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# On the Japanese perceptual *suru* construction<sup>1</sup>

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It is well known that in English, the human experience of perception is widely expressed in the linguistic pattern using the verb *have*, and a similar situation is found in various European languages including Dutch, German, Italian, Spanish, and Polish. Contrary to this, in Japanese, sentences expressing perception with a possession verb corresponding to *have* are usually unnatural or, even when such sentences are accepted, they are marked. Instead, our perceptual experience is usually described in Japanese by a topic construction using the verb *suru*, corresponding to the English *do*. This paper theoretically explores how perceptual experience is construed in the Japanese perceptual *suru* construction by referring to the ideas of Cognitive Grammar. In conclusion, the paper proposes the view that many European languages, including English, generally conceptualize perceptual experience as the object's possession of perceptual information, whereas Japanese interprets perceptual experience as an internal emergence of perceptual information obtained when the perceptual subject interacts with the object.

## 1. Introduction

Identifying the reality of perception, namely, the phenomenon of obtaining information from the environment through the five senses, is an important issue

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for deepening our understanding of how humans form cognition of the world. In recent years, research has been actively conducted to reveal cultural differences in the conceptualization of perception by analyzing the linguistic representations of perception, incorporating findings from psychology and cognitive science (Majid and Levinson 2011; Caballero and Paradis 2015; Majid et al. 2018, etc.).

Many linguistic studies on perception have focused on the codability of each perceptual modality, i.e., how information captured by different perceptual modalities is verbalized, the productivity of expressions for information captured by each modality, and the hierarchy of sensory modalities (e.g. San Roque et al. 2015; Viberg 2019; Majid 2021).<sup>2</sup> However, when we look around various languages, we find that the mechanisms of how they describe perceptual experience differ from language to language, and behind these differences seem to lie differences in how they view their sensory experience. In this paper, I introduce the Japanese perceptual *suru* construction (cf. Kageyama 2021), which uses the verb *suru*, corresponding to the English *do*, to express the attribute of an object or some perceptual experience, and discuss the cognitive foundations that contribute to its formation.

In the following section, I will give an overview of perceptual expressions in English and Japanese to introduce the Japanese perceptual *suru* construction. In Section 3, I will show the unique behavior of the construction in question. Section 4 will discuss the foundations of perceptual *suru* construction, by referring to the discussion of the English *have* construction in Cognitive Grammar. In conclusion, Section 5 will argue that the perceptual *suru* construction is an expression in which the subject of the perceptual experience subjectively perceives and describes the arising of perceptual information in their inner mind.

## 2. Basic perceptual expressions in English and the mystery of the Japanese perceptual *suru* construction

First of all, let us look at some basic perceptual expressions in English in Figure 1, which is a simplified version of the list of English perceptual verbs given in Viberg (2019).<sup>3</sup> According to Viberg, each expression placed under the headings of Activity and Experience in this Figure are both Experiencer-based perceptual expressions, in which the Experiencer is taken as the obligatory subject. These expressions indicate that the subject of the perception explores the object or

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<sup>2</sup> Hartman and Paradis (2023) focus on the issue of how sensory perceptual expressions are used in conversation. Their efforts provide an important insight into the future of perception research.

<sup>3</sup> Although Viberg also lists “sensory verbs” including shine, crack, tickle, etc., these are not directly relevant to the discussion here, so I will not refer to them.

obtains perceptual information as a result of the exploration. On the contrary, sensory copulas are Phenomenon-based perceptual expressions, in which the target of a perceptual experience taken as the subject. Here, perceptual evaluations of the objects are described by verbs associated with the five perceptions.

<b>Sense modality</b>	<b>Activity</b>	<b>Experience</b>	<b>Sensory copulas</b>
<b>SIGHT</b>	look at	see	look
<b>HEARING</b>	listen to	hear	sound
<b>TOUCH</b>	feel, touch	feel	feel
<b>TASTE</b>	taste	taste	taste
<b>SMELL</b>	smell (at), sniff	smell	smell

Figure 1. A simplified list of basic perception verbs in English

In relation to these expressions, I would like to focus here on the type of English sentence as shown in (1), in which the verb *have* is used to express the information associated with the object.

- (1) a. This dress has a bright color.
- b. This instrument has a good sound.
- c. This towel has a smooth touch.
- d. This fruit has a sour taste.
- e. This flower has a sweet smell.

These sentences may not be seen as genuine sensory expressions, but they are semantically similar to the sentences listed in (2) and represent some kind of perceptual information.

