# 'BA' in Japanese Grammar and Communication

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**Abstract.** In this study, I will show that we should admit the dense interaction between human being and his/her environment in order to fully understand the Japanese event expressions, as pointed out by Masayuki Otsuka. More concretely, (i) unlike the traditional view, it is possible to express a single state as an event; (ii) But it is possible only with the support either of two types of strong interaction, exploration or somatics. They are grammaticalized patterns of reportability of experience talked; (iii) Exploration has a further relation to the naturalness of the so-called mirative *TA*. It can be natural to express a thing's property and activity with mirative *TA* as experience. But this is only with the support of exploratory theme; and (iv) The setting of exploratory them can be related with the speaker's position in communication. In problem-solving situation, it is only the person responsible for the problem who can express his/her experience of discovering some state in terms of mirative *TA*.

Keywords: Ba, Japanese grammar, Japanese communication

# 1 Introduction

I am just a grammarian and not so familiar with the biophysical theory of 'ba' advocated by Hiroshi Shimizu. In spite of this I cannot help feeling that my linguistic research shares some of its basic orientations with this theory.

In his critical examination of modern science, Masayuki Otsuka points out that a linguistic theory based on the conception of 'ba' has the following holistic presuppositions, one of which is that the human being is not detached from his/her environment. According to this presupposition there is always dense interaction between the human being and his/her environment. (Otsuka, 2015: ch. 2, sec. 2).

This presupposition can be supported from a descriptive point of view. Based on my research on event expressions in Modern Common Japanese (henceforth Japanese), I will show that significant parts of Japanese grammar and communication are based on interactions between humans and the environment.

# 2 Event Models

It would be better to begin with traditional research on event models. There are many aspects of language that can never be fully understood without taking human cognition into consideration. Linguistic phenomena such as voice, case marking, and markedness, for example, are dependent to a large degree on the event conception of the speakers. In order to explain various aspects of event expressions, two types of event models have been suggested; the energy-based type and the spontaneous type. It would be helpful to briefly outline them here.

# 2.1 Event as an Energy Transfer

The energy-based type of event model is well known, and includes models with names such as "force dynamics" (Talmy, 1985), "causal chain" (Croft, 1991, 1998) and "billiard-ball model"

(Langacker, 1991). According to this energy-based event conception, an event expressed by sentences such as (1a, b), for example, is roughly modeled as an energy transfer, in this case from a female person being talked about to the speaker by hitting, as shown in Figure 1.

(1) a. She hit me.b. I was hit by her.



Figure 1: Energy transfer expressed by (1a, b)

In Figure 1 there are two round circles and an arrow extending from the left circle to the right circle. The left circle represents the female and the right circle represents the speaker. The arrow indicates the energy transfer from the female to the speaker in terms of the hitting of the speaker by the female.

# 2.2 Event as a Spontaneous Change of State

Energy-based event models are of much use for linguistic analysis, but it does not follow that these models always work well with event expressions in every language. Cross-linguistic studies such as Teramura (1976), Ikegami (1981), and Nakagawa (1992) reveal that languages vary from *suru*-languages (i.e. do-languages) on one side to *naru*-languages (i.e. become-languages) on the other side concerning the way they express events. A *suru*-language is a language that is inclined to express an event as an action conducted by some object, whereas a *naru*-language is a language that is apt to express an event as a spontaneous change of state, which cannot be attributed to any object.

According to the previous research cited above, English has a strong tendency towards *suru*-language, although some research (e.g. Hopper, 1995) focusing on natural speech data rather than on idealized English data cast some doubt on that idea. On the contrary Japanese language is positioned much closer to the *naru*-language side. An illustrative example of the difference between *suru*-language and *naru*-language is given in (2).

(2) a. *I have decided to get married*.
b. *Kekkonsuru koto-ni nari-mashi-ta*. get married event-into become-POLITE-PAST "(Lit.) I am to be married."

Both (2a) and (2b) convey the news of the speaker's getting married, but their ways of expressing it differ from each other. Sentence (2a) expresses it as an action of deciding done by the speaker. Sentence (2b) expresses it as a spontaneous change of the speaker's state. English speaking people usually adopt (2a), whereas Japanese people commonly select (2b). This difference of event expression between *suru*-language and *naru*-language is based on a difference of event conception. The nature of events expressed in *suru*-language can be captured successfully in terms of energy-based models. Then how about events expressed in *naru*-languages? Since they have no relation to energy transfer among objects, another type of event model is needed to explain their aspects.

