PAPERS ON AND AROUND THE LINGUISTICS OF *BA* 2017

Edited by

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Foreword

This compilation of papers represents part of the work toward establishment of the linguistics of *BA*, the study of syntax, semantics and pragmatics in relation to the field of communication in which communicating agents are situated relative to each other and to this field. When our initial research project started in 2009 partly funded by JSPS Kaken Grant-in-Aid for Challenging Exploratory Research (#21652041, "Toward Construction of Linguistics of *BA*: Semantics and Pragmatics of *BA*"), the participants were at a loss how to deal with those issues. Our bewilderment deepened as we continued discussion and we started a new project in 2014 again partly funded by JSPS Kaken Grant-in-Aid for Challenging Exploratory Research (#26580074, "Construction of Linguistics of *BA*: *BA* and Emergence of Meaning") headed by Yasuhiro KATAGIRI at Future University Hakodate.

Although our central notion was that of *BA*, or field in which communicating agents interact, we tried to avoid concentrating on defining what *BA* might be or how *BA* could be formulated in theoretical models, because we felt that by doing so, our research aim would get too narrowly focused, with only very limited number and kind of researchers getting interested in sharing ideas and concerns. We organized quite diverse kinds of workshops, domestic and international, linguistically and non-linguistically oriented, formal and informal, and each time we tried to invite researchers from different countries or regions and with diverse research backgrounds.

The collection of papers in this particular volume represents only a small part of those discussions. Most are based on presentations at the first International Workshop on Linguistics of BA and The 11th Korea-Japan Workshop on Linguistics and Language Processing, held at Waseda University in December 2011. We called the event "an International Workshop" because at the time we were not quite sure if there would ever be a second, as our initial Grant-in-Aid project period was coming to an end. The turn of events brought us a second in July 2015 and a third in March 2016, and the fourth took place in December 2016. Now, we are relatively sure that it would be OK to include the definite article in the title of this collection. There are a few papers that were independently contributed but it is based on or inspired by the discussions at the Second International Workshop on the Linguistics of *BA*.

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Subjecthood and Topicality are both Pragmatic Issues

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Abstract. The concept of centre of attention (CA) is used in our Distributed Grammar framework focusing on its relevance for the syntax of human languages. Based on psychological evidence, this notion captures what is common between subject, topic and theme in an integrated system of concepts rather than as a disparate collection of them. We define respectively subject as the main CA of a base utterance, topic as the main CA of an extended utterance (containing both Old and New meta-informative status) and theme as the main (composite) CA of a text/discourse. When choosing an entity or an element of the semantic situation as the CA of the utterance, a speaker creates a common ground on which it becomes possible to communicate with the addressee.

Keywords: subject, topic, theme, pragmatics, common ground

1. The problem of Subject in Logic and Grammar: Subject or Argument?

In ancient logic, a proposition was considered to be composed of two terms: the subject and the predicate (SP). In Aristotle's metaphysics, this two-fold definition of a proposition led to the ontological interpretation: the subject is an entity (a substance) and the predicate is a property or quality (an accidence). In formal logic (since G. Frege), this two-fold schema SP has been replaced by the concept of an n-ary predicate (a relation) represented by the logical predicate formula $P(x, y, …, n)$ which is considered more universal and is used to represent all sorts of relations, not only the binary ones. Many logicians and philosophers however (e.g. Geach 1950) consider that besides the concept of n-ary predicate, the traditional view of proposition as composed of subject and predicate remains relevant in order to give account of the structure of natural language utterances.

  As a matter of fact, the linguistic notion of predication cannot be formalised by the formula $P(x,y,z)$ (i.e. 'predicate' of the first order predicate logic) because there is no hierarchy between arguments, whereas in linguistic utterances the subject is a privileged argument and the other arguments are secondary and therefore are called "complements". Moreover, the logical predicate (predicate with arguments) does not make it possible to distinguish between different linguistic utterances expressing the same semantic situation, and therefore the predicate logic fails to explain such variations as diathesis, word order, left dislocation, cleaving, among others. For instance, the unique formula $P(x,y)$, instantiated as *invite(Peter, Jim),* cannot account for as many different natural language utterances as below:

 # Peter invited Jim.
 # Jim was invited by Peter.
 # It is Peter who invited Jim.
 # As regards Jim, Peter invited him.

Associative Semantics (AS - Wlodarczyk A. 2008) and Meta-Informative Centering (MIC - (Wlodarczyk A. & Wlodarczyk H. 2006a,b, 2008a,b, 2013) theory now belong to the Distributed Grammar project (Wlodarczyk A. & Wlodarczyk H. 2016) in which we intend to explain the relevance of merely binary predicates for the semantic (information) interpretation of human language utterances and to introduce multiple level analysis in order to treat the meta-informative elements of discourse.

