵ where *the child* belongs to *Mary* in (19b) and to *Bill* in (19c), *John* being entirely excluded from the state of affairs described by the rest of the clause. The same difference carries over to the following examples, where we assume that *John* and *Susan* in (20a) and *Mary* and *Alex* in (20b) are in a special pragmatic relation (e.g., they are both engaged couples):

- (20) a. *John-ga Mary-ni Susan-o home-rare-ta.* [R(j, s)]
 'John was affected by Mary's praising Susan.'
- b. *John-ga Mary-ni Alex-o home-rare-ta.* [R(m, a)]
 'John was affected by Mary's praising Alex.'

Here again, (20a) permits a neutral interpretation, but (20b) requires an adversative interpretation. This is what we informally call "adversity by exclusion," a notion essentially adopted from Wierzbicka (1979). Note that this analysis is similar to Kuno's (1983) theory based on his notion of "involvement," which Kuroda (1985) argues would be derived as a corollary from Kuroda's (1979) theory based on his notion of "affectivity," if the notion involvement is properly interpreted. To give proper interpretations to these partly overlapping notions and compare their empirical consequences is a very important task, which, however, goes well beyond the scope of this paper.

We use the term "adversity by exclusion" because in cases like (20b),

(19b, c) and, under one interpretation, (18), the subject is completely excluded from the event described in the VP. In (18), for example, if the child is Mary's child, then the event is simply that Mary praised her own child, and John has nothing to do with it. And it is precisely in cases like this that we have a very strong sense of adversity in Japanese passives. On the other hand, when the subject of a passive sentence is included in the event, then a neutral interpretation seems possible (unless, of course, lexical adversity and other effects interfere).

From this point of view, the subject of a direct passive is always included because of the binding relation it necessarily has with the object position. Some of the typical structures relevant to the Inclusion/Exclusion distinction are listed in (21):

- (21) a. John_{Nom} Mary_{BY} *e* praise-Pass
 b. John_{Nom} Mary_{BY} *self*'s child_{Acc} praise-Pass
 c. John_{Nom} Mary_{BY} child_{Acc} praise-Pass
 d. John_{Nom} Mary_{BY} Bill-'s child_{Acc} praise-Pass
 e. John_{Nom} Mary_{BY} Bill_{Acc} praise-Pass

In each case, if *John* has some relation to the object phrase, it counts as included, and a non-adversative reading is possible. But if the relation is between *Mary* and the object phrase, then *John* is excluded, and an adversative reading is obligatory. As mentioned, the relation here can be either "binding" or "pragmatic." In the case of a direct passive given in (21a), we only have an inclusion relation, which is in accord with the fact that direct passives do not have adversity by exclusion.

Assuming this much, let us return to the difference between Japanese and Korean that we observed in the previous section. We were interested in the contrast observed in (11), repeated here:

- (11) a. John-i Mary-eykey melithel-ul kkakk-i-ess-ta.
 John-Nom Mary-BY hair-Acc cut-Pass-Pst-Plain
 b. John-ga Mary-ni kami-o kir-are-ta.
 John-Nom Mary-BY hair-Acc cut-Pass-Pst
 'John had his hair cut by Mary.'

The crucial observation was the following: in the Korean case, the object *hair* can only be John's hair, but in Japanese, it can also be Mary's.

From the point of view of the Inclusion/Exclusion distinction just mentioned, the contrast here does make sense: it suggests something like the following:

- (22) If the subject is excluded in a passive structure, then
- the subject (or the entire structure) fails to be licensed in Korean, but
 - the subject receives an adversative interpretation in Japanese.

In (11), if *hair* is John's hair, then the subject is included in the event described in the VP by having a relation with the object phrase, and the structure is well-formed both in Korean and Japanese. If, however, *hair* is Mary's, the subject is excluded, in which case it receives an adversative interpretation in Japanese but no interpretation in Korean.

From (22) follows another very important generalization, namely this: Korean has no *intransitive* passive like (23a), which contrasts with the well-formed Japanese counterpart given in (23b):

- (23) a. *haksayng-i ai-eykey wul-li-ess-ta.
 student-Nom child-BY cry-Pass-Pst-Plain
- b. gakusei-ga kodomo-ni nak-are-ta.
 student-Nom child-BY cry-Pass-Pst
- 'The student was affected by the child's crying.'

As mentioned, adversity by exclusion is not observed in Korean. In other words, it is obligatory in Korean passives that the subject be related to the object phrase, either by binding some part of it or being in some pragmatic relation to it. However, if the verbal root is *intransitive*, as in (23a), adversity by exclusion is impossible since there is simply no object phrase for the subject to be associated with. So the idea is to reduce the lack of intransitive passives in Korean to the lack of adversity by exclusion.

The basic data can now be summarized as in (24), where "J_{adv}" indicates the possibility of adversity by exclusion (in Japanese):

(24)

		J	J _{adv}	K
Inclusion	NP _{Nom} NP _{BY} e V _t -pass	√	—	√
	NP _{Nom} NP _{BY} NP _{Acc} V _t -pass	√	—	√
Exclusion	NP _{Nom} NP _{BY} NP _{Acc} V _t -pass	√	√	*
	NP _{Nom} NP _{BY} V _i -pass	√	√	*

As is clear from (24), the distinction here is really one of Inclusion vs. Exclusion. All the acceptable structures in Korean have included subjects, whereas all the unacceptable ones have excluded subjects. It is precisely in the latter case that the Japanese counterparts display a strong sense of adversity.

4. CAUSATIVES IN FRENCH AND KOREAN

From the point of view of the Japanese-Korean comparison, it is natural to regard facts like those discussed so far as a problem concerning the *passive* construction. There is a phenomenon in French and other languages, however, that seems to suggest that we can, and perhaps should, look at them from a different angle.

Consider first the following examples:

- (25) a. Jean fait taper la lettre à sa secrétaire.
 ‘Jean has his secretary type the letter.’
 b. Jean fait taper la lettre par sa secrétaire.
 ‘Jean has the letter typed by his secretary.’

These are typical examples of the French causative construction, containing *faire* as a main verb. The logical subject of the infinitive verb appears either as an “à phrase” as in (a) or as a “par phrase” as in (b). As discussed in Kayne (1975), Hyman and Zimmer (1976), Danell (1979), and Roegiest (1983), among others, this choice of preposition affects meaning. Thus, although the sentences in (25) are not completely synonymous, they basically describe the same situation, that being the “causative” situation.

When we look at examples like those given in (26), however, the interpretation we get is rather different:

- (26) a. Il s’est fait renverser par une voiture.
 ‘He was knocked down by a car.’
 b. Elle s’est fait arrêter par la police.
 ‘She was arrested by the police.’

These are examples of the same causative construction, containing the very same verb *faire*, but what they mean is very much like passive.⁶ This is a well-known fact, mentioned in many books and articles, including Spang-Hanssen (1967), Chevalier et al. (1989), Dubois (1967), Gross

(1968), Kayne (1975), Danell (1979), and Blanche-Benveniste et al. (1984).

We will discuss more examples of this French construction below, but first, this question: why is this important? What is the relevance of this observation to our discussion in the preceding sections of the indirect passive construction in Japanese and Korean?

Basically, there are two reasons why this is important. First, many of the Korean examples that we have already seen in the preceding sections are in fact ambiguous between passive and causative readings. From the point of view of the Korean-French comparison (rather than the Korean-Japanese comparison), therefore, it makes perfect sense to look at the Korean facts as a problem concerning the *causative* construction: for example, as a problem as to how the causative construction is capable of expressing a passive sense. As mentioned in note 4, it is a well-known fact about Korean that the phonological shapes of passive and causative morphemes coincide in many cases. It is a matter of controversy, however, whether the passive and causative morphemes in Korean can (or should) be regarded as realizations of one and the same abstract morpheme, since, as John Whitman pointed out (p.c.), it is also well-known (cf. Choy (1961) and other standard sources) that, with certain verbs, the passive and causative morphemes do have different shapes, the best-known case being the verb *mek-* 'to eat', for which there is a contrast between *mekhi-* (passive) and *meki-* (causative). In this paper, however, we simply regard verbs like *mek-* as exceptional, following Song (1967), and assume that a single abstract morpheme is involved in both passive and causative constructions, following Marantz (1985).

The second reason for the relevance of the above observation concerning French to our discussion of indirect passives is the following. It is not always the case that the French causatives express a passive sense: for example, the sentences given in (25) can never mean passive. Only under certain circumstances can this construction mean passive. What we will suggest is that those circumstances can in fact be defined by using the notion we used for Japanese and Korean, namely the Inclusion/Exclusion distinction. This makes the French construction directly relevant to our discussion.

The possibility of a passive reading in the French causative construction seems to be determined by several independent factors. Some of them can be thought of as necessary conditions, others as sufficient conditions, and they jointly determine the actual permissibility of the passive reading. Determining the nature of the sufficient conditions is always difficult, and we will not try to specify them here. On the other hand, it seems possible

to identify at least one of the necessary conditions which is directly relevant to our discussion, namely the French causative must contain a reflexive clitic in order to express a passive sense. Observe that both of the examples in (26) contain a reflexive clitic *se*, whereas neither of the examples in (25) contains such a clitic. If we change the reflexive clitic in (26) to a non-reflexive pronominal clitic as in (27), then we only have a causative reading:

- (27) Elle l'a fait arrêter par la police.
'She had him arrested by the police.'

In fact, the passive sense seems possible only when we have the following structure, where *rc* stands for "reflexive clitic" which is either accusative or dative:

- (28) NP_1 *rc faire* V . . . (par NP_2)

Structures not included in (28) are basically of the following two types:

- (29) a. NP_1 (*pc faire* V . . . (NP_2))
b. NP_1 *faire rc* V . . . (NP_2)

(29a) represents structures containing no reflexive clitics. *pc* stands for a non-reflexive pronominal clitic, which may appear here. NP_2 is the logical subject of V, which can potentially be marked either by *à* or by *par*. On the other hand, (29b) represents those structures which do contain a reflexive clitic, but here the clitic is attached to the infinitive verb V rather than to *faire*.