The mold-growth model (*kabihae-moderu*, in Japanese), suggested by Sadanobu (1995, 2000) is an event model of this type. According to this model, an event expressed by sentences such as (2b), for example, is roughly shown in Figure 2.



State in which marriage has been settled

Figure 2: A spontaneous change of state expressed by (2b) [Sadanobu 1995, 2000]

In Figure 2 there are two parallelograms and an arrow extending from the left one to the right one. Each parallelogram represents a state that is relevant to the current topic. The left state is the earlier state in which the plan of the speaker's marriage has not been decided, and the right state is the later state where it has been decided, which is shown by a dotted circle on the right parallelogram. The arrow extending from the earlier state to the later state indicates the spontaneous change of state, which is spontaneous just like a natural growth of mold on a floor where it did not exist earlier. As argued in Sadanobu (1995, 2000), the mold-growth model is useful to explicate many behaviors of *naru*-language sentences that remain unexplained if we adhere only to the energy-based event conception.

# 2.3 Event as an Experienced State

What is common to these two types of event model is that they have a time shift as their essential element. Energy-based models presuppose a time shift from the point in time when the energy is possessed by the source to the point in time when the energy is located at the receiver. The mold-growth model also presupposes a time shift from the earlier state to the later state.

A third event model, newly suggested by me (e.g. Sadanobu 2010), is for events without any time shift. That is to say, a state can be an event (Figure 3).



Figure 3: Event model without time shift

Although this model includes an interaction between the experiencer and his/her environment and it takes some time, the state expressed itself has no time shift. I shall raise just one example of event expressions without time shift. Just as English has locative prepositions such as *in*, *on*, *at*, and *to*, Japanese has several words for marking location. Chief among them are *ni* and *de*. And the marking rule is very simple. The locative marker is determined by whether the subject that exists in the location is a thing or an event.

A thing's location is marked with ni, as is shown in example (3).

(3) a. <i>Niwa-ni</i> garden-ni	<i>ki-ga</i> tree-NOM	<i>aru</i> . exist
b.?? <i>Niwa-de</i>	<i>ki-ga</i>	<i>aru</i> .
garden-de	tree-NOM	exis

"There is a tree in the garden."

When we express the existence of a tree in a garden, we should mark the location noun *niwa* which means garden with ni, not with de. This is because a tree is a thing. Sentence (3b) which marks *niwa* with de is unnatural, as is indicated by a double question mark in front of it.

Conversely, an event's location is marked with de. For example, a party which starts, proceeds, and ends is an event, and its location should be marked with de rather than ni. This is why sentence (4a) is unnatural and (4b) is natural.

(4) a.?? <i>Niwa-ni</i> garden-ni	<i>paatii-ga</i> party-NOM	<i>aru</i> . exist
b. <i>Niwa-de</i>	<i>paatii-ga</i>	<i>aru</i> .
garden-de	party-NOM	exist

"There is a party in the garden."

It is important to note here that states are not included in events. Otherwise, the sentence (5b), which marks garden with de, should be natural, since according to this sentence the garden is a location of a tree's existential state.

(5) = (3) a.	<i>Niwa-ni</i>	ki-ga	<i>aru</i> .
	garden-ni	tree-NOM	exist
b.	?? <i>Niwa-de</i>	<i>ki-ga</i>	<i>aru</i> .
	garden-de	e tree-NOM	exist

"There is a tree in the garden."

In fact this sentence is unnatural, which shows that states are not events in Japanese grammar.

However, this is just in the case of expressions of knowledge. States are events when expressed as experiences. Here is an example (6) from a conversation on a Q&A website.

 (6) rondakai: PS3-ga kekkou urenokotteiru tteiu uwasa-o PS3-NOM considerably remain unsold that rumor-ACC
 kii-ta koto-ga arunndesu-ga, hontou-deshouka? hear-PAST event-NOM exist-but really-Q *Tonai-dewa mita-koto nai-ndesuga.* in Tokyo-LOC see-event noe exist-but

"I heard a rumor that a considerable number of PS3s remain unsold. Is it true? I have never seen one in Tokyo."

puipuihaohao: *kinoo geo-de ari-mashi-ta-yo*. yesterday GEO-de exist-polite-past-I tell you

"I saw one at GEO yesterday."

