

Lexical Operations on Passivization

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1 Introduction

A study of passivization has mainly focused on the syntactic mechanisms like the trigger of movement, feature checking, and the locality of movement. A closer survey shows, however, that there is another type of passivization, which is called lexical passivization. Different from syntactic ones, lexical passives have an interesting property: they are used as passive verbs without a passive morpheme *rare-*.

The aim of this paper is to provide accounts of the characteristics of Japanese lexical passivization. Differences in syntactic and lexical operations can also be observed in psychological predicates between English and Japanese. It will be shown that the same kind of lexicalization is found in Korean passivization and Hebrew conjugation called *binyan* (or *binyanim*), and further that Japanese lexical passivization is explained in the same way as Romance psychological and reflexive phenomena. I will claim that lexical verbs are middles in that they show less agentivity than syntactic passive verbs but more agentivity than intransitive verbs. The meaning of lexical passive is encoded as a zero-morpheme in the sense of Pesetsky (1995) into the verbal stem.

The paper is organized as follows: Section 2 reviews the basic explanation of the syntactic formation of passivization in Generative Grammar. Section 3 discusses two types of passivization in Japanese and Korean. It will be shown, further, that lexical passivization is closely related

to syntactic operations observed in the Hebrew *binyan* system. Section 4 argues that there is a similar type of correspondence in psychological predicates between English and Japanese. Section 5 discusses the similarity between Japanese lexical passives and Romance psychological predicates by the notion of zero-morphemes. Section 6 is a conclusion.

2 Passivization in Generative Grammar

In light of generative grammar, there are several steps that need to be taken in forming passive sentences in English. First, it is obvious that passivization applies to a transitive clause: the underlying object is promoted to subject position. Second the original agent is demoted and optionally appears in a *by*-phrase, which is added to the right-edge of the sentence. Third, the verb form is changed into the past participle (e. g. *-en*) with a form of *be* inserted before it.

- | | | | |
|-----|----|---|---------|
| (1) | a. | NP ₁ - V-NP ₂ | Active |
| | b. | NP ₂ be V-en (by NP ₁) | Passive |

In his *Lectures on Government and Binding (LGB)* (1981), Chomsky argues that the motivation of movement in the passive construction is derived from its two properties:

- | | | |
|-----|----|--|
| (2) | a. | the external argument role is absorbed |
| | b. | accusative Case is not assigned to the internal argument |

Raising of the direct object is triggered by the Case Filter, which states that all overt NPs must be marked for Case.¹ In case of direct passives (i. e. passivization of the direct object), the passive particle *-en* deprives the verb of assigning object Case to its complement. Therefore, it must move to the proper Case position (i. e. [Spec, IP]) to avoid the violation of the Case

Filter. The position is empty since the passive predicate cannot assign a theta-role to the external argument.

- (3) a. \emptyset was killed [the man] D-structure
 b. [The man]_i was killed t_i S-structure²

Let us turn to the Japanese passive construction in which the passive participle *-rare* follows the verbal stem, as illustrated below.

- (4) a. *Sono-otoko-ga musuko-wo korosi-ta* Active
 the-man_{Nom} (his) son_{Acc} kill-PAST
 b. *Musuko-ga (Sono-otoko-ni) koros-are-ta* Passive
 (his-) son_{Nom} (by the-man) kill-PASS-PAST
- (5) a. [\emptyset]_{subj} [*Musuko-wo*]_{obj} *koros-are-ta* D-structure
 b. [*Musuko-ga*]_i t_i *koros-are-ta* S-structure

It is difficult to judge, in light of linear order, whether or not the underlying object is raised to the subject position. The nominative Case-marker *-ga* in (4b) and (5b) illustrates, however, that the underlying object *musuko* is certainly moved to the subject position. The subject in the active sentence is demoted and marked as a *ni*-phrase³ equivalent to a *by*-phrase in English. As is the case with English, this adjunct is often absent. Unlike English, the *ni*-phrase does not appear in the marginal position of the clause. Instead, it is located between the promoted object and the passive predicate.⁴

There is a clear difference between Japanese and English passives: the auxiliary verb like *be* does not appear in the Japanese passive construction. This is partly due to the nature of the passive affix *-rare*, since it functions not only as a passive affix but also an auxiliary verb at the same time. In other words, *-rare* is a complex form including *be* and the passive morpheme *-en*.