The structures shown in (29) are perhaps too abstract, in that they actually subsume a variety of subcases, some of which would never be realized as grammatical for independent reasons. For example, one of the possible realizations of (29b) would be the combination of "*rc* = accusative" and " NP_2 marked by *par*," but this always leads to an ill-formed string as the following example (from Kayne (1975)) and many others demonstrate:

- (30) *II fera s'embrasser par Marie.
he will-make self-kiss by Marie

To identify the factors that interact to produce complex surface judgments on the French causative sentences is an interesting, and difficult, problem (see Kayne (1975), Danell (1979), Rouveret and Vergnaud (1980), Burzio (1986), Zubizarreta (1987), Legendre (1990), and many others). But we do not address that problem because the point here is this: when we do

get grammatical sentences with a structure like (29a) or (29b), only the causative reading is possible. We have already seen some examples of the structure (29a), such as (25) and (27), and as mentioned, they only have a causative reading.

As for the structure shown in (29b), examples such as the following are acceptable ((31b) from Legendre (1990)):

- (31) a. Ils ont fait se connaître les invités.
 'They made the guests get to know each other.'
- b. ?Le professeur a fait s'attribuer des bonnes notes par les
 étudiants (eux-mêmes).
 'The teacher made good grades be given to themselves by the
 students.'

As we can see, the reflexive clitic is attached to the infinitive verb in both of these examples, and they permit only the causative interpretation.

Assuming all this, what kind of generalization do we have here? In particular, what distinguishes (28) from (29)?

One clear difference between them is the function of the matrix subject. In (28), the matrix subject is the antecedent of the reflexive clitic, and the reflexive clitic in turn is related to the infinitival VP, so that the matrix subject is also indirectly related to it. For example, in (26b), repeated here,

- (26) b. Elle s'est fait arrêter par la police.
 (*elle* = *se* = the arrested)

the reflexive clitic corresponds to the direct object of *arrêter* and the clitic necessarily refers to the matrix subject, so that the subject is interpreted as the one arrested by the police, and the passive sense is possible. In (29), by contrast, the matrix subject is in no way related to the infinitival VP. In the case of (29a), that is obvious because there is no reflexive clitic. In (29b), which does contain a reflexive clitic, the matrix subject is still not related to the infinitival VP, because of an independent property of the reflexive clitic. That is, the reflexive clitic in this position can never be bound to the matrix subject. It can only be bound to NP₂ (if at all). This is a well-known, independently established property of reflexive clitics, first reported by Kayne (1975).

Intuitively, therefore, the distinction between (28) and (29) is really another case of what we called the Inclusion/Exclusion distinction. The generalization for French causatives would be that the passive sense is possible only if the matrix subject is *not* excluded from the event

described in the infinitival part of the sentence. We can then think of the reflexive clitic in French causatives as serving the function of making the subject included in the relevant sense, i.e., making it an overt marker of inclusion. This seems to be compatible with Zubizarreta's (1987, 161) analysis of the reflexive clitic which says that it "has the status of a verbal operator which relates the object and subject positions via Predication." Although we do not specifically discuss Zubizarreta's work in this paper, we believe that the phenomena studied here are basically compatible with her insightful analysis.

As in Japanese and Korean, there are several ways in which the subject can be included in the French causative construction. Some relevant examples are listed in (32), all of which permit a passive reading:

- (32) a. Jean s'est fait broyer par un camion.
 b. Jean s'est fait broyer la jambe par un camion.
 c. Jean s'est fait broyer sa voiture par un camion.
 d. Jean s'est fait broyer la voiture de son amie par un camion.
 e. Jean s'est fait broyer la voiture de Marie par un camion.
 'Jean had {a. himself/b. his leg/c. his car/d. his friend's car/e.
 Marie's car} crushed by a truck.'

In (32a), the reflexive clitic corresponds to the direct object of the infinitive verb, and therefore, the matrix subject *Jean* is involved in the event as the person who was crushed, i.e., as a patient.

In (b), the reflexive is related to a body-part, and the subject is involved in the event as its possessor. Similarly in (c), the subject is involved in the event as the owner of the car. In (d), the direct object is "his friend's car," and Jean is involved in the event as his friend. Finally, the direct object in (e) is "Marie's car," and Jean is involved in the event as somebody who has a reason to worry about it, as Marie's friend, for example. (A context making this sentence compatible with the passive reading might be *Jean a emprunté une voiture à Marie et a eu un accident sur l'autoroute* 'Jean borrowed a car from Marie and had an accident on the highway'.) Notice that if we do not establish any pragmatic relation between *Jean* and *Marie* in (e), then only the *causative* reading is possible.

At this point, Korean comes into play again. Consider first the following:

- (33) na-nun sensayngnim-eykey chayk-ul ilk-hi-ess-ta.
 I-Top teacher-BY book-Acc read-Voice-Pst-Plain
 'I had the teacher read a/the/his book.'

Speakers agree that this example, containing the verb *ilk-* 'to read', is acceptable *only as a causative sentence*, not as an indirect passive. Although we do not at present know why this should be so, it is interesting to note that the Japanese counterpart of (33) given in (34) somehow requires an adversative reading:

- (34) Taroo-ga Hanako-ni hon-o yom-are-ta.
 Taroo-Nom Hanako-BY book-Acc read-Pass-Pst
 'Taroo was affected by his book being read by Hanako.'

And its English counterpart given in (35) only has a *causative* reading:

- (35) John had his book read by Mary.

This is so even for those English speakers who generally find it easy to get a passive reading in the *have-* construction.

Observe, however, that our Korean informants find examples of the following sort considerably better than (33) under the passive reading:⁷

- (36) a. na-nun kwuntay-eyse sangkwan-eykey (ayin-uy)
 I-Top army-in superior officer-BY (lover-Poss)
 pphyenci-lul ilk-hi-ess-ta.
 letter-Acc read-Voice-Pst-Plain
 'In the army, I was affected by the superior officer's reading my letter (from my girl friend).'
- b. Swunca-nun tongsayng-eykey ilki-lul ilk-hi-ess-ta.
 Swunca-Top brother-BY diary-Acc read-Voice-Pst-Plain
 'Swunca was affected by her diary being read by her brother.'

These examples are essentially identical to (33) except for the direct object, which is *chayk* 'book' in (33) but *pphyenci* 'letter' in (36a) and *ilki* 'diary' in (36b). This choice of direct object makes a difference in the availability of a passive sense for the type of speakers our informants represent. For such speakers, if the direct object of the verb *ilk-* 'to read' denotes something that is part of one's privacy, such as a diary or a letter, then the sentence can be "indirectly passivized," forming a construction essentially like the Japanese indirect passive. This is not possible if the

direct object is not something that is to be kept secret, such as *camak* ‘cinema caption’.

Assuming this much and focusing on the dialect which permits a passive reading in (36), consider the following paradigm, corresponding to the French examples (32c–e) in relevant respects, where Voice in the glosses covers Causative and Passive:

- (37) a. Yengcheli-nun Swunca-eykey ilki-lul ilk-hi-ess-ta.
 b. Yengcheli-nun Swunca-eykey nwuitongsayng-uy ilki-lul ilk-hi-ess-ta.
 c. Yengcheli-nun Swunca-eykey Kyenghuy-uy ilki-lul ilk-hi-ess-ta
 Yengchel-Top Swunca-BY {a. diary/b. sister-’s diary/c. Kyenghuy-’s
 diary}-Acc read-Voice-Pst-Plain
 ‘Yengchel was affected by Swunca’s reading {a. his diary/b. sister’s
 diary/c. Kyenghuy’s diary}.’

All the examples here are natural as causative sentences, but in the dialect we are interested in, they are also acceptable as passive sentences. As such, they describe a situation in which *Swunca* read a diary and *Yengchel* was affected by that event. These examples differ only in the details of the direct object: it is just *ilki* ‘a diary’ in (a), “sister’s diary” in (b), and *Kyenghuy*’s diary in (c).

As already mentioned in Section 2 using different examples, (37a) is an acceptable passive only if the subject has some pragmatic relation with the diary, for example, if it is his secret diary. Similarly, (b) is an acceptable passive if the “sister” is the subject’s sister, and (c) is acceptable if the subject has some pragmatic relation with *Kyenghuy*. If we do not assume any pragmatic relation between *Yengchel* and *Kyenghuy* in (c), then the sentence is impossible as a passive. However, the sentence can still be grammatical as a *causative* sentence. This is strikingly similar to the situation in French that we observed in (32).⁸

What we have here, then, is a potential ambiguity of a single syntactic construction — one between passive and causative — observed in two different languages. Furthermore, the possibility of a passive reading is determined by what appears to be the same factor in both languages, namely the Inclusion/Exclusion distinction. The generalization that emerges from this can be stated as follows:

- (38) In both French and Korean,
 a. the causative construction can potentially express both passive
 and causative senses;

- b. if the subject is “excluded” from the event (described in the rest of the clause), then only a causative sense is possible;
- c. if the subject is “included” in the event, then a passive sense is possible.

This is a generalization rather different from what we have when we only compare Japanese and Korean, and it poses an interesting problem concerning the relationship between passives and causatives. Before considering the nature of the problem and a possible approach to it in Section 6, let us briefly consider some data from Mongolian in Section 5, showing that the same ambiguity is observed in that language.

5. SOME OBSERVATIONS ON MONGOLIAN

Mongolian,⁹ like Japanese, has distinct morphemes for passives and causatives. Corresponding to a transitive sentence such as (39), we have a passive of the form (40), containing the passive morpheme *-gd-* to the right of the verbal root:

- (39) bagš namajg bariv.
 teacher me-Acc catch-Pst
 ‘The teacher caught me.’
- (40) bi bagšid barigdav.
 I teacher-Dat catch-Pass-Pst
 ‘I was caught by the teacher.’

As we can see, (40) has all the usual properties of “direct passive.”