[URL: http://detail.chiebukuro.yahoo.co.jp/qa/question\_detail/q1010419930]

The English translation of rondakai's question is "I heard a rumor that a considerable number of PS3s remain unsold. Is it true? I have never seen one in Tokyo." In answering this, puipuihaohao brought up his/her experience from yesterday of seeing a PS3 at a shop named GEO, and the shop is marked not with *ni* but with *de*. This is because the existential state of the PS3 game console is an event when expressed as an experience. So our question is: why "states" count as "events" in experiential expressions?

Ernst Mach's self-portrait is of some help to us in this respect (Figure 4).



Figure 4: Ernst Mach's self-portrait [Mach 1906]

Unlike ordinary self-portraits, this portrait does not include the painter's face. Instead, it draws the view from the painter. Strictly speaking, it draws the view from Mach's left eye. In the background of the room we can see Mach's two legs with his shoes stretching out from the bottom to the center of the picture, and on the left side we can see his left arm with a cigarette lifted on an armrest. And the wall seen on the right side is the left side of Mach's nose. Mach drew this picture as his portrait, but I think this can be regarded as an event of experiencing the present state. Our life consists every moment of experienced states like this picture. Every moment we live and experience the present state. Our living and experiencing of states makes them into events. This is why "states" count as "events" in experiential expressions. This is not special to Japanese grammar, and it may be true for many other languages including English.

However, what is more important is that not all experienced states can be expressed as events. For example, the sentence (5b) is not natural as an expression of the experience of

watching a tree in the garden. A state can be expressed as an event only given a strong interaction between experiencer and environment (Figure 5).



Figure 5: Event model without time shift (= Figure 3)

In Figure 5, the interaction between the experiencer and the environment is divided into two parts just for the sake of convenience. One part is the approach from the experiencer to the environment, and the other part is the response from the environment to the experiencer. The upward arrow on the left side of this figure represents the former part, the downward arrow on the right side the latter part. Here I shall introduce two types of strong interaction, "exploration" and "somatics" (Figure 6).



Figure 6: Exploration (left) and somatics (right)

By "exploration" I mean an interaction where the approach from the experiencer to the environment is well motivated. And by "somatics" I mean an interaction where the response from the environment to the experiencer is intense. These two types of interaction allow the speaker to express the experienced state as an event, although their contributions are complementary. Below I will show their contributions one by one.

# 2.4 Exploration

First, I will show that the exploratory interaction allows the speaker to express the experienced state as an event. The more new and mysterious the environment being explored, the easier it is to express the state experienced in the environment as an event. See (7) for an example.

(7) a. PS3-nara Pekin-de ari-mashi-ta-yo.
 PS3-TOP Peking-LOC exist-POLITE-PAST-I tell you
 "There was a PS3 in Peking (and I saw it)."

b.?? *PS3-nara uchi-no oshiire-de ari-mashi-ta-yo*. PS3-TOP my house-GEN cupboard-de exist-POLITE-PAST-I tell you "(Lit.) There was a PS3 in the cupboard of my house (and I saw it)."

Sentence (7a) is natural, since the town of Peking is huge and it is plausible that the speaker explored it. On the other hand, sentence (7b) cannot be taken in the same way, because the

cupboard in the speaker's house is too familiar to the speaker, and therefore it is not natural to express the existence of a PS3 there as an experience of exploration rather than of mere knowledge.

As well as in the case of the locative markers, we can also see the affect of exploration on the naturalness of frequency expressions. See (8) and (9).

- (8) Tani-o nuketeikutoki tokidoki ie-ga a-tta.
   through the valley sometimes house-NOM exist-past
   "There was a house now and then through the valley."
- (9) Sadanobu-toyuu namae-no hito-wa mettani i-nai.
   Sadanobu-QUOT name-GEN person-TOPIC seldom exist
   "There is seldom a man named Sadanobu."