3 Lexical Passivization⁵

The passive construction introduced in Section 1 is called the “syntactic passivization” because it is derived by means of moving the direct object into subject position. By contrast, there is another type of passivization, called “lexical passivization”, with interesting clusters of property.

In Chomsky (1981), the term *lexical passives* refers to adjectival passives, in which there is no movement involved. The passive predicate behaves morphologically and syntactically like an adjective.

(6) The window was [_{AP} closed]

The NP in (6) occupies subject position at both D-structure and S-structure. The verbal and the adjectival passive are semantically distinct although they are morphologically uniform; the former denotes action while the latter is linked to stativity. In what follows, however, it will be shown that the term *lexical passives* is not used in the sense of Chomsky (1981), but to refer to another type of passivization.

3.1 Lexical Passives in Japanese

In Japanese, some verbs occur in the passive construction with an active form. Let us call them “lexical passives.” See Table 1 below. The middle of the column is the list of lexical passives, and the words in the right are used in the syntactic passive constructions. As the table shows, almost all verbs have both a lexical passive and an ordinary passive form with *-rare*. In colloquial speech, native speakers of Japanese prefer the former to the latter, since the latter seems redundant and sometimes unnatural.

Table 1: lexical passives

Active	Lexical Passive	Passive
<i>tukamaeru</i>	<i>tukamaru</i>	<i>tukamaerareru</i>
<i>barasu</i>	<i>bareru</i>	<i>barasareru</i>
<i>mazeru</i>	<i>maziru</i>	<i>mazerareru</i>
<i>mitukeru</i>	<i>mitukaru</i>	<i>mitukerareru</i>
<i>osieru</i>	<i>osowaru</i>	<i>osierareru</i>
<i>makasu</i>	<i>makeru</i>	–
<i>fusagu</i>	<i>fusagaru</i>	<i>fusagareru</i>
<i>umeru</i>	<i>umaru</i>	<i>umerareru</i>
<i>tumeru</i>	<i>tumaru</i>	<i>tumerareru</i>
<i>hirogeru</i>	<i>hirogaru</i>	<i>hirogerareru</i>
<i>mageru</i>	<i>magaru</i>	<i>magerareru</i>
<i>azukeru</i>	<i>azukaru</i>	<i>azukerareru</i>
<i>aratameru</i>	<i>aratamaru</i>	<i>aratamerareru</i>

- (7) *mituke-ru* (to find/discover *sb/sth*)
- a. *mituka-ru* [be-found/discovered] simplex
 - b. *mituke-rare-ru* [be] [found/discovered] complex

As for the verb *tukamae-ru* (to arrest sb, transitive), *tukamae* is the verbal stem and the particle *-ru* indicates the present tense (exactly “aspect”). In the syntactic passive, the passive participle *-rare* is attached to the verbal stem and then the particle *-ru* to its rightmost side. However, no participle appears in lexical passives. The only difference between an active form and a lexical passive form is the alternation of the word-internal morpheme (verbal conjugation): from *-e* to *-a*. Then, what is the status of the surface subject of lexical passives? See examples below.

- (8) a. *Keisatu-ga han'nin-wo mituke-ta.*
 the policeman the-criminal find-PAST.
 b. *Han'nin-ga (keisatu-ni) mituka-tta.*
 the-criminal (the policeman-by) find-PASS-PAST.
 'The criminal was found by a policeman'
 c. *Han'nin-ga (keisatu-ni-yotte) mituke-rare-ta.*
 the-criminal (the policeman-by) find-PASS-PAST.
 'The criminal was found by a policeman'

The internal argument of the transitive verb (8a) is located in the leftmost position of its passivized sentence in (8b) and (8c). They are marked *-ga*, indicating that they are in the subject position. It follows that the underlying object is raised to [Spec, TP] in the same way as the syntactic passives do.

- (9) $[_{TP} [_{Han'nin-ga}]_i (keisatu-ni) [_{VP} t_i mituka-] -ta]$

It is interesting to note that when the subject is omitted, the adjunct phrase must appear, instead.

- (10) $\emptyset^* (keisatu-ni) mituka-tta.$
 '∅ was found * (by the policeman)'

3.2 Lexical Passives in Korean

This type of passivization is not peculiar to Japanese. Kim and Maling (1993) and Lee (1999) refer to a similar phenomenon in Korean. Obviously, Korean has ordinary syntactic passivization where a passive participle *-oss'da* is attached to the right of a verbal stem by which the internal argument moves into subject position. On the other hand, the lexical passive construction consists of a Chinese noun followed by a Korean functional verb. See below.