Indirect passive is a different matter, however. Let us first consider *intransitive* passives that we already know to be possible in Japanese but not in Korean. Given in (41) is an active intransitive sentence, meaning ‘The baby cried,’ which, if indirectly passivized, would look like (42):

- (41) njalx xüüxed ujlav.
 newborn child cry-Pst
- (42) *bi njalx xüüxded ujlagdav.
 I newborn child-BY cry-Pass-Pst

(42) is not a possible passive sentence, however. More generally, intransitive passives are not permitted in Mongolian. Mongolian thus patterns with Korean in this respect rather than with Japanese.

There is an apparent counterexample to this restriction. Consider first the following famous Japanese example:

- (43) bokura-wa soto-de suzusi kaze-ni huk-are-ta.
 we-Top outside cool wind-BY blow-Pass-Pst
 'We enjoyed the cool wind outside.'

Since the verb involved here is *huk-* '(for the wind) to blow', (43) is an instance of intransitive indirect passive. This is a famous example in Japanese syntax because it apparently does not carry any adversative interpretation, despite being an intransitive passive. Consider now the following example, which is a direct Mongolian translation of (43):

- (44) bid gadaa serüün salxind üleegdev.
 we-Top outside cool wind-BY blow-Pass-Pst
 'We enjoyed the cool wind outside.'

This was judged as quite natural by all of our Mongolian informants, which is surprising, given the general prohibition in Mongolian against intransitive passives. This remains a mystery so long as we associate (44) with the following active intransitive clause:

- (45) serüün salxi üleej bajna.
 cool wind blow be
 'The cool wind is blowing.'

It so happens, however, that the verb *ülee-* 'to blow' in Mongolian, unlike the Japanese verb *huk-*, may take a direct object, as is clear from the perfectly acceptable sentence given in (46a), as contrasted with the ungrammatical Japanese counterpart given in (46b):

- (46) a. salxi namajg üleev.
 wind me-Acc blow-Pst
 'The wind blew me.'
- b. *kaze-ga boku-o hui-ta.
 wind me-Acc blow-Pst

It is therefore reasonable to assume that (44) is in fact an instance of *direct* passive, derived from a transitive structure essentially like (46a).¹⁰

So Mongolian lacks intransitive indirect passives, and in this respect it is like Korean. Let us next consider the possibility of transitive indirect passives. Constructing such passives in Mongolian on the model of

Japanese passives, we get things like the following, which, however, are not natural:

- (47) ??bi bagšid garaa barigdav.
 I teacher-BY hand-Ref catch-Pass-Pst
 'I was caught by the hand by the teacher.'

- (48) ??bi ter bagšid nüüree zanchigdav.
 I that teacher-BY face-Ref hit-Pass-Pst
 'I was hit in the face by that teacher.'

From these data alone, it is not entirely clear just what the status of indirect passive sentences is in modern spoken Baarin-Mongolian. Informants basically agree that the examples of the above sort are not natural, beyond which, however, judgments seem to vary. Some say they are unacceptable, while others say they may be "grammatically correct but not quite right, though the meaning expressed is perfectly clear," where "grammatically correct" seems to mean simply that they cannot explain what is wrong with them by any pedagogical rule of grammar known to them.

Returning to our main theme, observe that Mongolian does have a means of expressing the kind of meaning expressed by such examples as those given in (48), and as in French, it is the *causative* construction that is used in such cases. Consider the following examples, which are the causative counterparts of those given in (48):

- (49) a. bi bagšaar garaa bariulav.
 I teacher-Ins hand-Ref catch-Cause-Pst
 'I had the teacher catch my hand.'
- b. bi ter bagšaar nüüree zanchuulav.
 I that teacher-Ins face-Ref hit-Cause-Pst
 'I had that teacher hit my face.'

Since these are examples of the causative construction, containing the causative morpheme *-uul-*, they can of course be interpreted as causatives. However, they can also be interpreted essentially as passive, something like 'I was grabbed by the hand by the teacher' in the case of (49a) and 'I was hit in the face by that teacher' in the case of (49b).¹¹

Thus, the phenomenon in question, i.e., that the causative construction can sometimes mean passive, is observed in Korean, French, English, and Mongolian, which clearly suggests that what we are dealing with here belongs to the realm of universal grammar. This is further supported by

the fact that Japanese also has a construction which can be ambiguous between passive and causative senses. Consider the following, which is an example of the so-called *-te morau* construction:

- (50) Taroo-ga sensei-ni kodomo-o home-te morat-ta.
 Taroo-Nom teacher-Dat child-Acc praise receive-Pst
- (1) 'Taroo had the teacher praise his child.'
 (2) 'Taroo received the teacher's praise of his child.'

If we have such a context as "Since nobody else praised his child, Taroo asked the teacher to do so," then (50) means what the English translation given in (1) means, but if we add to (50) an adverb like "unexpectedly," then it means something like (2).

Quite generally, then, languages seem to allow causative constructions to express a sense that is much like passive. In the next section, we will consider the nature of the problem this phenomenon raises and what sort of explanation we can provide for it.

6. ON THE NATURE OF THE PROBLEM

6.1. *Introduction*

We begin this section by making sure that there is indeed a problem here. We can see this if we try to characterize the lexical or thematic property of the causative morpheme in the languages we have looked at so far. As an example, consider French again:

- (51) a. Jean a fait broyer la voiture par un camion.
 'Jean had the car crushed by a truck.'
- b. Jean s'est fait broyer par un camion.
 'Jean was crushed by a truck.'
- c. Jean a été broyé par un camion.
 'Jean was crushed by a truck.'

As mentioned, the subject *Jean* in (51a) is interpreted as the causer of the event, but in (51b), it is interpreted as a person "affected" by the event. This interpretation is very much like what we find in the passive sentence (51c).

In the case of true passives, this interpretation is of course explained by saying that the subject is licensed as an internal argument of the verb *broyer* and then moved to the surface position, as shown in (52a):

- (52) a. Jean a été [broyé par un camion]
 ↑
 b. Jean s'est fait [broyer par un camion]
 ↑

Now the question is this: can we also analyze the *faire* case in the manner shown in (52b), which amounts to treating *faire* as a kind of passive auxiliary? If this is possible, then the passive sense receives a straightforward explanation (see Blanche-Benveniste et al. (1984)). However, there are at least two good reasons to believe that this analysis is not a possible option.

First, the passive sense is not restricted to cases like (51b), for which this movement analysis is not entirely unreasonable. As mentioned, however, there are many other cases which simply cannot be analyzed in a similar fashion. For example, (53) is a case in point:

- (53) Jean s'est fait broyer la voiture de Marie par un camion.
 'Jean had Marie's car crushed by a truck.'

Here, there is simply no D-structure position that could have been occupied by *Jean*.

The second reason to reject the movement analysis is related to the behavior of the reflexive clitic in Romance. There is a well-known restriction on the reflexive clitic, first reported by Kayne (1975, 375–376), that the reflexive clitic cannot appear in passive. (54a) is therefore impossible, and is to be contrasted with (54b) containing a reflexive *non-clitic*:

- (54) a. *Jean *se* sera décrit par sa femme.
 'Jean will be described to himself by his wife.'
 b. Jean sera décrit à *lui-même* par sa femme.
 'Jean will be described to himself by his wife.'

It has since been observed (cf. Burzio (1981, 1986), Couquaux (1981) and Rizzi (1986)) that this is part of a more general restriction, namely, that the reflexive clitic is incompatible with any type of derived subject, not just with a passive subject. (55a) is a case of raising (from Couquaux (1981)), and (55b) is a case of unaccusative structure (from Burzio (1986)); neither is acceptable:

- (55) a. *Jean *se* semble avoir raison.
 'Jean seems to himself to be right.'
 b. *Ils *se* sont venu à l'esprit.
 'They came to each other's mind.'

(55a), for example, is to be contrasted with *Jean lui semble avoir raison* 'Jean seems to him to be right', from Couquaux (1981).

Given this independently established generalization, the very fact that (51b) is grammatical suggests that the subject *Jean* is NOT a derived subject, excluding (52b) as a possible analysis of (51b).¹² This means that the subject *Jean* in (51b) or (53) is theta-marked in its surface position. We must then say that *faire* takes a Patient-like role as its external argument. However, we must also say that *faire* takes an Agent-like role as its external argument, as is clear from (51a) and many other examples (after all, *faire* is a causative verb).

Within a conventional theory of thematic roles and argument structure, i.e., what Jackendoff (1990) calls a "coarse-grained" theory as opposed to a "fine-grained" theory, this state of affairs can be described by simply stipulating that *faire* is ambiguous with respect to the thematic content of its external argument, as in (56):

$$(56) \quad \textit{faire} \left(\begin{array}{c} \text{Agent} \\ \text{Patient} \end{array} \right), \text{Event}$$

As an explanation, however, this is certainly not enough. For one thing, (a) if *faire* is lexically ambiguous, we expect it to be always ambiguous — potentially, that is — which is not the case, as we have seen. The passive reading is permitted only with an "included subject"; with an "excluded subject" only the causative reading is possible. For another, (b) we must explain the fact that the same ambiguity is observed in other languages, but if we just repeat the same stipulation for these languages, we would be missing something. And finally, a fundamental question would remain to be answered, namely (c) why is it passive and causative senses that can be expressed in the same construction? In terms of (56) or some similar stipulation, this question can be restated as: why is it Agent and Patient roles that can alternate as an external argument of a verb like *faire*?

Considerations such as these suggest that what we need here is a theory in which passive and causative senses are characterized as not very different from each other. If we have such a theory, it would be much easier to understand why these two senses can be expressed in the same syntactic form. In what follows, we will consider what such a theory might look like.