2. The Iceberg Metaphor

Signification consists in converting signs into infons (inner representations) and vice versa during the processes of analysis and synthesis of utterances respectively: extracting information from utterances or building utterances with signs. Signs in utterances have to be mapped onto sets of infons. The signification of linguistic expressions allows us only to encode/decode overt ("explicit") information. For instance, it is quite difficult to align texts written in two languages. Using an *iceberg* metaphor makes it possible to point to the two following important characteristics of human languages:

(1) The content of linguistic expressions convey both *overt* and *covert* information. The implicit part of content is grounded in both contextual and cognitive representations. But interpretation consists of recovering the *covert* information from the linguistic expressions with the sole help of the *explicit* information they contain. There are various ways of recovering information. Let us mention just a few of them: all kind of presuppositions, paradigmatic functions and semantic hyponymy. For example, when the subject of a transitive utterance is not overt, its object can be recovered if it is defined as a dependent centre of attention: Object → Subject (the object entails the subject).

(2) The content of linguistic expressions can be either concise (compressed) or precise (extended). A concise linguistic message contains fewer units (hence less information) and a precise one contains more linguistic units (hence more information)**.** Concision and precision are results of the fact that modal[1] equivalences can be ordered: $(x \equiv_{D1} y) \leq (x \equiv_{D2} y) \leq (x \equiv_{D3} y)$ iff $D_1 \subseteq D_2 \subseteq D_3$.

3. Representation of Linguistic Information using Binary Predicates

Information is produced when *relations* are established between entities. In the framework of associative semantics (Wlodarczyk A. 2008), the universal ontological components of linguistically expressed situations are:

(1) static or dynamic frames (states, events and processes),

(2) their roles (enacted by animate agents and/or inanimate figures)

(3) and anchors (indicators of spatial and temporal relations).

Each language provides speakers with linguistic means for expressing situation frames: verbal lexemes with aspectual properties and different types of valence opening sequentially ordered places in utterances. Entities playing roles in situations are classified with regard to such criteria as ±abstract, ±animate, ±human, etc. Human languages also use various sorts of adverbs and autonomous noun phrases to express spatial and temporal anchors.

We define *information* as the content of utterances including the semantic roles as expressed

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[1] Because they operate on a given domain D only.

by the noun phrases and the semantic situation frames with their participant roles as expressed by the verb phrase. Information is never exhaustively expressed in discourse (the iceberg metaphor gives a suggestive account of this). Information needs be reconstructed and completed by the hearer. In linguistic messages, information is always partial since speakers express only what is said to be **obligatory** (grammaticalised in their language) and what is pragmatically (due to the speakers' point of view, i.e. due to what they pay attention to) **relevant**.

Sets of binary predicates can be used to internally represent information (relations and their participants); they can be used as formal representations of semantic situations in which participants take part. On the level of information, the validation of utterances as true or false is a function mapping semantic frames of situations, their roles and anchors onto mental representations of states of affairs (or eventualities) and entities of the world. We will be keeping in mind that the binary formulas $P(x,y)$, in most general cases, do not establish hierarchical order between the arguments of P and do not constitute any foundation for the sequential (linear) order in which it is the verb valency that represents the (associated) situation(s) and the noun phrases show that their arguments are aligned in an utterance.

4. Meta-Information and Attention-Centred Phrases

Meta-information is information about other information. What is not taken into account in most syntactic theories of linguistic expression is the fact that the elementary syntactic structure of utterances corresponds to meta-information, not to information. What, in Generative Grammar (GB), is defined as a sentence by the rewriting rule: S --> NP + VP and what is represented by tree structures of immediate constituents, is in fact meta-information (not information).