- (11) *gu'sog* (= attack [noun], (*kougeki*))
 a. *gu'sog-ha'da* to attack sb/sth (*kougeki-suru*)
 b. *gu'sog-doi'da* to be attacked (*kougeki-wo ukeru*)

The word *gu'sog* is a Sino-oriented noun meaning “attack”. Adding a light verb *-hada* to it derives a transitive verb, while suffixing another verb *-doi'da*⁶ produces a passive one. As the gloss in (12) shows, *-doi'da* can be put into *-ukeru* or *-au* in Japanese, and the both correspond to the English word “receive” or “encounter.”

- | | Active | Passive |
|----------|---------------|--------------------|
| (12) Ko. | <i>-ha'da</i> | <i>-doi'da</i> |
| Ja. | <i>-suru</i> | <i>-ukeru, -au</i> |

Nevertheless, Korean does not have an alternation of transitive verbs and lexical passives like *mitsukeru-mitsukaru* found in Japanese. (11) and (12) are examples of compounds; therefore, I will leave the matter open here, since my main discussion is focused on the internal structure of a simple predicate.

3.3 Hebrew Verb Conjugation

In common with other Semitic words, Hebrew words consist of three or four consonants in their basic form. Many words are derived from the single roots by changing vowels. Seven derivation patterns used in Hebrew verbs are called *binyan*. Verb conjugation plays an important role especially in voice and valency. More precisely, the formation from active to passive can be done by vowel alternation. The operations of so-called *pi'el*, *pu'al*, and *hitpa'el* decrease the valence of verbs. For example, the *pu'al* means that the verbs *u* and *a* are inserted into a consonant root to form a passive sentence.

- (13) a. *le-bbl* (to confuse)
 b. *me. vulbal* (to be confused)

- (14) a. *le-lbsb* (to dress)
 b. *bit. labesb* (to dress oneself)

In (13), *me. vulbal* is derived from (13a), the infinitive form by adding vowels *u* and *a* into the verbal root *bbl* to make a passive meaning. In (14) the *hiipa'el* is employed. (14b), a reflexive form of (14a), is formed by adding a prefix *bit-* and vowels *a* and *e* into the verbal root.

3.4 Summary

We have seen that the alternation of voice (or passivization) can be realized by not only syntactic operations but lexical operations. In the following sections, I will discuss what lexical passive verbs are like.

4 Passive as an Intransitive Predicate

As mentioned in Section 1, the term *lexical passives* in Chomsky (1981) refers to adjectival passives, in which there is no movement involved in syntax, and it shares some properties with an adjective. On the other hand, *lexical passives* discussed here is slightly different, in that the original object undergoes movement into subject position.

Lexical passive predicates take a single argument; that is to say, they are “derived intransitive verbs”. It has been assumed in generative grammar (cf. Burzio (1986)) that intransitive predicates are divided into unaccusative and unergative verbs. Comparing them with lexical passive predicates, I will show that the internal structure of Japanese lexical passives are similar to Romance reflexive verbs.

4.1 Are Lexical Verbs are Unaccusative?

Some verbs are ambitransitive occurring in both the transitive and the intransitive sentence. However, (16) illustrates that not all verbs can permit this option. Such verbs are limited to verbs of change of state/location, to

which most of unaccusative verbs belong. The sentences in (15) entail that the shape of the window undergoes a change, while ‘English’ in (16) is never affected by the act of speaking.

- (15) a. I broke the window.
 b. The window_i broke t_i.
- (16) They speak English in Singapore.
 a. *English_i speaks t_i in Singapore.
 b. English_i is spoken t_i in Singapore.

The theme argument (*window*) in (15), originally generated in the complement position of V, moves into subject position to get nominative Case checked because unaccusative verbs cannot assign accusative Case to its complement.

Consider the Japanese unaccusative construction. As (17b) shows, the surface subject is derived from the complement position in the same fashion above. Note that this operation is analogous to that of the passive construction. Unlike passives, however, unaccusative verbs cannot cooccur with *ni*-phrase, since they lack agentivity.