6.2. Action Tier and the Passive/Causative Ambiguity

As mentioned, passives and causatives are different with respect to the situations they describe: while the causative situation consists of two events, the passive situation usually consists of a single event. Notice, however, that there is a passive situation which does consist of two events,

and that is the situation the *indirect passive* construction describes. Consider the following pair of examples, where (a) is causative and (b) is indirect passive:

- (57) a. John-ga Mary-ni hon-o yom-ase-ta.
 John-Nom Mary-Dat book-Acc read-Cause-Pst
 ‘John had Mary read the book.’
- b. John-ga Mary-ni hon-o yom-are-ta.
 John-Nom Mary-Dat book-Acc read-Pass-Pst
 ‘John was affected by Mary’s reading the book.’

In (a), there is an event, E_1 , such that Mary read a book, in addition to which there is another event, E_2 , such that John caused E_1 . In (b), there is an event, E_1 , such that Mary read a book, in addition to which there is another event, E_3 , such that E_3 affected John. So (a) and (b) share the same event, E_1 , and differ from each other only with regard to the nature of the other event, the “causing event” (E_2) in the former case, the “affecting event” (E_3) in the latter. Now, if we can say that causing something is one form of affecting it, then both E_2 and E_3 are affecting events, the only difference between them being the *direction* of affectedness: in other words, both (a) and (b) say something about the relation between a person (John) and an event (the reading of a book by Mary = E_1). They both say that the relation is one of affectedness, but (a) says that the direction of affectedness is from the person to E_1 whereas (b) says that the direction is from E_1 to the person. This can be represented by the following diagram, where the arrow indicates the direction of affectedness:

- (58) a. Person \rightarrow Event
 b. Person \leftarrow Event

(58a), corresponding to (57a), says that the person stands in an affecting relation to the event, ultimately a causative relation. (58b), corresponding to (57b), says that the person stands in a relation of being affected to the event, which ultimately leads to the passive interpretation. At this level of abstraction, then, causatives and indirect passives do not look very different, which is exactly what we wanted.

Assuming that something like (58) is the right way of looking at the matter, we must now explain why these two interpretations can alternate in the same syntactic structure, as in (59) for example:

- (59) Jean s’est fait broyer {sa voiture/la voiture de Marie} par un camion.
 ‘Jean had {his car/Marie’s car} crushed by a truck.’

With the notation used in (58), the ambiguity of this sentence can be represented in the following manner:

- (60) a. Jean \rightarrow [a truck crush(ed) a car]
 b. Jean \leftarrow [a truck crush(ed) a car]

Notice that the notion “direction of affectedness” seems to fit in well with Jackendoff’s (1990) Action Tier. Citing Culicover and Wilkins (1986) and Talmy (1985) as his immediate predecessors, Jackendoff claims that conceptual roles fall into two distinct but related *tiers*, called the Thematic Tier and the Action Tier, the former “dealing with motion and location,” and the latter “dealing with Actor-Patient relations” (p. 126). On this view, roles such as Theme, Goal and Source appear in the Thematic Tier, and roles like Actor and Patient/Undergoer/Beneficiary appear in the Action Tier, the two tiers being represented as independent lines in the conceptual structure. The traditional notion Agent splits up into Actor and (extrinsic) Instigator: the former, defined as the first argument of the AFFECT function, belongs to the Action Tier, and the latter, defined as the first argument of the CAUSE function, belongs to the Thematic Tier. The well-known ambiguity of an example like *Bill rolled down the hill* can then be regarded as a phenomenon arising from two possible Action Tiers being associated with a single Thematic Tier, as shown in (61):

- (61) Bill rolled down the hill.
 a. $\left[\begin{array}{l} \text{GO} ([\alpha], [\text{DOWN} [\text{HILL}]]) \\ \text{AFF} ([\text{BILL}]^{\alpha},) \end{array} \right]$
 b. $\left[\begin{array}{l} \text{GO} ([\alpha], [\text{DOWN} [\text{HILL}]]) \\ \text{AFF} (, [\text{BILL}]^{\alpha}) \end{array} \right]$

Being the first argument of the AFF function, BILL is Actor in (a), but in (b) it is the second argument of AFF, which defines Undergoer/Patient/Beneficiary. (Undergoer/Patient is negatively affected by the Event but Beneficiary is positively affected. We will hereafter refer to Undergoer/Patient/Beneficiary collectively as Affectee, suppressing the positive/negative distinction when it is not crucial to our discussion.)¹³ The fact that BILL is Theme in (61) is captured by having a Greek letter variable, α , appear in the Theme position (the first argument of GO) in the Thematic Tier and having it bound to BILL in the Action Tier. So the NP corresponding to BILL in syntax bears two theta-roles in (61). More generally, Jackendoff’s system permits an NP to bear multiple theta-roles, but only the most *dominant* among multiple θ -roles in a bound complex is directly

linked to syntax. Thus the theory still contains its version of the θ -criterion. The relation of dominance is defined on the basis of the Thematic Hierarchy, which states that arguments in the Action Tier always come higher than those in the Thematic Tier; within the former tier, arguments are ordered from left to right, and within the latter, from least embedded to most deeply embedded, producing a partial hierarchy Actor > Affectee > Theme > Thus Actor, if present, will always end up as the subject, and Affectee (i.e., Undergoer/Patient/Beneficiary), if present, will end up as the object, which however would be the subject if there is no Actor.

Since the causative/passive ambiguity observed in (59)/(60) can be regarded as one form of the Actor/Affectee alternation observed in (61) and similar cases, it is natural to assume the following representations for the two senses associated with (59) within Jackendoff's framework, where CRUSHED is just an abbreviation for an appropriate decomposition that we need not specify for the purpose of this discussion, and the subscript A is a marker of argumenthood (Jackendoff (1990, 252ff.)).¹⁴

- (62) a.
$$\left[\begin{array}{c} \left[\begin{array}{c} \text{CAUSE } ([\alpha], [\text{CRUSHED } ([\beta])]) \\ \text{EVENT AFF } ([\text{TRUCK}]^{\alpha}, [\text{CAR}]_{\text{A}}^{\beta}) \end{array} \right] \\ \text{EVENT AFF } ([\text{JEAN}]_{\text{A}},) \end{array} \right]$$
- b.
$$\left[\begin{array}{c} \left[\begin{array}{c} \text{CAUSE } ([\alpha], [\text{CRUSHED } ([\beta])]) \\ \text{EVENT AFF } ([\text{TRUCK}]^{\alpha}, [\text{CAR}]_{\text{A}}^{\beta}) \end{array} \right] \\ \text{EVENT AFF } (, [\text{JEAN}]_{\text{A}}) \end{array} \right]$$

These two representations share the same subordinate event structure, differing from each other only in the nature of the relation JEAN bears to that event, which is Actor in (a) and Affectee in (b).

Although (62) has a desirable effect of reducing the causative/passive ambiguity to an independently attested alternation in the Action Tier, it is not enough, because the two readings that (59) has are also different in the Thematic Tier, in a way not unlike the causative alternation observed in such pairs as (63), in the sense that in both (59)/(60) and (63) the same verb is involved in the description of two different situations, one causative, the other non-causative:

- (63) a. John opened the window.
b. The window opened.

Jackendoff analyzes (63) as an alternation between the two conceptual structures corresponding to the representations given in (64), which can be collapsed into (65) — the lexical entry of *open* — by the use of his

dashed underline notation which indicates, in this case, the optionality of the outer function plus one of its arguments:

- (64) a. [CAUSE ([JOHN]_A, [GO ([WINDOW]_A, [TO [OPEN]]))]]
 b. [GO ([WINDOW]_A, [TO [OPEN]])]
 (65) [CAUSE ([THING]_A, [GO ([THING]_A, [TO [OPEN]]))]]

Since Jean in (59) *causes* the event under the causative reading, (60a) must specify that JEAN is the Instigator of the event (the first argument of CAUSE) exactly like JOHN in (64a). (60a) should therefore look something like the following:

$$(66) \left[\begin{array}{c} \text{CAUSE} ([\gamma], \left[\begin{array}{c} \text{CAUSE} ([\alpha], [\text{CRUSHED} ([\beta])]) \\ \text{AFF} ([\text{TRUCK}]^{\alpha}, [\text{CAR}]^{\beta}) \end{array} \right]_{\text{EVENT}} \right) \\ \text{AFF} ([\text{JEAN}]^{\gamma}_{\text{A}},) \end{array} \right]$$

Thus, the causative/passive ambiguity that we have been discussing can be regarded simply as a combination of two independently attested alternations, i.e., the Actor/Affectee alternation observed in (63) and the causative alternation observed in (63). We can intuitively characterize the lexical property of *faire* as in (67), where we specify the outer optional function as part of the entry for concreteness and the notation AFF ([]) is meant to abbreviate the two possibilities, AFF ([],) and AFF (, []):¹⁵

$$(67) \left[\begin{array}{c} \text{CAUSE} ([\text{THING }], [\text{EVENT }]) \\ \text{AFF} ([\text{THING }]) \end{array} \right]$$

As Jackendoff (1990, 245ff., 258) observes, when an Event has the CAUSE function on the Thematic Tier and the AFF function on the Action Tier, then the Instigator (the first argument of CAUSE) is always bound to the Actor (the first argument of AFF). This is a generalization that should follow from some principle within Jackendoff's framework even aside from the problem we have been discussing. Assuming some such principle (cf. Section 6.4), if the optional outer function is chosen in (67), then it would be realized as (68a); otherwise, (68b) would result:

$$(68) \text{ a. } \left[\begin{array}{c} \text{CAUSE} ([\text{THING } ^{\alpha}], [\text{EVENT }]) \\ \text{AFF} ([\text{THING }]^{\alpha},) \end{array} \right]$$

$$\text{ b. } \left[\begin{array}{c} [\text{EVENT }] \\ \text{AFF} (, [\text{THING }]) \end{array} \right]$$

Let us compare (67) with the lexical specification (56), repeated here:

- (56) *faire* ($\begin{bmatrix} \text{Agent} \\ \text{Patient} \end{bmatrix}$, Event)

(56) reduces the causative/passive ambiguity to the ambiguous character of the external argument of *faire* by specifying that it can be either Agent or Patient, which, however, completely leaves unexplained why it is only these particular roles that can alternate in this construction. By contrast, (67) can be viewed as providing an *explanation* for (56) by deriving it from independently attested generalizations, i.e., from the causative alternation such as (63) and the Actor/Affectee alternation observed in (61). Thus, *faire* is like *open* in that its outer function in the Thematic Tier is optional. In the standard causative alternation, if the outer function is not chosen, a syntactically intransitive structure such as *The window opened* is projected, which completely suppresses the external argument of the verb. This is different from the *faire* construction, which never “suppresses” the external argument of *faire*, even under the passive reading. This, however, follows from the other property of *faire*, that it is also like *roll* in that its Action Tier is ambiguous between AFF ([],) and AFF (, []). Since the Action Tier takes precedence over the Thematic Tier when conceptual structure is linked to syntax, the single argument of the AFF function is always linked to the subject of *faire*, irrespective of whether it is the first argument (Actor) or the second argument (Patient/Undergoer). In the former case, we have a causative reading while in the latter we have a passive reading (in the sense that the subject is interpreted as “affected” by the Event). Thus, (67) is a significant improvement over a coarse-grained analysis such as (56), so that the present discussion provides a piece of evidence for the kind of approach to thematic roles/argument structure that Jackendoff (1990) advocates, especially the separation of the Action Tier from the Thematic Tier.