The phenomenon we will focus on here is concerned with words of frequency that actually express spatial distribution rather than frequency itself. For example, when we say (8) "There was a house now and then through the valley" in Japanese or in English, we actually mean "There were houses HERE AND THERE through the valley." The frequency "now and then" is the frequency of experiencing a house in the visual frame of the speaker who went through the valley. Likewise, sentence (9) actually means that there are few people named *Sadanobu*. The frequency "seldom" refers to the frequency of experiencing a man named *Sadanobu* in the visual frame of the speaker who moves around the world. Although my surname is rare even in Japan, there always have been people named Sadanobu. (Otherwise the author of this paper wouldn't exist now.) Similar examples can be easily seen in novels, essays, and so on. Let us examine (10), which is quoted from an essay based on an experience of visiting the U.S.A.

(10) *Shikashi, tamaniwa aishoo-de yobareruno-o* but sometimes nickname-by being called-ACC

*kirau ningen-ga iru-kara chuuigahitsuyooda.* dislike man-NOM exist-since you should take care

"But you should be careful, because some people dislike being called by their nickname (in the U.S.A.)"

[Masahiko Fujiwara, Wakaki Suugakusha-no Amerika, 1977.]

Although the sentence (10) literally comments on the frequency (*tamaniwa*, sometimes) of the existence of people who dislike being called by their nicknames in the U.S.A., actually it means that the number of such people is limited there.

And let us consider the difference of naturalness between (11a) and (11b).

- (11) a. ?? Uchi-no kinjo-wa shocchuu resutoran-ga aru-yo.
  my neighborhood-TOP often restaurant-NOM exist-I tell you "(Lit.) There are often restaurants in my neighborhood."
  "There are many restaurants in my neighborhood."
  - b. *Kono machi-wa, shocchuu resutoran-ga aru-ne.* this town-TOP often restaurant-NOM exist-aren't there "(Lit.) There are often restaurants in this town, aren't there?" "There are many restaurants in this town, aren't there?"

Frequency expressions (*shocchuu* (i.e. often) in the case of (11a,b)) express the frequency of events, not the frequency of states. But the predicate phrase *resutoran-ga aru* expresses the existential state of a restaurant rather than an event. This is why the sentence (11a) is unnatural. What is important here is that the sentence (11b), unlike (11a), is quite natural because of its natural situation of exploring. It is plausible that the town is an unfamiliar place to the speaker and that the speaker is exploring it, by walking around, for example. In other words, the speaker's consciousness of exploring the unknown environment motivates her/him to express the state of the existence of a restaurant as an event. This is why the frequency expression *shocchuu* can co-occur with it naturally in (11b). In the case of (11a), on the contrary, the speaker's neighborhood is generally supposed to be a familiar place to her/him and so it is not natural for the speaker to express the distribution of restaurants in the neighborhood as her/his experience of exploring.

The object to be explored is not limited to physical spaces such as a town. As in the following sentence (12a), we very often explore other people.

- (12) a. Ano kyaku-wa, miteiru-bakari-de chittomo kawa-nai-nee. that customer-TOP watching-only-and at all buy-NEG-TAG Q "That customer is never going to buy anything, only looking, is she?"
  - b.?? *Ie ie, miteiru-bakari-desu-kara.*no no looking-only-COPULA-because
    "(Lit.) No thank you. (I don't want to try anything on) because I am only looking."

Sentence (12a) can be uttered in a secret voice by a clerk to another clerk, at a tailor's shop, for example. Sentence (12b), on the other hand, is unnatural as a response by the customer to the clerk who recommended s/he try on something. As shown by Kikuchi (1983) and Sadanobu (2001), the meaning of *bakari* is event-based. It expresses the monotony of multiple experienced events. The difference of naturalness between (12a) and (12b) can be understood if we accept this idea and pay attention to the difference between self and others. We cannot know what other people are going to do in the same way that we ourselves know what we are going to do, and so we frequently explore other people but seldom explore ourselves. The state of the speaker's looking at products is no more than an event for the speaker himself/herself, but every state of the other person's behavior, like looking at products, can be an event of the speaker's exploration.

# 2.5 Somatics

It is not only exploration that changes an expression of a single state into that of an event. The somatic feature of the responses the speaker receives from her/his environment also changes a state expression into an event expression. The stronger and more intense the response is, the easier it is for the speaker to express the experienced state as an event.