- (2) a. This dress looks bright.
- b. This instrument sounds good.

- c. This towel feels smooth.
- d. This fruit tastes sour.
- e. This flower smells sweet.

In this way, the use of the possession verb is a general way of representing the perception of all five sensory modalities in English. This seems to be true for several European languages other than English.

Contrary to this, in Japanese, when considering a general expression that covers perceptual experience of all five modalities, the use of possession verb is quite unnatural or in most cases even inappropriate. If the English sentences shown in (1) were translated into Japanese sentences using possessive verbs, none of them would be natural. See example (3).

- (3) a. \**Kono doresu wa akarui iro o motsu.*  
this dress TOP bright color ACC have
- b. \**Kono gakki wa yoi oto o motsu.*  
this instrument TOP good sound ACC have
- c. \**Kono taoru wa yawarakai tezawari o motsu.*  
this towel TOP smooth touch ACC have
- d. \**Kono kudamono wa suppai aji o motsu.*  
this fruit TOP sour taste ACC have
- e. \**Kono hana wa amai nioi o motsu.*  
this flower TOP sweet smell ACC have

Although these sentences may be used in very limited cases to emphasize the characteristics of the subject, they are not usually considered natural.<sup>4</sup>

How, then, is the state or attribute of the entity described in Japanese? In such cases, our perceptual experience is generally verbalized with the verb *suru*, corresponding to *do* in English, although it is impossible to describe visual perception in this type of expression.<sup>5</sup> You will see this in (4).

- (4) a. \**Kono doresu wa akarui iro ga suru.*  
this dress TOP bright color NOM do

<sup>4</sup> Furthermore, in Japanese, we cannot find a set of verbs that exactly correspond to the English sensory copulas. There are two verbs similar to the sensory copula for sight and hearing: *mieru* (look) and *kikoeru* (sound), but no copula like expression for olfactory, gustatory, or tactile perception.

<sup>5</sup> As far as its form is concerned, this perceptual *suru* sentence can be called the *ga suru* construction. This paper focuses on the semantic aspect of this construction, in which *suru* expresses the reception of perception rather than action or activity, so calls this pattern the perceptual *suru* construction here.

- b. *Kono gakki wa yoi oto ga suru.*  
 this instrument TOP good sound TOP do  
 Lit. This instrument, a good sound does.  
 ‘This instrument has a good sound.’
- c. *Kono taoru wa yawarakai tezawari ga suru.*  
 this towel TOP smooth touch NOM do  
 Lit. This towel, a smooth touch does.  
 ‘This towel has a smooth touch.’
- d. *Kono kudamono wa suppai aji ga suru.*  
 this fruit TOP sour taste NOM do  
 Lit. This fruit, a sour taste does.  
 ‘This fruit has a sour taste.’
- e. *Kono hana wa ii nioi ga suru.*  
 this flower TOP good smell NOM do  
 Lit. This flower, a good smell does.  
 ‘This flower has a good smell.’

Thus, in Japanese, our perceptual experience is represented by using the verb *suru*, except in the case of visual perception. In these sentences in the form of *X wa Y ga suru*, *wa* is a postpositional particle that indicates the topic, and the element placed in X is interpreted as the topic of the entire affair being referred to in the sentence. On the other hand, *ga* here is a case marker that refers to the subject, and the element in Y is the subject of the action indicated in the predicate. The verb *suru* describes the performance of an action or the carrying out of an activity. As a result, this *X wa Y ga suru* pattern literally translates to “As for X, Y does.”

Now, the question is why, in Japanese, perceptual information is represented by *suru*, that typically expresses an action or activity itself.<sup>6</sup> To answer this question, I will observe some noteworthy behaviors of Japanese perceptual *suru* sentences in the next section.

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<sup>6</sup> Even in English, the production of perceptual information is sometimes expressed by action verbs, such as seen in “that instrument produces beautiful sound” or “that car is making a loud noise.” Note that these verbs do not represent the action or activity itself, as in the Japanese *suru* or English *do*.

### 3. Observations on the unique behaviors of the Japanese perceptual *suru* sentences

#### 3.1. *The absence of visual suru sentence and the suru sentence for visual impression*

As I suggested earlier, a sentence describing visual information is not possible in the Japanese *suru* construction.