The MIC approach differs from purely syntactic theories in that it defines the subject of an utterance not simply as a syntactic constituent but as an attention-centred phrase. We define the subject as that noun phrase which corresponds to the *global* centre of attention of an utterance. The syntactic properties of such a noun phrase may differ from language to language by different criteria: case-marker, word-order, agreement between subject and verb, etc. Thus, in the MIC Theory, centring is a structuring operation concerning not only texts but also as it were utterances. On the other hand, in the computational "centering theory" by Grosz et al. [1986, 1995], centres of attention are defined at the text level: one constituent of an utterance is treated as a *forward or backward looking centre* in order to maintain the cohesive flow of information from one utterance to its successor. Forward and backward looking centres make it possible to give an account of the relations which bind utterances together into a coherent text.

In the MIC theory, we consider that no judgment may be uttered without selecting at least one centre of attention (CA) among the participants of the situation spoken about; thus we consider centring as a structuring operation not only at the text level but also at the level of the utterance because of the necessarily linear (sequential) structuring of speech sounds in human languages. An utterance will be defined as a linguistic message having at least one Centre of Attention (CA). The general concept of centre of attention makes it possible to capture what is common between Subject, Object, Topic and Focus. In our theory, CAs are seen not as psychological phenomena but rather as those segments of linguistic utterances on which attention has been centred. In order to communicate semantic information in a non-linear manner, the speaker has to select one of the participants of the semantic situation and treat it as the global (primary) centre of attention, (i.e. the subject of the utterance) about which they predicate. Information corresponding to the *local* (secondary) centre of attention may be expressed as the object.

As stated above, a segment which expresses a chunk of a semantic situation is "centred" (treated by the speaker as representing a CA) if it has been distinguished among other elements of one situation or many situations by linguistic meta-informative markers (syntactic, morphological, prosodic or any pragmatic marker). This view is very close to the concept expressed by Givón: "the subject and DO (direct object) may be viewed as the grammaticalised

primary and secondary topic of the discourse at the time when the clause in which they take part is being processed." (Givón 1994, 198). From the above quotation it is obvious that the author calls "topic of the discourse" what we call more generally the "centre of attention". However, in our theory, we use the word "topic" as a reserved term to refer to a constituent of an utterance which is prominent and which bears the old meta-informative status

Thus, the core of syntax does not map directly on information (semantics) but on meta-information (pragmatics) of the utterance. Syntax is a means of expression or a resource (along with morphology, phonology and prosody) used to linearise the information content communicated in an utterance.

5. Subject and Semantic Role

For the hearer, to understand (be able to reach a semantic interpretation of) the content to which the subject of an utterance points, it is necessary to interpret the semantic role played by the participant chosen for the subject. Since we consider that the subject belongs to the pragmatic module, it is independent of the semantic role enacted by the participant it refers to. However there exists a default relationship between the subject and one of the two main semantic roles (active or passive) depending on whether the syntactic structure of the language is either nominative or ergative.

In nominative (active) languages, in utterances with a verb in the direct, unmarked active voice, a default relation is established between the subject and the active role… and the object and the passive role.

Consequently, if we admit that the semantic interpretation of an utterance is realized in different successive steps, in the first step, by default, the subject is assigned the active role. When the entity chosen as the subject by the speaker is not an animate agent, in the first step of interpretation, the speaker and the hearer treat the subject as referring to a pseudo-agent, as it is the case in utterance #1 hereafter.

 # 1 A car hit a pedestrian.

Morpho-phonetic level	*A car*	*hit*	*a pedestrian.*
Meta-information level	global CA: subject	verb	local CA: object
Information level	pseudo-active role	action: process	passive role

In utterance #1, in the first step of semantic interpretation, the inanimate subject " a car" is assigned a pseudo-active role. In the second step, a more accurate semantic interpretation may be reached and expressed in utterance #2, in which the proper animate entity is assigned the active role and the subject of utterance #1 transformed into the instrumental PP "with his car".

#2 The drunken driver hit a pedestrian with his car.

Morpho-phonetic level	*The drunken driver*	*hit*	*a pedestrian*	*with his car*
Meta-information level	global CA: subject	verb	local CA: object	instrument
Information level	active role	action: process	passive role	median role

Thus the definition of the subject as the global centre of the utterance makes it possible to treat in a universal manner active and ergative languages as well as subject of active or passive verbs in active languages. This pragmatic definition frees the subject from any obligatory link with the active role (traditionally called the *agent*). It makes it possible to explain that the choice of a subject by the speaker is not simply a grammatical obligation but rather a pragmatic choice used in the discourse strategy.