- (13) a. ?? Ano ika-wa sakki-kara tokidoki karada-ga shiroi. that squid-TOP just now-from sometimes body-NOM white "(Lit.) That squid's body is sometimes white."
  - b. *Ano kyaku-wa sakki-kara tokidoki koe-ga ookii* that customer-TOP just now-from sometimes voice-NOM loud "The voice of that customer is loud sometimes."

The word *tokidoki* (i.e. sometimes) in sentence (13a) is a frequency expression. As stated earlier, frequency expressions express the temporal distribution of events, not of states. But the predicate *karada-ga shiroi* (i.e. body is white) in sentence (13a) expresses a state, rather than an event. This is why (13a) is unnatural. In order to make this sentence natural, we must use the verb *shiroku-naru* (i.e. become white). This verb expresses an event, instead of the adjective *shiroi*. On the other hand, sentence (13b) is natural. This is due to the somatic feature of the adjectival predicate *koe-ga ookii* (i.e. loud). Although the adjectives *shiroi* and *ookii* both designate the state of the response the speaker receives from the environment, the latter is more somatic than the former, in that too loud a voice is harmful for many animals with auditory sense, whereas the visual image of the white color is "judged" as such only by highly advanced animals which can differentiate one color from another. This somatic feature of *koe-ga ookii* changes its meaning from just a state of being loud into an event of experiencing a loud voice, so the frequency expression *tokidoki* co-occurs with it naturally in (13b).

The same observation applies to *bakari*-sentences, which expresses the monotony of multiple experienced events.

- (14) a. *Ano ryouri-wa tadamou karai-bakari-de, sukoshimo oishiku-nai.* that dish-TOP tremendously hot-only-and at all delicious NEG "That dish is only tremendously hot, not delicious at all."
  - b.?? Ano ryouri-wa chotto karai-bakari-de, sukoshimo oishiku-nai. that dish-TOP a little hot-only-and at all delicious NEG "(Lit.) That dish is only a little hot, not delicious at all."

Sentences (14a) and (14b) share most of their words, but their adverbs modifying the degree of hotness are different. Their naturalness depends on the degree of hotness expressed. Sentence (14a) includes the adverb *tadamou* (i.e. tremendously), which intensifies the degree of hotness, and this sentence is natural as an expression of the monotonous continuity of the event of experiencing a hot feeling every moment. On the other hand sentence (14b) includes the adverb *chotto* (i.e. a little), which lowers the degree of hotness, and thus this sentence is unnatural.

For locative expressions, it is not as easy as in the case of exploration to show a clear case whose naturalness is affected by the somatic feature of the response, probably due to the inherent vagueness of de among locative, conjunctive, and assertive interpretations. Instead of locative expressions, let us examine here the conditional sentences (15a, b).

(15) a. ??Kore oshi-tara, gamen-ga akai-yo.
this push-if screen-NOM red-I tell you
"(Lit.) If you push this button, the screen will be red."

b. Kore oshi-tara, kimochi-ga ii-yo.
this push-if feeling-NOM good-I tell you
"If you push this button, you will feel fantastic."

Both of the apodoses of (15a, b) have stative predicates (*akai* (be red) in the case of (15a) and *ii* (be good) in the case of (15b)), but their naturalness is not the same. Whereas the sentence (15a) is unnatural as an instruction for a new TV set, for example, sentence (15b) is perfectly natural as an instruction for a new massaging chair. The unnaturalness of (15a) can be understood by the general tendency for an apodosis of a conditional sentence to express an event (there are diverse types of conditional sentences though). The apodosis of (15b), unlike that of (15a), expresses a highly somatic state, which changes this into an event of experiencing a good state.

So, why do exploration and somatics have such power to change an expression of a single state into that of an event?

I think reportability can be considered the cause of this. While talking of experience, other participants may take turns but the speaker role automatically returns to the narrator (Sacks 1992: II, 3-5). As argued by Labov (2001: 66), a talk about an experience must be intriguing and reportable enough to justify this automatic reassignment of the speaker role to the narrator. Of course the notion of reportability varies from one person to another and depends on social situation, age, and other cultural parameters. But it is an intersubjective truth that the more adventurous or stimulating an experience is, the more reportable it tends to be. Exploration and somatics are two factors that contribute to make an experience reportable intersubjectively.