- (17) a. [_{TP} *pro* [_{VP} *fune-wo sizumeta*]] (*pro* sank the ship)
 b. [_{TP} *fune-ga*_i [_{VP}t_i *sizunda*]] (the ship sank)
 c. * [_{TP} *fune-ga (teki-ni)* [_{VP}t_i *sizunda*]] (... sank by an enemy)

Their semantic distinctions become clearer when we consider their translation⁷ into English: Japanese unaccusative verbs are translated into their English counterpart with an active form, whereas the translation of lexical passive predicates into English must be expressed in a passive form. The presence of agentivity yields another difference. It is argued that unaccusative verbs are stative. Lexical passives denote action by someone (See (18)). These indicate that they are identical superficially but greatly different in their

semantic structure. In (18), one might claim that the sentences are incompatible with *ni* or *niyotte* phrases. However, the schedule (*bidori*) and contract (*keiyaku*) cannot be determined without someone's decision. This means that these sentences implies agentivity of lexical passive verbs.

- (18) a. *Hidori-ga kimaru.*
 "The schedule has been determined"
 b. *Keiyaku-ga aratamaru.*
 "Our contract has been renewed"

4.2 Are Lexical Verbs are Unergatives?

Although unergative and unaccusative verbs are both one-place predicators, they are different from each other in two respects. One difference is that the surface subject of unergatives implies volition and agentivity. The other is, deduced from the first one, that the surface subject should be an external argument, and thus, it is base-generated in [Spec, TP].

As seen before, the subject of lexical passives is a derived subject. In addition, neither agentivity nor volition is involved in the subject of the lexical passive. Rather, it is affected by an external causer. It follows that lexical passive predicates are not unergative verbs, either.

4.3 Similarities to Psychological Predicates

It has been shown that English passive formation requires a verb with a past participle and a *be*-verb, whereas Japanese lexical passive verbs are expressed in an active form. Interestingly, the same type of correspondence can be found in psychological predicates. In general, verbs of emotion in English appear in a passive form of the subject-experiencer predicate construction. Such verbs are usually expressed in an active form in Japanese.

- (19) a. John was surprised at the news.

- b. John was bothered from a serious illness
 (20) a. *John-ga sono sirase-ni odoroiita/*odorokasareta.*
 b. *John-ga omoi byouki-ni nayandeiru/? nayamasareta.*

This does not mean that Japanese psych-verbs do not have a passive form. The predicate must be expressed in a passive form when a sentence has an agent adjunct.

- (21) *John-ga tomodachi-ni odorok-as-are-ta.*
 John_{NOM} friends-by surprise-CAUS-PASS-PAST.

Table 2: Psychological Predicates

Japanese	English
<i>kurusimu</i>	<i>be-suffered</i>
<i>yorokobu</i>	<i>be-pleased</i>
<i>odoroku</i>	<i>be-surprised</i>
<i>nayamu</i>	<i>be-worried</i>
<i>kiniyamu</i>	<i>be-worried</i>
<i>fuangaru</i>	<i>be-worried</i>
<i>kowagaru</i>	<i>be-threatened/fear</i>
<i>manzoku-suru</i>	<i>be-satisfied</i>

Table 2 shows some examples of Japanese psych-verbs.⁸ Interestingly, this contrast can be seen in English and Romance languages like Spanish. The examples below are not adjectival but verbal passives.

- (22) a. The door is closed at eight o'clock.
 b. $[_{TP} \emptyset [_i [_i \textit{Se cierra}], [[_{VP} t_i \textit{la puerta}] \textit{a las ocho}]]]$ ⁹
- (23) a. She was surprised that you were coming

- b. $[_{TP} \text{Ella} [_r [_i \text{ se sorprendió}_i] [_{VP} t_i [_{CP} \text{ de que llegaras}]]]]$

In Spanish, there are two verbs corresponding to ‘to close’: *cerrar* and *cerrarse*. The former is a pure transitive, while the latter functions as an intransitive, which is made of an infinitival form *cerrar* ‘to close’ and a reflexive clitic *se*,¹⁰ which plays an important role here.

Why does such correspondence occur in different predicates? Passivization and psychological predication are realized in the same fashion in those languages although each language employs a specific marker for them.¹¹

- (24) a. Japanese, Hebrew verb conjugation
 b. English passive morphemes
 c. Spanish object clitics

5 Discussion

5.1 Lexical Passive Verbs

My claim is that Japanese lexical passives and psychological predicates are semantically analogous. They belong to a type of middle verbs,¹² which are intrinsically reflexive in that the event expressed by the verb is directed to the subject (Hosoe (1928) for Japanese¹³ and Babcock (1970) for Spanish). Another claim is that Japanese lexical passives are similar to Romance psych-verbs in that they have a similar morpheme in their internal structure. This view is reasonable because Romance languages generally employ object clitics in both psychological and reflexive predicates.