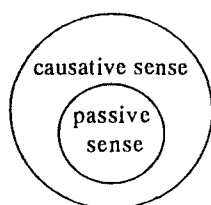
To summarize briefly, the observation that causative constructions quite often permit a passive-like interpretation in addition to a straightforward causative interpretation suggests that we need a theory wherein the passive and causative senses are characterized as not very different from each other. A lexical specification such as (56) cannot be part of such a theory because the Agent-role and the Patient-role, which are said to alternate and give rise to the causative/passive ambiguity, do in fact look very different from each other, and would remain that way so long as we continue to work within a conventional coarse-grained theory. In contrast, if we look at the ambiguity from the point of view of *the relation between a person and an Event*, we notice that the two senses basically differ in the

direction of affectedness, a notion that seems to fall out of Jackendoff's Action Tier as an alternation between AFF ([],) and AFF (, []) that is independently motivated in his theory.

6.3. *On the Nature of the Inclusion Restriction*

Although (67) is a significant improvement over (56), an inadequacy inherent to the latter still carries over to the former. As mentioned earlier in this section, if it is simply that *faire* is lexically ambiguous, it should always be potentially ambiguous, but that is not the case, as we have seen. There is an asymmetry in interpretive possibilities that can be represented as follows:

(69)



That is, while it is always possible for the causative construction under discussion to express a causative sense, it can express a passive sense only under certain restricted circumstances. But (67), like (56), does not predict such an asymmetry.

This asymmetry is of course due to the inclusion restriction — though there are other factors involved, as noted. Our problem is how to incorporate it into (67) so that one of its realizations given in (68b), corresponding to the passive reading, is properly constrained by the inclusion restriction.

There is another problem concerning (68b) that is closely related to the one just mentioned, and it has to do with the precise meaning of the affectedness relation that we assumed to be encoded there. (68b) says that there is a (subordinate) Event and that there is a person ("Thing") that is affected, but it says nothing about what affects the person: in particular, it does not say that the person is affected *by the Event*. Let us first clarify the meaning of this affectedness relation, and then turn to the inclusion restriction.

Consider first the following case and what Jackendoff has to say about it.

(70) a. Bill rolled down the hill.

b. What happened to Bill was he rolled down the hill.

Commenting on the non-Agentive reading of (70a), i.e., the one picked out by (70b), Jackendoff (1990, 128) says: “in [(70b)] there is no sense of an implicit Actor whose action caused Bill’s rolling — it just may have been one of those things. In such a case perhaps it would be better to say Bill is the *Undergoer* rather than the *Patient*, but the sense ‘affected by the Event’ remains. Hence [(70b)] appears to be a case where only the second argument of AFF is present” [emphasis added]. Jackendoff then proposes the following representation for this reading:

$$(71) \quad \left[\begin{array}{l} \text{GO} ([\alpha], [\text{DOWN} [\text{HILL}]]) \\ \text{AFF} (\quad , [\text{BILL}]^{\alpha}) \end{array} \right]$$

(71) explicitly says that BILL is affected, but what part of (71) tells us that it is affected *by the Event*? Since the AFF function contains nothing as its first argument, the only conceivable possibility here is that BILL is interpreted as being affected by the Event *by being part of the Event*, i.e., by binding the Theme argument in the Thematic Tier in this case. And in fact, it seems quite generally to be the case that an argument of the AFF function is related to some argument in the Thematic Tier. This, however, is not *always* the case: there are cases where an argument of the AFF function is not directly related to any argument in the Thematic Tier and is still properly interpreted. For example, (72a) receives the kind of conceptual structure roughly shown in (72b) in Jackendoff’s analysis (cf. Jackendoff (1990, 194–197)):

(72) a. Susan made Francine a picture.

$$b. \quad \left[\begin{array}{l} \text{CREATE/PREPARE} ([\text{SUSAN}], [\text{PICTURE}]^{\alpha}) \\ [\text{FOR} [\text{AFF}^{+} ([\alpha], [\text{FRANCINE}])]] \end{array} \right]$$

Here, the Affectee FRANCINE (Beneficiary in this case, being the second argument of the AFF^{+} function — see note 13 above) is not itself related to the Thematic Tier, but it is still properly interpreted by the presence of the first argument of the AFF^{+} function, as being positively affected by the picture Susan made.¹⁶ There is yet another type of configuration involving AFF in which the Affectee argument is not related to the Thematic Tier, but this time the AFF function contains no first argument. We find this possibility in Jackendoff’s analysis of the so-called adversative *on*, as in *My car broke down on me* or *It rained on me*, the former being assigned a conceptual structure of the following sort (cf. Jackendoff (1990, 187)):

(73) a. My car broke down on me.

$$b. \quad \left[\begin{array}{l} \text{BREAK-DOWN} ([\text{MY CAR}]) \\ [\text{WITH} [\text{AFF}^{-} (\quad , [\text{ME}])]] \end{array} \right]$$

(73b) specifies the meaning 'My car broke down' as the main conceptual clause and the meaning 'I was affected' as a subordinate conceptual clause whose relation to the main clause is specified by the subordinating function WITH (indicating accompaniment),¹⁷ but (73b) does not directly specify what affected ME. Jackendoff discusses the possibility of having MY CAR as the Actor argument in the subordinate Event, but he rejects it because of the impersonal example mentioned above (*It rained on me*), which suggests that it is not a particular Thing involved in the Event but the Event itself that affects the object of the adversative *on*. (As noted, (73b) itself does not explicitly state that [ME] is affected *by the Event*. It is not entirely clear to me if this information is derived from the meaning of WITH; if not, we may need some convention which supplies (73b) with it. We will return to this problem below when we discuss a representation which is similar to (73b) but which does not contain any subordinating function.)

So we basically have three ways in which the second argument of the AFF function is affected with respect to an Event:

- (74) i. by being a participant in the Event
- ii. by being affected by a participant in the Event
- iii. by simply receiving some effect from the Event.

Returning to the problem raised above, what is the nature of the affectedness relation that we assume to hold between the subject of the causative verb (such as *faire*) and the Event expressed as its complement, in an example such as (59) (repeated here as (75a) together with its conceptual structure under the passive reading in (75b))?

- (75) a. Jean s'est fait broyer {sa voiture/la voiture de Marie} par un camion.

'Jean had {his car/Marie's car} crushed by a truck.'

$$b. \left[\begin{array}{c} \left[\begin{array}{c} \text{CAUSE } ([\alpha], [\text{CRUSHED } ([\beta])]) \\ \text{EVENT}_1 \text{ AFF } ([\text{TRUCK}]^\alpha, [\text{CAR}]^\beta_A) \end{array} \right] \\ \text{EVENT}_2 \text{ AFF } (, [\text{JEAN}]_A) \end{array} \right]$$

In particular, which category of (74) does the affectedness relation in (75) belong to?

In (75a), it is clear that Jean does not directly participate in the Event (*the truck crushed the car*), which immediately excludes (74i). This leaves us with (ii) and (iii), and the question is this: is Jean affected by a particular Thing involved in the Event or by the Event itself?

In the representation (75b), JEAN is the sole argument of the AFF

function and is not related to any part of the subordinate Event (EVENT1) so that, formally, it corresponds to case (74iii), and JEAN is completely excluded from the subordinate Event. But, as a matter of empirical fact, Jean in (75a), under the passive reading, *must* be included in the Event, as we have seen. This conflict can be resolved if we revise (75b) in such a way as to encode into it the information that JEAN is included in the Event, possibly in the following manner:

$$(76) \left[\begin{array}{c} \left[\begin{array}{c} \text{CAUSE } ([\alpha], [\text{CRUSHED } ([\beta])]) \\ \text{EVENT AFF } ([\text{TRUCK}]^{\alpha}, [\text{CAR}]^{\beta}) \end{array} \right] \\ \text{EVENT AFF } ([\beta], [\text{JEAN}]_{\text{A}}) \end{array} \right]$$

Here, the AFF function in the main Action Tier contains the Actor argument, which is bound to the second argument of the AFF function in the subordinate Event. It seems that this representation already captures the essential part of the inclusion effect because (76) says Jean is affected by the car which is crushed by a truck, and the effect in this case is rather abstract (non-physical), but if Jean is to be non-physically affected by the car, he must be concerned with it or have some reason to be concerned about it, i.e., he has to have some pragmatic relation to it. If this is correct, then no additional restriction needs to be postulated to the effect that, in (75a), *Jean* be pragmatically related to the *car*. In other words, it seems that what we have been calling “pragmatic relation” can be dispensed with, being simply replaced with the relation defined by the AFF function. Thus, JEAN is pragmatically related to the CAR in (76) in the sense that AFF ([β], [JEAN]) where β = CAR. We thus take (76) as a sufficient representation of the *passive sense* of (75a), which amounts to ‘Jean was (non-physically) affected by the car which was crushed by a truck, a paraphrase that (76) in fact represents. The relation of affectedness in (75) is thus regarded as an instance of (74ii) rather than (74iii).