- (4) a. \**Kono doresu wa akarui iro ga suru.*  
       this dress TOP bright color NOM do
- (5) a. \**Kono tsukue wa marui katachi ga suru.*  
       this desk TOP round form NOM do
- b. \**Kono hana wa kirei-na mitame ga suru.*  
           this flower TOP beautiful appearance NOM do

Regarding this phenomenon, notice that the information captured by visual perception has a particularly strong objective character. Let us consider the case of other types of perception. For example, the smell or the taste of something can be interpreted or evaluated differently by different people. For example, I find beer tasty, but some of you would find it bitter and bad. However, in normal situations, what is red looks red to everyone, and what is round looks round to everyone. The Japanese perceptual *suru* expression cannot describe such strongly objective information. In contrast, the sentences in example (6), which refer to an impression of an object, are appropriate because they describe how the experiencer feels about an object.

- (6) a. *Kono doresu wa akarui kanji ga suru.*  
       this dress TOP bright impression NOM do  
       Lit. This dress, bright impression does.  
       ‘This dress looks bright.’
- b. *Kono iro wa atatakai kanji ga suru.*  
       this color TOP warm impression NOM do  
       Lit. This color, warm impression does.  
       ‘This color looks bright.’
- c. *Kono gohho no e wa kurai kanji ga suru.*  
       this Gogh GEN painting TOP dark impression NOM do  
       Lit. This Van Gogh painting, dark impression does.

‘This Van Gogh painting looks dark.’

From this, we can characterize the Japanese perceptual *suru* construction as describing a highly subjective interpretation of an object.

3.2. *Auditory, tactile, gustatory, and olfactory suru sentences that do not indicate the source of the stimulus*

Next, let us see that auditory, tactile, gustatory, and olfactory *suru* sentences can represent the reception of information without indicating the source of the stimulus.

- (7) a. *Daidokoro kara ii nioi ga suru.*  
 kitchen from good smell NOM do  
 Lit. From the kitchen, a good smell does.  
 ‘A good smell comes from the kitchen.’
- b. *Ni-kai kara hen-na oto ga suru.*  
 two-floor from strange sound NOM do  
 Lit. From the second floor, a strange sound does.  
 ‘A strange sound comes from the second floor.’
- c. *Kuchi no naka-de tetsu no aji ga suru.*  
 Mouth GEN inside iron GEN taste NOM do  
 Lit. In the mouth, a taste of iron does.  
 ‘It tastes like iron in the mouth.’
- d. *Senaka ni yawarakai kanshoku ga suru.*  
 back LOC soft feel NOM do  
 Lit. On the back, a soft feel does.  
 ‘I feel a soft feeling on my back.’

These sentences express that the experiencer has received some perceptual information without indicating what is causing the information; Each sentence in example (7) represents a situation where what is releasing the stimulus is not specified.<sup>7</sup> Besides, the following sentences should be further noted.

- (8) a. *Hana ga tsuma-tte nioi ga shi-nai.*  
 nose NOM stuff-CONT smell NOM do-NEG  
 Lit. (My) Nose stuffed up and smell does not do.  
 ‘My nose is stuffed up and I cannot smell anything.’

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<sup>7</sup> As such, these expressions share commonalities with the English sensory copula sentences.

- b. *Shokku no-seide tabemono no aji ga shi-nai.*  
 shock due-to food GEN taste NOM do-NEG  
 Lit. Due to a shock, a taste of food does not do.  
 ‘Because of the psychological shock, I cannot get a taste of food.’

In these, the expression *shi-nai*, the negative form of *suru*, indicates that a smell or sound that is present in reality is not perceived by the speaker; These sentences describe certain smells or sounds that should actually be present are not perceived by the speaker due to the speaker’s mental or physical condition.<sup>8</sup> This indicates that this type of expression essentially describes the experiencers’ inner discovery of perceptual information. From the observation here, we can assume that the experiencer is focusing only on some subjectively captured information in the perceptual *suru* sentences on their auditory, tactile, gustatory, and olfactory experience.

### 3.3. *Suru* sentences for some physiological phenomenon or intuition

In addition to the observations made thus far, I would like to further show that expressions in the form of *ga suru*, which form perceptual *suru* construction, can also be used to describe some physiological phenomenon or intuition, as shown in the following example.

- (9) a. *Hakike ga suru.*  
 nausea NOM do  
 Lit. Nausea does.  
 ‘I feel nauseous.’
- b. *Memai ga suru.*  
 dizziness NOM do  
 Lit. Dizziness does.  
 ‘I feel dizzy.’
- c. *Iyana yokan ga suru.*  
 bad premonition NOM do  
 Lit. A bad premonition does.  
 ‘I have a bad premonition.’