Now consider the internal structure of Japanese lexical passive predicates.

- (25) a. transitive
 $[[[_{mituk}] e] ru]$
 b. lexical passive
 $[[[_{mituk}] a] PASS] ru]$

In (25a), a transitive marker *-e* and an aspectual morpheme *-ru* are attached to the verbal stem *mituk*. In (25b), on the other hand, an intransitive marker *-a*, the zero morpheme PASS in the sense of Pesetsky (1995), and an aspectual marker *-ru* are attached to the stem *mituk*. What is the difference between *-a* and PASS? Why should we postulate the zero-morpheme for the construction? The affix *-a* only changes transitivity and does not have any effect on voice.¹⁴ In (26), *-a* is not relevant to passive, but taken to be an inchoative.

- (26) a. *atatam. e. ru* (to warm; transitive)
 b. *atatam. a. ru* (get warm; intransitive)
 c. [[*atatam*] *a*] *ru*]

Moreover, the morpheme *-a* sometimes works as a transitive marker.¹⁵ This is an important reason to assume that another morpheme makes an effect on passive meaning. On the other hand, PASS is assumed to change voice of the sentence like Spanish reflexive clitics, as in (27).

- (27) [[*cerrar*] *se*]

Pesetsky (1995) claims that zero morphemes should obey Myers's (1984) generalization.

- (28) Myers's Generalization:
 Zero-derived words do not permit the affixation of further derivational morphemes.

There is good evidence in favor of (28). (29) shows that only transitive verbs can be causativized. This is because that *-sase* is attached to the preceding morpheme in (29a), while it is blocked by the affixation of PASS in (29b).

- (29) a. [[[[*mituk*] *e*] *sase*] *ru*]
 stem + transitive + causative + aspect
 b. *[[[[[[*mituk*] *a*] PASS] *sase*] *ru*]
 stem + transitive + causative + passive + aspect

Note that the affix *-ru* can attach to PASS after the affixation of the zero morpheme, as in [[[[*mituk*] *a*] \emptyset] *ru*]. It is not inconsistent with Myers's generalization, however. The morpheme *-ru*, which is an aspectual affix, is base-generated not in V^0 but T^0 and is attached by a syntactic operation. His generalization is effective only in morphology.

The similarity of Japanese lexical passives to Romance psychological/reflexive verbs is further supported by their meanings. It is argued that the Romance reflexive corresponds to the middle voice in Greek (cf. Dixon and Aikhenvald (2000) and Babcock (1970)). Babcock (1970) claims that "an accepted definition of the middle is 'action by the subject' or 'for the subject'." It is indeed that three types of verb involve an implicit argument to cause an event depicted by the verb. Consider (30).

- (30) *Han'ning-ga tukama-tta.*
 the-criminal_{NOM} arrest-PASS-PAST

The arrest of the criminal did not happen spontaneously, but he/she was caught by an implicit argument. In this respect, lexical passive verbs are middles in that they show less agentivity than syntactic passive verbs but more agentivity than intransitive verbs.¹⁶

5.2 Japanese Psych-Verbs

Finally consider Japanese psychological verbs. See (31). The left column contains psychological predicates while the right one indicates causative types. The situation is rather complicated because the causative verbs in (31a) and (31b) seem to be derived but verbs in (31c) and (31d) seem to be derived.

- (31)
- | | non-causative | causative |
|----|------------------|-------------------|
| a. | [[[odorok] u] | [[[odorok] a] su] |
| b. | [[[nayam] u] | [[[nayam] a] su] |
| c. | [[[i] e] ru] | [[[i] ya] su] |
| d. | [[[kujik] e] ru] | [[kujik] u] |

It cannot be said that, unlike lexical passive verbs, these verbs carry a zero-morpheme in their internal structure. According to Hosoe (1928), however, these psychological verbs were originally spontaneous verbs,¹⁷ and then developed into so-called *chuso*, in the sense that the event expressed by the verb is directed to the subject (not to the object). He argues further that verbs with weak conjugation can express middle meanings, which could be a piece of weak evidence for the claim that psych-verbs are middle.

6 Summary

We are now in a position to say that Japanese lexical passive constructions bear closer resemblance to Romance reflexive constructions than syntactic passive constructions, on the assumption that they belong to a broader sense of middle verbs. It has been shown that Japanese lexical passive verbs differ from unaccusatives and unergatives. Rather, they are semantically close to middle/reflexive verbs. Accordingly, it can be said that the Japanese lexical passive undergoes a mediopassive transformation. The present discussion is a tentative theory, so calls for further consideration. Specifically, we have to clarify how we can tell syntactic passives from lexical passives, and provide another piece of evidence for a zero morpheme. Finally, the reason why such devices are differently employed is a further topic to be explored.