We may perhaps add the following observation in support of the conclusion just reached. The inclusion restriction states that the subject be related to the Event by having some pragmatic relation to its part. (75a) satisfies this condition because Jean can be assumed to be pragmatically related to the car, which is directly represented in (76). Now suppose, contrary to the conclusion reached above, that the affectedness relation in (75) is one between a person and the Event (rather than a particular Thing involved in the Event). Then, in principle, a pragmatic relation between the subject and *any* part of the Event should satisfy the inclusion restriction. Consider then examples of the following sort from Japanese (we will return to French below):

- (77) a. *Mary-wa misiranu hito-ni kodomo-o home-rare-ta.*
 Mary-Top unknown person-BY child-Acc praise-Pass-Pst
- b. *Mary-wa tomodati-ni kodomo-o home-rare-ta.*
 Mary-Top friend-BY child-Acc praise-Pass-Pst

These are examples of indirect passive, meaning Mary was affected by the event, and the event is that the child was praised, by a person unknown to Mary in (a) and by a friend in (b). In both cases, if Mary has a pragmatic relation to the “child,” a neutral reading is possible, in accordance with our discussion in Section 3. But let us assume here that the *child* is related to the BY-marked person, as is indicated by the italics. Then, *Mary* is excluded in each case, and we only get the adversative reading, as expected.

Now, what happens if *Mary* in (77b) is related to the BY-marked NP, for example, if this *tomodati* ‘friend’ is Mary’s friend? Actually, nothing happens: the sentence is still very adversative under that interpretation, which means that *Mary* does *not* count as included even if it has a pragmatic relation to the *Actor* of the event, though it does count as included if it is related to *what is acted on*. The pattern is thus basically as in (78), where italics indicate some pragmatic relation:

- (78) a. *NP-ga* [_{Event} *NP-ni NP-o V*] rare (subject included)
 b. *NP-ga* [_{Event} *NP-ni NP-o V*] rare (subject excluded)

But if the Inclusion/Exclusion distinction is sensitive to the relation between the subject and the *Event*, it is not clear why (78b) does not count as an inclusion structure.

Exactly the same holds in French and other languages. Consider (79):

- (79) a. Je me suis fait jeter des papiers au feu par un inconnu.
 ‘I was affected by the papers being thrown on the fire by a stranger.’
- b. Je me suis fait jeter des papiers au feu par ma femme.
 ‘I was affected by the papers being thrown on the fire by my wife.’

In (a), the Event consists of the *throwing of papers on the fire by a stranger* and in (b) the *throwing of papers on the fire by my wife*. Both of these examples can be interpreted in a passive sense, *provided* that the papers or documents are mine (or at least I am responsible for them, etc.). This is of course what we expect. Suppose now that the papers are not mine, or

at least, I have no particular pragmatic relation to them, in which case the subject has no relation whatsoever to the Event in the case of (a). But in (b), the subject can still have a relation to the BY-phrase — as the husband of the woman.¹⁸ However, that does not make it possible for this sentence to express a passive sense, which means that the subject does not count as included even if it is related to the Actor of the Event. This can be represented as in (80):

- (80) a. NP se faire $[_{Event} V NP \text{ par } NP]$ (subject included)
 b. NP se faire $[_{Event} V NP \text{ par } NP]$ (subject excluded)

Obviously, we are dealing with one and the same phenomenon in (80) and (78). But if we just assumed that the subject in (80) is affected by the entire subordinate Event and simply stipulated that the subject be pragmatically related to it, it would be difficult to distinguish (80a) from (80b). By contrast, the analysis of (80) along the lines suggested above correctly differentiates these two cases. Consider the following representation, corresponding to (79b), where that part which corresponds to the meaning of *on the fire* is not specified:

$$(81) \left[\begin{array}{c} \left[\begin{array}{c} \text{CAUSE } ([\alpha], [\text{GO } ([\beta], \dots)]) \\ \text{AFF } ([\text{WIFE}]^\alpha, [\text{PAPERS}]^\beta_A) \end{array} \right] \\ \text{EVENT AFF } ([\beta], [I]_A) \end{array} \right]$$

This says that *I* was non-physically affected by the papers thrown on the fire by my wife (hence *I* must be concerned with them or have some reason to be concerned about them) and this makes *I* included in the Event, which in turn permits the entire construction to have a passive sense. Although *I* certainly have a “pragmatic relation” to WIFE as her husband, it does not make *I* included in the Event, because what is linguistically relevant is the *formal relation* defined by $\text{AFF } ([\beta], [I])$ where $\beta = \text{PAPERS}$.

Thus, we have an important generalization about affectedness, to the following effect: “You can be affected by an Event that you are not part of, if you are related to a Thing *that is affected in that Event*.” Call this the Affectee Principle (cf. Section 6.4). Our analysis of the passive sense of the causative construction as a directional relation of affectedness from the Event to the subject (i.e., $\text{Thing} \leftarrow \text{Event}$) basically says: “you are affected by the Event that you are not part of,” which is equivalent to the main clause of the Affectee Principle. On the other hand, the inclusion restriction can be interpreted as saying “you must be related to the Thing that is affected in the Event,” which is equivalent to the *if*-clause of the Affectee Principle. In this sense, our analysis of the passive sense provides

a setting for the “application” of the Affectee Principle, of which the inclusion restriction is an inherent part, so that they jointly produce an inclusion effect on the passive interpretation. Since the notion “be related to a Thing” is defined by the AFF function of the main Action Tier, we now have a formal definition of “inclusion”: X is *included* in the subordinate Event in the configuration (82i). This is to be contrasted with (82ii) where X is completely disconnected from E, i.e., *excluded* from it:

- (82) i.
$$\left[\begin{array}{c} \text{.....} \\ \left[\text{EVENT AFF} ([Y], [Z]^\beta) \right] \\ \text{EVENT AFF} ([\beta], [X]) \end{array} \right]$$
- ii.
$$\left[\begin{array}{c} \text{.....} \\ \left[\text{EVENT} \right] \\ \text{EVENT AFF} (, [X]) \end{array} \right]$$

The fact that X in (i) is the second argument of AFF, which is part of our analysis of the passive reading, means that X is affected, but for X to be interpreted as affected by the Event, there must be a chain of relations ($[]^\beta, [\beta], [X]$), which is a requirement imposed by the Affectee Principle. Since the causative constructions in French and other languages discussed in this paper all display the inclusion effect under the passive interpretation, they can be assigned a representation essentially of the form (82i). The indirect passive in Japanese can also be assumed to have the same representation under the neutral reading; as discussed, however, it also permits its subject to be excluded from the Event, leading to the adversative interpretation, for which (82ii) seems appropriate. Thus, the adversative passive in Japanese is special precisely because it does *not* conform to the Affectee Principle. An example such as (83) would thus have two possible representations roughly shown in (84), where, as before, the Thematic Tier of the subordinate Event is an abbreviation for some appropriate decomposition:

- (83) boku-wa tuma-ni syorui-o moyas-are-ta.
I-Top wife-BY papers-Acc burn-Pass-Pst
'I was affected by the papers being burned by my wife.'

- (84) a.
$$\left[\begin{array}{c} \text{CAUSE} ([\alpha], [\text{BURN} ([\beta])]) \\ \left[\text{EVENT AFF} ([\text{WIFE}]^\alpha, [\text{PAPERS}]^\beta) \right] \\ \text{EVENT AFF} ([\beta], [I]_A) \end{array} \right]$$
- b.
$$\left[\begin{array}{c} \text{CAUSE} ([\alpha], [\text{BURN} ([\beta])]) \\ \left[\text{EVENT AFF} ([\text{WIFE}]^\alpha, [\text{PAPERS}]^\beta) \right] \\ \text{EVENT AFF} (, [I]_A) \end{array} \right]$$

In (84a), the subject *I* is included in the subordinate Event by its relation to β (= PAPERS) defined by the main Action Tier, and this corresponds to the neutral reading. In (84b), the subject *I* is completely disconnected from the Event, which corresponds to the adversative reading. In the latter case, the subject is affected by the Event itself, not by having a relation to a particular Thing involved in it. But since (84b) does not represent this information, we probably need to encode it directly into the representation, in the following manner:

$$(85) \quad \left[\begin{array}{c} \text{CAUSE } ([\alpha], [\text{BURN } ([\beta])]) \\ \text{[EVENT AFF } ([\text{WIFE}]^{\alpha}, [\text{PAPERS}]^{\beta}_{\text{A}})]^{\gamma} \\ \text{[EVENT AFF } ([\gamma], [\text{I}]_{\text{A}})] \end{array} \right]^{\gamma}$$

Here, the main AFF function has the first argument $[\gamma]$, which is bound to the entire subordinate Event rather than to the Thing involved in the Event.

Note again that the notion “pragmatic relation,” which may be important for other purposes, has no place in our formal analysis. As mentioned, the adversative reading of (83), represented by (85), can describe a situation wherein I have no particular interest in the papers burned by my wife, for which an appropriate context might be this: “I have been trying to cure my wife of her bad habit of throwing papers on the fire, but she did it again last night,” in which case, the papers need not be important to me. Yet it may still be the case that the papers in question *happened* to be important to me, i.e., I might have some pragmatic relation to the papers even under the adversative reading described by (85). As discussed, however, this does not make “I” included in the Event, because it is the formal configuration defined by (82i), conforming to the Affectee Principle, that induces the inclusion effect. But in (85), $[\text{I}]$ is related by AFF to $[\gamma]$, which is bound to the entire Event, not to $[\text{PAPERS}]$, so that it is formally unrelated to PAPERS, though pragmatically it may certainly have some relation to them.