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<sup>8</sup> The expressions “*nioi ga shi-nai*” and “*aji ga shi-nai*” in (8a) and (8b) are the negative forms of “*nioi ga suru*” and “*aji ga suru*,” respectively. “*hana ga tsuma-tte*” in (8a) and “*shokku no-seide*” in (8b) are contextual information that is added to make it easier to imagine the scene being referred to, providing the reason for the inability to smell or taste.

As demonstrated by these, the Japanese *suru* pattern can describe not only perceptual information caused by some object in the outside world, but also some feeling or impression that arises internally for the experiencer. This fact further emphasizes the subjective nature of the perceptual *suru* sentences.

### 3.4. *Summary of this section*

As seen in this section, the Japanese perceptual *suru* construction is considered to be a highly subjective linguistic expression, in which the experiencer directly describes some information as it appears in their mind. Based on the observations so far, let us then examine the cognitive motivation of the perceptual experience assumed behind the perceptual *suru* construction by comparing the case of English perceptual *have* construction with reference to a discussion from the perspective of Cognitive Grammar.

## 4. The cognitive foundation of the Japanese perceptual *suru* construction

### 4.1. *Explanation of the cognitive motivation of perceptual have pattern from the perspective of Cognitive Grammar*

In brief, Cognitive Grammar is a theoretical framework whose basic ideas are presented in Langacker (1987, 1991, 2008, etc.) that attempts to explain the connection between the meaning and structure of language as a reflection of the way in which humans construe the things and events in the world. By taking this approach, we can expect to gain perspective on the workings of cognition that motivate the meaning and structure of our language. Therefore, this approach can be effective to explain the similarities and differences found between languages in terms of their modes of verbalizing a given situation from a cognitive viewpoint.

Regarding the semantic extension of *have*, Langacker (1995) introduces its various uses, which are shown in (10).

- (10) a. Watch out - he has a knife!  
b. I have a chain saw, in case I should ever need one.  
c. She has a substantial income.  
d. He often has migraine headache.  
e. I have brown eyes. (Langacker 1995:64)  
f. They have a lot of armadillos in Texas. (Langacker 1995:73)

In these sentences, several different situations are expressed, such as possession of a physical object in (10a) and (10b), possession of an abstract entity or attribute in (10c) and (10d), or the presence of some object in a certain place in (10e) and (10f). According to Langacker, this variation can be explained as an example of “subjectification,” which is a cognitive phenomenon related to the meaning of various linguistic expressions.<sup>9</sup>

To introduce a clear and concise explanation of this concept, Langacker (1998) states that “Subjectification is the laying bare of conceptualizations which is immanent in the original lexical meanings and in that sense constitute their deepest properties.” More recently, Langacker (2008) has described this as “mental operations inherent in the experiences of a certain kind are used in abstraction from their content and applied to other circumstances.” According to this view, in the sentences in example (10), the relationship “the subject’s referent controls the object’s referent” is read from the sense of physical possession in (10a), and such a control relationship is eventually applied to the interpretation of abstract relationships such as in (10c), and finally (10f), so that *have* is used to describe these different situations. Thus, as for the various usages of *have* in example (10), although the meaning of *have* differs in some way, in all cases *have* is considered to reflect the speakers’ cognition that the referent of the subject exercises a control over the element indicated as the object, which is assumed in the original meaning of *have*.

Although Langacker did not directly refer to the use of *have* for perceptual experience, based on the above-mentioned view, the English perceptual *have* sentences are considered to verbalize the experiencer’s construal that the referent of the subject controls the information indicated by the object. For instance, the sentence “this dress has a bright color” is interpreted as describing the experiencer’s perception that “the dress” in some way controls its “bright color.” In short, the perceptual *have* construction captures and describes a relationship in which the referent of the subject possesses some perceptual information. Here, the speaker, namely the agent of perceptual experience, is described as an observer who objectively captures and describes this relationship.

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<sup>9</sup> Regarding this concept, Langacker (1990) characterized it as “the realignment of some relationship from the objective axis to the subjective axis,” and Langacker (1991) described it as “a semantic shift or extension in which an entity originally construed objectively comes to receive a more subjective construal.” The explanation given in Langacker (1998) and Langacker (2008) reviewed and theoretically elaborated these views.

#### 4.2. *Explanation of the cognitive motivation of perceptual suru construction*

How, then, can we explain the formation of the perceptual *suru* construction in Japanese? As we observed before, sentences in this pattern do not always require a subject of the sentence, and thus they are not necessarily supposed to describe the source of the perceptual information. As an example, in (7a), it is not necessary to specify what the owner of “a good smell” is, but the subject of the perceptual experience only needs to capture the information “a good smell” to make this statement possible.