6. The Old/New Meta-Informative Status of Discourse

Many linguists (Chafe - 1976 and Prince - 1981 among others) point to the importance of the distinction between old and new information. "Connected speech unfolds as an unbroken sequence of 'messages', in which the speaker is alternating between elements of given and elements of new; these map into the structures of the other grammatical units, most powerfully into those of the clause." (Halliday M.A.K. and Greaves W.S., 2008, p. 42). In the MIC theory, the well-known distinction between old and new information, is considered as "meta-informative old or new status" alternation, and - obviously - we agree so far with the mapping of old and new onto the units of the clause that we consider to reflect directly the structure of the utterance.

The old or new status of information conveyed by an utterance (or by one of its segments) depends on the discourse strategy chosen by the speaker. The speaker is free to introduce some chunk of information either with a new or old meta-informative status and to use it as a possibly major argumentation device.

We distinguish the three following kinds of motivation of old and new meta-informative status:

(a) The **communicative** motivation is explicit and speech bound. The situation spoken about is either connected to another one mentioned earlier (anaphoric) or to be mentioned (cataphoric) or it is a modal situation (either reported or to be reported).

(b) The **cognitive** motivation is related to the process of knowledge acquisition. Situations appear as already known (registered) or unknown (unregistered). This presupposes the existence of a kind of recent discourse memory (to be confirmed by neurological experiments).

(c) The **ontological** (referential) motivation depends on the knowledge stored in long term memory; the situation spoken about needs to be treated either as a type (generic, general, habitual or potential) or an instance (specific, particular, occasional or actual).

INFORMATION STORAGE	Type of MOTIVATION	Motivation of *Old* status		Motivation of *New* status	
Intermediate memory	**Immediate Communication**	anaphoric		cataphoric	
	Recently acquired information	known		unknown	
Permanent memory	**Ontological knowledge (mental reference)**	Σ	generic	Π	specific
			general		particular
			potential		actual
			habitual		occasional

Table 1. Motivations of the meta-informative old or new status

In the MIC theory approach, the old/new status alternation is relevant to the syntactic structure of clauses belonging to a coherent text, whereas the truth validity of an utterance has no direct influence on its syntactic structure and linear ordering. We propose therefore to pay more attention, in linguistic studies, to the old/new alternation within the syntactic structure of utterances. When the speaker changes the meta-informative status of the utterance or of one of its clauses, it has no effect on its truth-conditional validity. As noted by Kuroda S. Y. 1976, both utterances #3 and #4 which follow below have the same truth value, because the latter depends on the particular, widely known battle which the speaker can refer to in his/her discourse.

#3 The Greeks defeated the Persians.

as opposed to its passive form

#4 The Persians were defeated by the Greeks.

In the same way, the difference between subject and topic (or focus) is not relevant to truth-conditional validation of utterances. The following utterances #5 (with a topic) and #6 (with a focus) have the same truth validity as the first #3 and #4 utterances in the active and passive voices : the situation of the world which is the referent of this utterance remains the same and the truth validity depends only on the adequacy of the utterance to the state of affairs spoken about.

#5 As regards the Greeks, they defeated the Persians.

#6 It was the Greeks who defeated the Persians.

However, the choice between one of the four mentioned utterances (we call them "meta-informative paraphrases") has important consequences on discourse strategy and pragmatic felicity. In a discourse, in which the Greeks are the main theme, the speaker would rather choose utterance #3 than #4. Utterance #5 would be felicitous only in a discourse in which the speaker would not have been dealing with Greeks in the previous part of the text. Utterance #6 would be used either to contradict a previous utterance asserting that the Persians defeated the Greeks or in answer to the question *Who defeated the Persians?* Let us now explain the difference between utterances #3 and #4 on the one hand and #5 and #6 on the other. To achieve this, we need to distinguish between base and extended utterances.

7. Base and Extended utterances, the Definition of Topic

Base and extended utterances are defined as **pragmatic** units of discourse in contrast to simple and complex sentences understood as **syntactic** units. As a pragmatic unit, each utterance contains at least one centre of attention (CA). The CA phrases may have either ~~of~~ the same or a different meta-informative status (Old or New) than the rest of the utterance. In a base utterance there is no contrast between the status of the global CA and that of the rest of the utterance: it is either "all New" or "all Old". On the other hand, the CAs of extended utterances contrast with the rest of the utterance. The Topic bearing an Old meta-informative status is in contrast with the "New Comment", the Focus of New meta-informative status is in contrast with the "Old Background".