Please note here that what I am talking about is not etiquette or manners in communication but grammar. Of course, in order not to bore other people by talking about our mediocre experiences, it might be called communicative etiquette or manners for us to talk about our own experience in a dramatizing and exaggerated way, so far as objectivity and probity are preserved. But what I am talking about here is quite another matter, since the expressions of experience I raised lack exploration and somatics, such as sentence (5b) *Niwa-de ki-ga aru,* which expresses the experience of watching a tree in the garden. These expressions are not boring, just somewhat unnatural.

At the same time, however, such grammar cannot be independent of this communicative consideration. It can be thought of as the result of grammaticalization of our pursuit of reportability of experience spoken about in everyday communication.

Exploration and somatics further affect the naturalness of experiential expressions. Due to space considerations, I shall omit the part of somatics and concentrate on exploration below.

#### **3** Exploration in Grammar and Discourse

Exploration has a strong relation to the naturalness of expressions using the so-called "mirative" *ta*.

### 3.1 Mirative

Here what I call "mirativity" roughly means surprise. Let me first introduce briefly the history of the particle *ta*'s semantics (Figure 7).



Figure 7: History of ta's semantics [Sadanobu and Malchukov, 2011]

*Ta* originated from *tari*, which signified a result. Then, the mirative meaning and perfect meaning derived from it, and the past meaning derived from the perfect meaning. Such semantic derivations are common throughout languages in the world. However, the root part of this derivation was eroded by another word *teiru*. As a result, *ta* in the main clause nowadays has only two meanings, mirative and past. This polysemy is very rare cross-linguistically. So,

how can mirativity be connected with pastness in the Japanese speakers' mind? Here is my answer (Figure 8).



Figure 8: Connection of mirativity and pastness

The feeling of surprise motivates the speaker to talk of the present state being experienced. However, in the consciousness of living every moment, the present state being experienced (e.g. the state of t2 in Figure 8) turns into an event in the immediate past when it is talked about (i.e. at t3 in Figure 8). This is the way mirativity and pastness are interconnected. Thus the mirative *ta* indicates that the speaker's experience of discovering happened in the immediate past.

Here is an example of a connection between mirativity and pastness from a novel.

(16) Kono otoko-wa hoka-nimo mada myouna kuse-ga aru. Jibun-no mot-teru zeni-o hito-no shiranai-ma-ni ishigake-no ana-ka dokoka-ni kakushite-oite, "Oya, koko-ni zeni-ga at-ta. Koitsu-de ippai nomou."-to itte, hito-ni gochisou-suru kuse – ga aru.

"This man has other strange habits. When no one is looking, he has the odd habit of hiding his own coins between cracks in walls, then saying *Oya, koko-ni zeni-ga at-ta*. (Lit. Oh, there was some money in here.) *Let's go for a drink*, and then treating others to a drink.

[Masuji Ibuse, Ekimaeryokan, 1956-57.]

Here, a bath attendant named Ikuno explains the eccentricities of Takazawa, another attendant. According to Ikuno, Takezawa pretends to discover money between cracks in walls. And as part of this performance he expresses the unexpected existence of money in front of him by using the particle "ta," which usually indicates pastness.

# **3.2 Effect of Explanatory Theme**

The mirative *ta* is not so natural when the speaker expresses not a thing's existence but a thing's property and activity. For example, at the sight of a very slender person, we can say (17a) *A*, *hosoi!* (Oh, s/he is slender!), but we cannot say (17b) *A*, *hosoka-tta!* (Oh, s/he was slender!). However such exceptions are not crucial, since they can be understood if only we

recognize that the information of properties and activities based on the thing's existential information is too complex to ingrain in a moment.

(17) [At the sight of a very slender person]a. *A*, *hosoi*! "Oh, s/he is slender!"b.??*A*, *hosoka-tta*! "Oh, s/he was slender!"

And such exceptions are no longer exceptions in contexts where their information is easier to capture in a moment. For example, let us examine (18), where the speaker was thinking about whether the person about to appear is slender or not.

- (18) [The speaker was thinking about whether the person about to appear is slender or not] a. *A/Hora, hosoi!* "Oh/Yes, (s)he is slender!"
  - b. A/Hora, hosoka-tta! "(Lit.)Oh/Yes, (s)he was slender!"