Since the option of having the Affectee related to the entire subordinate Event is not available to French and other languages, Japanese examples such as (86a), analyzed as in (86b), have no counterparts in those languages:

- (86) a. John-ga Mary-ni nak-are-ta.
John-Nom Mary-BY cry-Pass-Pst

‘John was affected by Mary’s crying.’

$$b. \left[\begin{array}{c} \text{[EVENT CRY } ([\text{MARY}])^{\gamma}] \\ \text{[EVENT AFF } ([\gamma], [\text{John}])] \end{array} \right]^{\gamma}$$

6.4. *Affectedness Principle: Some Speculations*

There are three types of conceptual structure that played particularly important roles in our discussion, which we abstractly represent in (87):

- (87) a.
$$\left[\begin{array}{c} \text{CAUSE } ([\alpha], [\begin{array}{c} \text{.....} \\ \text{EVENT AFF } ([Y]^\delta, [Z]^\beta) \end{array}]) \\ \text{EVENT AFF } ([X]^\alpha,) \end{array} \right]$$
- b.
$$\left[\begin{array}{c} \text{.....} \\ \text{EVENT AFF } ([Y]^\delta, [Z]^\beta) \\ \text{EVENT AFF } ([\beta], [X]) \end{array} \right]$$
- c.
$$\left[\begin{array}{c} \text{.....} \\ \text{EVENT} \\ \text{EVENT AFF } ([\gamma], [X]) \end{array} \right]^\gamma$$

(87a) represents a causative reading of the causative constructions in French and other languages. (87b) represents a passive sense of the same causative constructions as well as one possible reading of the indirect passive construction in Japanese. (87c) represents the other possible reading of the indirect passives (obligatory for intransitive passives), i.e., the sense associated with the adversative passive. The causative constructions under discussion are thus ambiguous between (a) and (b) whereas the indirect passives are ambiguous between (b) and (c), so that the observation made in the previous sections — that the *causative* sentences in some languages sometimes, but not always, correspond to the *passive* sentences in Japanese — is now quite understandable, at least much more so than before when we consider the causative/passive ambiguity in terms of the Agent/Patient alternation within the coarse-grained theory of thematic roles.

Let us now return to some of the central questions raised in this section: (A) how are we to explain the alternation of (87a) and (87b) in the construction headed by a verb such as *faire*? Similarly, (B) how are we to explain the alternation of (87b) and (87c) in the Japanese passive construction?

Consider (B) first. Clearly, we do not want to say that a child learns (87b) and (87c) independently and list them as two possible subentries for the passive morpheme *-rare-* in Japanese. Simply collapsing them into a single schema, though better than the worst scenario just mentioned, is not sufficient, because we would at the same time like to state, in a natural way, that (87b) is very general cross-linguistically whereas (87c) is very rare. We have been assuming that the cross-linguistic generality of the inclusion effect, captured by the β -binding in (87b), is something that

follows from the Affectee Principle, so that this aspect of the meaning need not be stipulated in the lexical entry. Removing it from (87b), we get the following:

$$(88) \quad \left[\begin{array}{c} \dots\dots \\ \text{EVENT AFF} ([Y]^\delta, [Z]^\beta) \\ \text{EVENT AFF} (\quad, [X]) \end{array} \right]$$

Notice that this structure is identical, in the relevant respects, to the structure shown in (87c) except for the presence in the latter of $[\gamma]$ bound to the subordinate Event. Thus, if we assume, as is natural, that (88) is not well-formed *because the relation of X to the Event is left unspecified*, we can view the β -binding in (87b) and γ -binding in (87c) as two different ways to specify the relation that X bears to the Event, the former being induced by the Affectee Principle, which is probably universal, and the latter by a special option available to Japanese, which can be stated as follows:

- (89) If X is an Affectee that is completely disconnected from the subordinate Event, E, then interpret it by relating it to E itself.

More intuitively, “you can be affected by an Event that you are not part of, if you are related to that Event.” Here, as before, the notion “be related to” is defined in strictly formal terms, i.e., by the AFF function itself.

Given (89) and the Affectee Principle, therefore, (88) is quite sufficient to represent the two possible interpretations of indirect passives in Japanese, in the sense that both (87b) and (87c) can be “derived” from (88).

By the same reasoning, we can regard (88) as the representational core of the passive interpretation of the causative constructions in French and other languages, in the sense that its full representation (87b) can be derived from (88) by the Affectee Principle. Thus, whatever theoretical status this principle/generalization might turn out to have, it has a very clear *function* within a theory of lexical semantics: *it simplifies lexical entries*, making them easier to learn. The fact that a structure essentially like (88) shows up in Japanese and alternates with (87b) gives a strong support to the claim that (87b) should be viewed as consisting of two components, namely (88) and what is added by the Affectee Principle.

This leaves us with (87a), which represents the *causative* interpretation. Since this is causative, the subject must correspond to the Actor of the main Action Tier (the *first* argument of AFF), as in (90):

$$(90) \quad \left[\begin{array}{c} \dots\dots \\ \text{EVENT AFF} ([Y], [Z]) \\ \text{EVENT AFF} ([X], \quad) \end{array} \right]$$

Now the question is this: is it possible and desirable to derive (87a) from (90) in a way parallel to the derivation of (87b, c) from (88)? I believe this is the question one of the reviewers had in mind when he/she wrote in the comments:

There are some formal niceties to be dealt with, for example, whether the causative actually adds a CAUSE function as well on the thematic tier. Economy suggests not; but then some formal convention or rule of construal [...] may have to add CAUSE to preserve well-formedness.

Following this suggestion, let us assume that it is desirable to derive (87a) from (90) because that would permit a considerable simplification of the lexical entry. Continuing to assume that (90) is not well-formed because X's relation to the subordinate Event is not specified, the "convention" that the reviewer alludes to might then be stated as follows, where a "bare subordinate Event" is a subordinate Event that is not an argument of a subordinating function such as FOR, WITH or BY (cf. note 16):

- (91) If X is an Actor and E is a bare subordinate Event, then relate X to E as the Instigator of E.

Call this the Actor Principle. Since Instigator is defined as the first argument of the CAUSE function, (91) would correctly derive (87a) from (90). (91) should probably be regarded as capturing the unmarked situation, i.e., if a Thing is an Actor and its relation to a subordinate Event is not specified by any subordinating function, then in the unmarked case, that relation is one of causation, which seems intuitively plausible. Given this, we can easily unify (88) and (90) into a single schema using the notation "AFF ([X])" introduced earlier (cf. note 15) and regard it as the lexical entry for *faire* and other causative verbs discussed in this paper.

(92) summarizes the way various representations are related:

$$\begin{array}{l}
 (92) \text{ (a) } \left[\begin{array}{c} \text{.....} \\ \text{AFF} ([Y], [Z]) \\ \text{AFF} ([X]) \end{array} \right] \rightarrow \text{ (b) } \left[\begin{array}{c} \text{.....} \\ \text{AFF} ([Y], [Z]) \\ \text{AFF} ([X],) \end{array} \right] \rightarrow \text{ (c) } \left[\begin{array}{c} \text{CAUSE} ([\alpha], [\text{AFF} ([Y], [Z])]) \\ \text{AFF} ([X]^{\alpha},) \end{array} \right] \\
 \downarrow \\
 \text{ (d) } \left[\begin{array}{c} \text{.....} \\ \text{AFF} ([Y], [Z]) \\ \text{AFF} (, [X]) \end{array} \right] \rightarrow \text{ (e) } \left[\begin{array}{c} \text{.....} \\ \text{AFF} ([Y], [Z]^{\beta}) \\ \text{AFF} ([\beta], [X]) \end{array} \right] \\
 \downarrow \\
 \text{ (f) } \left[\begin{array}{c} \text{.....} \\ \text{AFF} ([Y], [Z]) \\ \text{AFF} ([\gamma], [X]) \end{array} \right]^{\gamma}
 \end{array}$$

(92a) represents the essential lexical property of a causative verb such as *faire*, where [Y] is not A-marked (i.e., suppressed), as already mentioned (cf. note 14). It is expanded into either (b) or (d), X receiving the status of

Actor in the former case, the status of Affectee in the latter. X's relation to the subordinate Event is then interpreted either by the Actor Principle or by the Affectee Principle, depending on X's status, so that (b) is converted into (c), the representation of the causative sense, and (d) is converted into (e), the representation of the passive sense. Since (e) specifically requires X (corresponding to the subject) to be related to the Affectee of the subordinate Event, the passive interpretation of this construction would display the inclusion effect. By contrast, (c) does not require the subject to be related to any participant in the subordinate Event, which makes the causative interpretation of this construction free from the inclusion effect. This explains the asymmetry in interpretive possibilities shown in (69).

The indirect passive construction in Japanese starts with a structure essentially like (d), to which the Affectee Principle may of course apply, deriving (e). This explains the apparent constructional mismatch, i.e., the fact that the *causative* construction in French and other languages sometimes correspond to the *passive* construction in Japanese. As noted, there are passives in Japanese that are free from the inclusion effect. The semantic representation of this type of passive given in (f) can be obtained only if the language has the option stated in (89). We leave open whether the notion "affected by the Event," encoded in (f) by the γ -binding, should also be encoded in a similar fashion in the representation of the adversative *on* construction shown in (73), or should instead be regarded as being contained in the meaning of the subordinating function WITH (or something similar). But either way, (f) and (73b) are similar enough to capture the well-known semantic similarity between the adversative passive and adversative *on* constructions.

There are many questions that we cannot answer at present or did not even raise in this paper. The most fundamental question that remains to be answered is the precise theoretical status of the Actor Principle and the Affectee Principle. Since these are virtually complementary to each other, dealing with the Actor-Event relation and the Affectee-Event relation, respectively, we should perhaps state them as two components of a single principle or generalization, in the following manner, for example:

(93) *Affectedness Principle:*

If *X* is an argument of the main AFF function and its relation to a subordinate Event *E* is not specified, then

- a. relate *X* to *E* as the Instigator of *E*, if *X* is Actor
- b. relate *X* to the Affectee of *E*, if *X* is Affectee.