TYPE OF EXPRESSION	CENTRES OF ATTENTION	
	Global	Local
1.1. Base Utterance	Subject	Object
1.2. Extended Utterance	Topic	Focus
2. Text / Dialog	General Theme	Particular Theme

Table 2. Pivots of discourse (from Wlodarczyk A. & Wlodarczyk H. 2008a)

Table 2 shows that, in the MIC theoretical framework, the theme is not merely a synonym of topic. As a matter of fact, we define topic and theme by reference to the representation layer of linguistic information to which they respectively belong. We use the word "theme" as a term referring to texts or discourses as organised, linguistically coherent sets of utterances. Thus, making reference to the meta-informative status of base and extended utterances respectively, it is possible to capture and better explain the difference and, at the same time, the similarity which characterise the subject and the topic.

6

Informative Layer (0-order)	typical semantic unit : situations schemata
Meta-informative Layer (1st order)	linguistic unit uttered in a context : 1st m-inf. level: base utterances 2nd m-inf. level: extended utterances
Cognitive Layer (2nd order)	organised set of utterances : texts, dialogs

Table 3. Three layers of linguistic information (Wlodarczyk A. & Wlodarczyk H. 2006a)

The *second meta-informative level* is an extension of the predication: it consists of adding attention-centred phrases with contrasting status to a base utterance. Extended utterances consist of two contrasting parts each having an opposed meta-informative status; their centre of attention corresponds to an emphasized noun phrase contrasting with the rest of the utterance: an "Old" status phrase (topic) contrasting with a "New" status phrase (comment) or a "New" status phrase (focus) with an "Old" status phrase (background).

Thus, in order to define the topic, it is necessary to establish a contrast between the meta-informative status of information contained in discourse. In the topic position, the speakers place the constituent they wish the speaker (1) to pay attention to and (2) to consider as having the "Old" status of information.

Thus, in the MIC theory, topic is defined as a prominent or attention-centred phrase with an "Old" meta-informative status. It is only the comment part of the utterance which introduces information with a "New" meta-informative status. The comment itself may, in some cases, be further divided into two parts again: focus and background.

What is introduced by the speaker as a topic is supposed to be "taken for granted", presupposed to be known to everybody. Only the comment can introduce new information. Thus, the topic is (or is part of) the common ground making it possible for the speech participants to communicate new information.

8. Conclusion

On top of logical inference (reason), such psychological factors as attention, intention and emotion interplay as much in the processes of meaning creation as in that of communication. The Distributed Grammar is therefore a complex view of language which emerged as the result of a multi-level investigation into the sequential (linear) ordering of the constituents of linguistic utterances focusing on the fact that the sequential nature of language reflects the semantico-pragmatic overt (cf. explicature) and covert (cf. implicature) components of communicated information. It is an integrated framework for Associative Semantics (AS) and Meta-Informative Centering (MIC) theory.

In the MIC theory, the old/new status of a chunk of information depends on the strategy chosen by the speaker to enrich or even manipulate the hearer's knowledge. In an utterance, the subject corresponds to that noun phrase which represents the global centre of attention and the object — the local one. Depending on the attentional strategy adopted, the speakers need to choose among the utterance schemata (based on the verb valence) the one which allows them to assign the global and local centres of attention to the subject noun phrase and to the object noun phrase respectively assuming that there is a default mapping between the subject and the active participant (agent) of the semantic situation. Needless to say that in case the speakers wanted to talk about the passive participant (patient) paying more attention to it than to the active participant, they can use the selected utterance schema in passive voice. Thus, it is clear that any participant can be treated alternatively as the subject or the object of an utterance. Traditional grammarians were aware of this interchangeability of subject and object in the utterance. In our

framework, we treat the passive voice as one of the **meta-informative** devices which provide the speakers to express the distinction of salience (global/local) without changing the information content of the utterance.

The use of a topic (expressing the global centre of attention of the speaker) is very similar to that of a subject. It differs however in that the topic is used when the speaker wants to establish contrast between the meta-informative status of two chunks of information (contained in an utterance).

Thus, subject and topic are part of the common ground making it possible for the speaker and hearer to communicate: they are proposed to the hearer by the speaker as the global centre of attention about which something will be predicated in a base utterance or to which a comment will be added in an extended utterance.