- (7) a. *Daidokoro kara ii nioi ga suru.*  
'A good smell comes from the kitchen.'

In this way, in this type of *suru* sentence, the element indicated as the topic will be mentioned only when necessary, as the destination to which the perceptual information is to be attributed.

This provides a perspective on the reason why the perceptual *suru* sentences describe perceptual experiences by using the verb *suru*: This type of sentence describes the emergence of perceptual information in the experiencer's mind, and such emergence of information is seen as some kind of movement. In other words, here, perceptual information is not objectively observed as “occurring,” but is “setting in motion” within the perceiver's mind. However, in the case of visual perception, this would not occur because the visual information is considered to be always connected to the object from which the sensory information originates, rather than arising in the mind of the experiencer. In short, information such as color and shape are in most cases objectively perceived as existing in the outside world, making it difficult for the experiencer to interpret them as arising inside the mind, thus the expression of *suru* is not considered valid in this case.

#### 4.3. *Summary of this section*

As we have seen here, in the perceptual *have* construction, perceptual experience is thought to be conceptualized according to the view that the element from which the perceptual information originates controls some perceptual information. This is why the possession verb *have* is used to describe the relation between the subject and its perceptual information in this type of sentence. On the contrary, in the perceptual *suru* construction, the experiencer captures the arising of some perceptual information in their mind, and, only when necessary, attributes such information to the source of the stimulation. Here, the perceptual experience is taken as the arising of perceptual information in the experiencer's mind, and this

emergence of information is subjectively interpreted as some kind of movement. As a result, such an image of a movement is represented by *suru*, a verb that primarily indicates some action or activity. This is the reason *suru* is used to describe our perception in the perceptual *suru* construction. Here, *suru* is seen to have bleached its dynamic meaning, and its meaning of control is considered lost.

## 5. Conclusion

The English perceptual *have* construction and the Japanese perceptual *suru* construction are considered to reflect different ways of conceptualizing perceptual experience. What is important is that the differences between these perceptual expressions is considered to be derived from differences in the cognitive strategies for interpreting perceptual experience. In the former, the relationship in which the referent of the subject controls information related to sight, hearing, touch, taste, and smell is conceptualized, whereas in the latter, the inner occurrence of information about hearing, touch, taste, and smell is considered to be conceptualized subjectively. This may suggest that English and Japanese speakers may experience the phenomenon of perception differently, even though they share the same biologically functional body organs.

I have dealt here only with a limited set of expressions: English perceptual *have* construction and Japanese perceptual *suru* construction. Needless to say, however, there are many other perceptual expressions in both English and Japanese. A comprehensive discussion of the perceptual expressions of each language, taking them into broad scope, will provide further insight into the differences in the conceptualization of perception in these two languages.

One of the most interesting topics is that in English, olfactory, gustatory, and tactile perceptions are represented by sensory copulas, whereas such expressions are not allowed in Japanese. It would be useful to consider this issue from the cognitive viewpoint of how the mental processes that perceive information from the outside world are conceptualized in English and Japanese, respectively. Furthermore, in future studies, it would also be important to look at the differences in the conceptualization of perceptual experience for different perceptual modalities within a given language. For example, I have shown in this paper that in Japanese, among the five modalities of perception, only visual perception is not represented in the form of *X wa Y ga suru*, and this may be due to the fact that visual perception is supported by a different conceptualization strategy than perception in the other modalities. We will find more of these differences by looking at other types of perceptual expressions. This would also apply to English, and if we look at languages other than English and Japanese, we will find a variety

of situations. From this perspective, it would be beneficial to investigate variations in the conceptualization of perception within individual languages, such as English and Japanese, and to conduct cross-linguistic contrast studies based on the results obtained from these studies.

In relation to the discussion in this paper, one of our future tasks is to pay attention to linguistic expressions related to bodily sensations other than those perceived by the five senses. On this topic, Dutch, as an example, has expressions for sensations such as pain with the verb *doen*, corresponding to the English *do*, as well as the Japanese perceptual *suru* pattern. It is interesting to see such expressions in Dutch, a Germanic language that is distant from Japanese both geographically and in origin, similar to those in Japanese, but not found in English. Besides, it is reported that expressions similar to the perceptual *suru* pattern are possible in Turkish and Persian. These are interesting topics for future research.

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