We certainly need to refine this intuitive statement, checking its empirical validity against the whole range of proposed or possible conceptual structures, and then we must clarify its theoretical status, deriving it from some general principle of language or cognition, which, however, we have to leave for future research.

Finally, as an example of a question that we did not even raise in this paper, though it is directly relevant to our discussion, consider the so-called “adversative causative” construction in Japanese, which, in a sense, describes a passive situation.¹⁹ The following is a typical example of this construction:

- (94) John-wa (ziko-de) kodomo-o sin-ase-ta.
 John-Top (accident-in) child-Acc die-Cause-Pst

This sentence clearly has a non-causative reading. If this use of the causative morpheme is productive and the sense expressed by this construction can be regarded as the “passive sense” in the terms of this paper, then the Japanese causative morpheme *-sase-* would be essentially like French *faire*. Although we certainly need further study here, it seems that the interpretation of the subject in (94) is not that it is *affected* by the event: rather, what is expressed in (94) is something like ‘John regrets the child’s death which he could/should have prevented’. And it seems that the French causatives with the passive sense correspond more closely to the *passive* construction in Japanese than to the *adversative causative* construction. Thus, whereas the French example given in (95a) can naturally be translated into Japanese by using the indirect passive construction, it is impossible to translate it by using the adversative causative construction, as shown in (95b):

- (95) a. Pendant qu’il était dans le coma, Paul s’est fait voler sa montre.
 ‘While he was in a coma, Paul had his watch stolen.’
 b. Pooru-wa konsui-zyootai no aida-ni (dareka-ni)
 Paul-Top coma-state during (somebody-BY)
 tokei-o nusum-{are/*?ase}-ta.
 watch-Acc steal-{Pass/*?Cause}-Pst

So there seems to be another kind of non-causative reading which a causative construction can express, which is most likely to be related to some extension of the well-known *let*-interpretation of causatives, as one of the reviewers noted in a somewhat different context. Again, to characterize the nature of this interpretation and its relation to the passive

interpretation discussed in this paper is a problem which, together with many others, we leave for future research.

NOTES

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¹ There seem to be variations among speakers as to whether or not a given example of the *have*-causative construction such as (4a) permits a passive reading. For example, a sentence like *I had my dog run over (by a car)* was pointed out to me by Susan Fischer at the workshop as an example which can only be interpreted as carrying a causative sense, but William Poser disagreed, for whom it does have a passive reading. I have experienced this type of disagreement many times before, not only among English speakers, but also among speakers of languages such as French, Korean, and Mongolian, to be discussed below. It seems that there is some unknown factor determining the possibility of a passive reading and speakers differ as to whether they are sensitive to it or not. It is not particularly surprising, therefore, if there are speakers who find it difficult to get a passive reading for (4a) or other examples used below.

² There are analyses (see Terada (1990)) in which (5) is regarded as a kind of direct passive, its subject being actually moved from within the D-structure object phrase. For other recent analyses of Japanese passives, see Hasegawa (1988), Miyagawa (1989), Washio (1989–1990) and references cited there. Kitagawa (1991) discusses some very important issues that are directly relevant to the present paper.

³ Passives like those given in (7) are discussed in Song (1967), one of the earliest and most insightful generative studies of Korean grammar. Many of the Korean examples cited in this paper are from Washio (1991).

⁴ For example, Song (1967, 168) says that “only transitive verbs passivize [. . .]” in Korean. (8b) is perfectly acceptable as a causative sentence, however. This state of affairs arises because the phonological shapes of passive and causative morphemes in Korean coincide in many cases. This fact, which is mentioned in every grammar book on Korean, will be very important in the following discussion. Marantz (1985) contains an interesting discussion of this phenomenon, which we hope to discuss in a separate work.

⁵ Assuming, that is, that there is no pragmatic relation between John and Bill in the case of (19c). If there is such a relation, (19c) is reduced to a case like (20a) below, which would then permit a neutral reading. Notice that if we can imagine a context for (19a) such that John does not want his own child to be praised, then (19a) may have an adversative reading. This reading is a little easier to get in (19a) than in (18), probably because of the (somewhat forced) use of *zibun* in (19a), which we can do without here to express that the child is John's. See Washio (1983) for some discussion of the PRO-*zibun* alternation and the semantic effect of *zibun* in such a case.

⁶ So we can almost paraphrase them by using the true passive construction, *Il a été renversé par une voiture/Elle a été arrêtée par la police*, corresponding to (26a) and (26b), respectively. It has been observed, however, that the two constructions display a subtle difference in meaning. See Dubois (1967) and Gross (1968) for discussion.

⁷ As in English (see note 2), there can be variations among speakers here as to whether the examples permit a passive reading or not.

⁸ Instead of (37), we can use the following (or other) examples to make the same point:

- (i) Yengcheli-nun Swunca-eykey {chayk/nwuitongsayng-uy chayk/Kyenghuy-uy chayk/Kyenghuy}-(l)ul ppayas-ki-ess-ta.
 Yengchel-Top Swunca-BY {book/sister-'s book/Kyenghuy-'s book/Kyenghuy}-Acc deprive-Voice-Pst-Plain
 'Yengchel was deprived of {his book/his sister's book/Kyongheuy's book/Kyongheuy} by Swunca.'

These examples can be interpreted as passive, and there seems to be no variation among Korean speakers.

⁹ More specifically, the Baarin dialect of Inner Mongolia (see Washio (1992)). For transliteration, I adopted the system proposed in Binnick (1979).

¹⁰ Masayoshi Shibatani (p.c.) suggested that, in Japanese too, a form like (46b) might be the underlying source of a passive like (43), which would explain why the latter has a neutral reading, a suggestion that deserves serious consideration.

¹¹ There are sporadic hints in the literature at the possible passive meanings carried by the causative sentences. See Poppe (1954) and Ozawa (1979). These and some other works are discussed in Washio (1992).

¹² We must of course explain how the gap following *broyer* in (51b) is created. In particular, we must determine whether or not there is a movement involved (and if there is, whether it is the reflexive clitic itself or an invisible operator (as suggested by John Whitman) that is moved to create the gap). As far as the problems we are discussing are concerned, we can assume any one of these options. See Wehrli (1986) and Zubizarreta (1987), among others, for some relevant discussion.

¹³ The positive/negative distinction is expressed in Jackendoff (1990, 134) as variations in the AFF function (AFF⁺ vs. AFF⁻). Beneficiary is the second argument of AFF⁺ and Undergoer/Patient the second argument of AFF⁻.

Jackendoff further permits the AFF function a feature elaboration [\pm *volitional*], which distinguishes a "willful doer" from "nonwillful doer," so that (61a) in fact stands for two distinct structures, one containing AFF_{+vol}, the other AFF_{-vol} (cf. Jackendoff (1990, 129)). Again, we will ignore this feature of the AFF function in this paper.

¹⁴ We deliberately leave unspecified the precise way in which (62a) and (62b) are linked to syntax because that will crucially depend on the syntactic analysis of the various properties associated with the causative construction such as (59). For example, what is the syntactic category of the infinitival complement in (59) — is it VP or S or something else? Or, how does the order *faire* + V_{inf} arise in (59) — has there been a movement of V_{inf} in the derivation? What is the nature of this *faire* + V_{inf} string — do these verbs form a syntactic constituent? The precise characterization of the syntactic and semantic functions of the clitic *se* is also a problem, as mentioned. Since the literature contains various conflicting claims on these matters, we will simply confine ourselves to the most basic facts about the syntax-semantics correspondence in this construction, viz., the fact that (1) JEAN in (62), under either passive or causative interpretation, is realized as the subject of *faire*, and (2) the Affectee in the subordinate Event, CAR, is realized as the direct object of the complement verb, but (3) the Actor in the subordinate Event, TRUCK, is *not* realized as the complement subject as is generally the case, but as a BY-marked NP that also appears in the ordinary passive construction (cf. Kayne (1975)). (1) is straightforward since in either (62a) or (62b) JEAN is the argument that is highest in the Thematic Hierarchy. (2) is not so straightforward, but if we assume that the infinitival complement is a VP, following Burzio (1986), then CAR is necessarily linked to the direct object. As for (3), note that TRUCK in (62) is not A-marked, which means that it is not an argument in

conceptual structure and as such is not to be linked to syntax at all. In other words, we are following Zubizarreta's (1987) insightful analysis to the effect that the external argument of the infinitive verb is "suppressed" in this construction, exactly as in the passive construction. TRUCK will then be interpreted by some version of Jackendoff's Passive By-Adjunct Rule (see Jackendoff (1990, 179–181) for relevant discussion).

¹⁵ In a different context, Jackendoff (1990, 181) proposes the notation [AFF (<[X] . . .)], which means that "the argument [X] may be either the first argument of AFF or else, if there is no first argument, the second." This is equivalent to the notation AFF ([]) that we adopted. No significant claim is being made by this choice of notation.

¹⁶ In (72b), the Action Tier is attached to the conceptual clause corresponding to *Susan made a picture* by the subordinating function FOR of purpose/intent, so that the Action Tier in this case is a modifier rather than part of the main conceptual clause. Jackendoff derives (72b) by a rule called *Beneficiary NP Adjunct Rule* (see Jackendoff (1990, 196, 281)). Similarly, WITH in (73b) is a subordinating function of accompaniment.

¹⁷ Jackendoff says the choice of the subordinating function WITH is tentative, mentioning a function such as RESULTING-IN as a possible alternative.

¹⁸ An appropriate context in this case would be something like "J'ai essayé de corriger ma femme de la mauvaise habitude de jeter des papiers au feu, mais hier soir . . ." (I've been trying to cure my wife of her bad habit of throwing papers on the fire, but last night . . .).

¹⁹ As Shigeru Miyagawa pointed out at the workshop. See Oehrle and Nishio (1981) for an important discussion of this construction.

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Institute of Modern Languages and Cultures
University of Tsukuba
1-1-1 Tennodai
Tsukuba, Ibaraki 305
Japan