Under this context we can say *hosoka-tta!* as naturally as *hosoi!*. It does not matter whether the speaker's expectation has come true or not. What is important here is that by thinking about the question of whether the person is slender or not, the speaker was ready to capture the information that came next. Here, I will use the term "exploratory issue" (*tansaku kadai*, in Japanese) to mean an issue like this that is to be solved in terms of exploration.

Exploratory issues resemble "the consciousness of exploration" (*tansaku ishiki*, in Japanese), but they are different from each other. The consciousness of exploration is essential for a person to explore. However mysterious a person's surroundings may be, exploration does not happen if s/he is concentrated on other things and has no consciousness of exploration. By contrast, an exploratory issue is optional for a person to explore. A person can explore a room with an exploratory issue such as "Where is my wallet?", but s/he can explore a room just out of curiosity without any exploratory issue. Although exploratory issues promote the consciousness of exploration, they are not the same.

The example raised above was a property expression, *hosoka-tta!*, but the effect of the exploratory issue is still clearer in the case of activity expressions. It is generally impossible to express the completion of an activity until the activity has come to an end. For example, at the sight of a person who is drinking liquor, (19a) *A*, *nonderu!* (Oh, s/he is drinking!) is natural but (19b) *A*, *non-da!* (Oh, s/he drank!) is unnatural.

(19) [At the sight of a person who is drinking liquor]a. A, nonde-(i)ru! "Oh, s/he is drinking!"b.??A, non-da! "(Lit.)Oh, s/he drank!"

However, *A*, *non-da*! (Oh, s/he drank!) is natural if the person gave up drinking liquor and vowed to pay 10,000 yen to anyone who saw him/her drink.

(20) [At the sight of a person who gave up liquor and vowed to pay 10000 yen to anyone who saw him/her drink]

a. *A*, *nonde-(i)ru!* "Oh, s/he is drinking!"b. *A*, *non-da!* "(Lit.)Oh, s/he drank! (I get money!)"

In this context, an exploratory issue "Is s/he dinking liquor?" is set by the person's vow, which makes sentence (20b) natural.

Note that the speaker does not actually have to remember this exploratory issue every time s/he visits a restaurant or bar. After finding the person drinking, the speaker can activate this exploratory issue *ex post facto*.

#### **3.3 Explanatory Themes in Problem-Solving Communication**

Exploration is related to not only the speaker's cognition but also to the situation of the communication. In a problem-solving situation, whether the speaker can express his/her experience of discovering some state depends heavily on the speaker's position. It is only the person responsible for the problem who can utter his/her experience in terms of the mirative *TA*. For example, let us imagine a group of people in a car that isn't working. They are looking for the cause of this trouble. When they finally find that the car can't move because the handbrake is on, all of them can say (21a) *A, saido bureeki kaka-tteru!* (Oh, the handbrake is on!), but it is only the driver who can say (21b) *A, saido bureeki kaka-tte-ta!* ((Lit.) Oh, the handbrake was on!).

- (21) a. *A, saido bureeki kaka-tteru!* oh handbrake is applied-CONTINUOUS "Oh, the handbrake is on!"
  - b. *A, saido bureeki kaka-tte-ta!* oh handbrake is applied-CONTINUOUS-PAST "(Lit.) Oh, the handbrake was on!"

It is not necessary for the driver himself/herself to have applied the handbrake beforehand. Even if it was not the driver but an agent of the car rental company who applied the handbrake, the driver has the privilege of uttering the mirative *ta*. This privilege of the responsible person can be thought of as the privilege of setting an exploratory issue explicitly.

### 4 Summary

In this paper I showed that we should recognize the dense interaction between human beings and their environment in order to fully understand Japanese event expressions.

Specifically, (i) unlike the traditional view, it is possible to express a single state as an event; (ii) but it is possible only with the support either of two types of strong interaction: exploration or somatics. These are grammaticalized patterns of reportability of spoken experience; (iii) exploration has a further relation to the naturalness of the mirative ta. It can be natural to express a thing's property and activity with the mirative ta as experienced in the immediate past. But this is only with the support of an exploratory issue; and (iv) the setting of the exploratory issue can be related with the speaker's position in communication. In problem-solving situations, it is only the person responsible for the problem who can express his/her experience of discovering some state in terms of the mirative ta.