Notes

¹ In Chomsky (1995), the trigger of the movement can be attributed to

feature-checking.

² As known, strong features should be checked before Spell-out in Chomsky (1995).

³ The agent is marked “*ni-yotte*” in Japanese passivization. The replacement of *ni* by *ni-yotte* does not bring about a striking difference in meaning between them. Nevertheless, they cannot be exchanged by each other in passive of adversative (to suffer), a kind of indirect passive, which is inconsistent with agentivity.

- i) a. *Kanojyo-ga Musuko-ni sin-are-ta.*
 She._{Nom} her-son-by die-pass.-past
 b. **Kanojyo-ga Musuko-ni-yotte sin-are-ta.*
 She._{Nom} her-son-by die-pass.-past

This contrast might indicate that *ni-yotte* implies agentivity more clearly than *ni*.

⁴ The syntactic status of the *ni*-phrase is controversial, in that *ni* is considered as a dative Case marker and a postposition. In addition, there is little agreement as to the position where the *ni*-phrase is adjoined.

⁵ I will use the term “lexical passive” for some Japanese predicates, although they are totally different from those discussed in Chomsky (1981). It is because some Korean linguists (see 3.2) have already used the term for a similar construction and a number of Japanese grammarians regard the present construction as “*goi-teki*” meaning “lexical” or “lexicalized”.

⁶ There is another morpheme *-dang ‘ba’ da* which means that the subject has to deal with something painful or unpleasant; that is to say, adversative passive (*meiwaku-no ukemi*).

⁷ One reviewer claims that translation should not be a piece of evidence for the present discussion. What I would like to say here, however, is not a matter of translation. “Translations” here means a direct corresponding expressions: Japanese has UNMARKED EXPRESSIONS equivalent to English expressions.

⁸ *Manzoku-suru* is a complex predicate composed of a Sino-oriented noun (*manzoku*; satisfaction) and a light verb *-suru*.

⁹ Here, I do not care about the reason why the logical subject stays in situ.

¹⁰ In Spanish passivization, of course, we use the verb *ser* (= *be*) and a past participle *-ado* or *-ido*, depending on the ending of the verbal stem. The agent is usually introduced by *por*.

¹¹ Hebrew is similar to Japanese in this respect, as mentioned in 3.3.

¹² What is the middle voice is a difficult problem since the range of the

middle voice varies among languages. In some languages, for example, middle verbs are expressed in the same syntactic way as reflexive verbs. However, they are clearly distinguished in English. Therefore, some properties of middle verbs in one language may not be found in another language.

¹³ See Teramura (1982), Noda (1991), and Jacobsen (1992) for a study of the Japanese voice system.

¹⁴ The morpheme *-a* sometimes works as a transitive marker.

¹⁵ The second morpheme *-a* in *mak. a. s* (to beat *sb/sth*) certainly functions as a transitive marker while *-e* in *mak. e. r* (to be lost) is an intransitive marker.

¹⁶ A serious problem occurs in English middle verbs. As well-known, there must be an understood person who cuts something with the knife in (ia), and (ib) implies that someone offers a bribe to bureaucrats.

- i) a. This knife cuts well.
- b. Bureaucrats bribe easily.

Nevertheless, they do not appear in a passive form, contrary to our expectation. English has a more complicated system in that psychological predicates appear in a passive form while reflexive and middle verbs occur in an intransitive form. It will take more time to integrate these phenomenon into the present discussion. So, I will leave the matter open here.

¹⁷ The term 'spontaneous' is called *Jibatsu doshi* in the field of *Kokugo-gaku*.

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Synopsis

Lexical Operations on Passivization

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This paper is a descriptive study of Japanese lexical passivization. First, it will be shown that there are two types of passivization in Japanese. One is traditionally known as syntactic passivization. The other is passivization in which only lexical operations are required. I will point out that this phenomenon, also observed in Korean, is analogous to the *binyan* system in Hebrew, which plays an important role in voice and valency alternation. Therefore, lexical passivization is not peculiar to Japanese grammar, but it falls on the system of Universal Grammar. Next, I will discuss similarities between lexical passive verbs and psych-verbs and propose that they belong to middle verbs in the sense of Hosoe (1928) and Babcock (1970).