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#### References

Croft, W. 1991. Syntactic Categories and Grammatical Relations: The Cognitive Organization of Information. Chicago: The University of Chicago Press.

Croft, Wi. 1998. "The structure of events and the structure of language." In M. Tomasello (ed.), *The New Psychology of Language*, Vol. 1, pp. 67-92, N.J.: Lawrence Erlbaum Associates.

Hopper, P. J. 1995. 'The category 'event' in natural discourse and logic.' In W. Abraham,

T. Givón, and S. A. Thompson (eds.), *Discourse Grammar and Typology: Papers in Honor of John W. H. Verhaar*, pp. 139-150, Amsterdam: John Benjamins.

- Ikegami, Y. 1981. "Suru"-to "Naru"-no Gengogaku: Gengo-to Bunka-no Taiporojii-e-no Shiron. Tokyo: Taishukan.
- Kikuchi, Y. 1983. "Bakari, dake." In Kunihiro, Tetsuya (ed.), *Imibunseki*, pp. 57-59, Faculty of Letters, The University of Tokyo.
- Labov, Wi. 2001. "Uncovering the event structure of narrative." In D. Tannen and J. E. Alatis (eds.), *Georgetown University Round Table on Languages and Linguistics* 2001, pp. 63-83.
- Langacker, R. W. 1991. *Foundations of Cognitive Grammar*, Vol. II: Descriptive Application. Stanford, CA: Stanford University Press.
- Mach, E. 1906. Die Analyse der Empfindungen und das Verhältnis des Physischen zum Psychischen. [Japanese translation by Gonosuke Sudo and Wataru Hiromatsu, Kankaku-no Bunseki. Tokyo: Housei Daigaku Shuppankyoku, 1971.]
- Nakagawa, M. 1992. "Ruikeiron-kara mita Chuugokugo, Nihongo, Eigo." In Y. Ohkohchi (ed.), Nihongo-to Chuugokugo-no Taishoukenkyuu Ronbunshuu, Book 1, pp. 3-21, Tokyo: Kurosio Publishers.
- Otsuka, M. 2015. "Ba-no riron-niyoru gengo, komyunikeishon riron-no kouchiku." ms.
- Sacks, H. 1992. *Lectures on Conversation*, Vol. II. Edited by G. Jefferson. Cambridge: Blackwell.
- Sadanobu, T. 1995. "Two types of event models: Billiard-ball model and moldgrowth model," *Journal of Cross-Cultural Studies* 4: 57-109.

[http://www.lib.kobe-u.ac.jp/repository/81001155.pdf]

Sadanobu, T. 2000. Ninchigengoron. Tokyo: Taishukan.

Sadanobu, T. 2010. "'Ta'-hatsuwa-o okonau kenri." In Nihongo-Nihongokyouiku Kenkyukai (ed.), *Nihongo-Nihongokyouiku Kenkyu* 1: 5-30. [http://www.cocopb.com/NichiNichi/journal\_1/%E3%82%A8%E3%83%B3%E3%83%88 %E3%83%AA%E3%83%BC/2010/5/5\_日本語/日本語教育研究\_\_1\_2010\_files/2010\_ 1 sadanobu.pdf]

- Sadanobu, T., and A. Malchukov. 2011. "Evidential extension of aspecto-temporal forms in Japanese: From a typological perspective." In T. Mortelmans, J. Mortelmans and W. De Mulder (eds.), *In the Mood for Mood* (Cahier Chronos 23), pp. 141-158, Amsterdam; New York: Rodopi.
- Talmy, L. 1985. "Force dynamics in language and thought." In W. H. Eilfort, P. D. Kroeber, and K. L. Peterson (eds.), *Papers from the Parasession on Causatives and Agentivity*, *Twenty-First Meeting*, Chicago: Chicago Linguistic Society, pp. 293-337.
- Teramura, H. 1976. ""Naru" hyougen-to "suru" hyougen: Nichiei "tai" hyougen-no hikaku." In The National Institute for Japanese Language (ed.), *Nihongo-to Nihongo Kyouiku: Moji Hyougen Hen*, pp. 49-68.