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BA Theory/Field Theory:
BA-Oriented Thought and Language

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Abstract. The conceptual approach of *ba* (a Japanese term that combines the meanings of place, locus, situation, and field) has existed in the East since ancient times. The distinguishing characteristic of *ba*-oriented thought is non-separation of subject and object and non-separation of self and other. Modern approaches apprehend subject and object as different entities, and consider the self and the other to be entirely different entities. Free subjectivity understands the object that has necessity as an individual and its cause-and-effect relationship, while the other stands as an objective thing to the self. Quantum field theory and brain science, however, have shown that the subject and object are not distinctly separable, and that the self and the other are profoundly interlinked. In *ba*-oriented thought, there is first a locus (*ba*) where interaction occurs between subject and object and between self and other. It is from that locus or field (*ba*) that subject and object, the self and the other, come into being, and what takes this ba-oriented thought as its foundation is *ba* theory. Language is also generated from the *ba* where the self and the other interact.

Keywords: *ba* (field), non-separation of subject and object, non-separation of the self and the other, quantum field theory, complex system, mirror neuron.

1   BA Theory/Field Theory

The conceptual approach termed *ba* (a Japanese term that combines the meanings of place, locus, situation, and field) has existed in the East since ancient times. It is found in the Buddhist conceptual approach and in Japanese thought, and the distinguishing characteristic of this conceptual approach could be summed up as non-separation of subject and object, or non-separation of the self and the other.

The foundation of the modern era's conceptual approach is in Newtonian mechanics and Cartesian philosophy. Its characteristic features are the way it distinctly separates the subject and the object, and the way it conceptualizes the self and the other as clearly distinguished one from the other. The object is a realm of necessity and the subject is a realm of freedom. The object is made from a substantive individual, and the causal relationships between individuals can account for all things. The individual person is a subject that cannot be divided any further, and it is considered an entity that is clearly separate from other people.

In the East, by contrast, since long ago the subject and the object have not been distinctly separated, and the self and the other have not been considered to be clearly differentiated (Suzuki, 1972). That which takes this subject and object, self and other, and enfolds them within itself without distinguishing them is the *ba*. The first to think of this baas philosophy was Kitaro Nishida. Nishida's view was that the subject and the object are not differentiated in experience at the moment of experience (pure experience), and that the subject and the object first emerge when reflective retrospection occurs (Nishida, 1979). Later he used the term place (*basho*) for that which enfolds this subject and object. This is why Nishida's philosophy is also referred to as a philosophy of place. The concept that includes subject and object, self and other in itself was thus named place in Nishida's philosophy, but here this will be expressed

instead by the term *ba*. These words place and *ba* are employed in a variety of ways according to the context. Here, however, for the sake of simplicity, they will all be expressed collectively by the term *ba*. The conceptual approach that is founded in this thing called *ba* that enfolds subject and object, the self and the other, in this way will be referred to here as *ba* philosophy. Scientific inquiry into this is *ba* theory, and the ideological apperception of it is *ba* thought.

This is not to suggest that there were no doubts in the West regarding modern Western philosophy. The question of why, when the self and the other have separate existence as subjects with regard to each other, one human and another can understand each other (why is understanding other minds possible) was a topic in Husserl's phenomenology, which explained that the other's perception of the subject is made possible by empathy. Heidegger, by contrast, found that there is co-existence between one human being and another, and sought to resolve the problem of understanding other minds by means of this co-existence. As he saw it, the self and the other are not separated entities, but rather possess co-existence from the start (Heidegger, 1927). Adam Smith, J. J. Rousseau, Schopenhauer, Karl Marx, Emmanuel Levinas, Tetsuro Watsuji, and others have all made observations on the connectedness of the individual person and the individual person, but it was Heidegger who posited a basis for human existence in the co-existence of the self and the other.

These positions, however, all belong within the realm of philosophy. Where the validity of the conceptual approach of *ba* was shown clearly and scientifically was in the science of living organisms, which is founded upon the science of complex systems. Living organisms are entities that exhibit special behavior in terms of the laws of physics. All things essentially are moving toward stasis, thermodynamically speaking, and their entropy increases. Living organisms, however, contain mechanisms that reduce entropy. The activities of living organisms are complex systems. Living organisms are entities with the abilities to change the self itself and continue surviving by assimilating information in the interior of the self.

Professor Emeritus Hiroshi Shimizu (Doctor of Pharmacology) of the University of Tokyo understood living organisms as entities that live in the *ba* of non-separation of the self and the other. He named the field that studies the activities of these living organisms that carry on their lives within a *ba* as the relational study of biological self-organization. This applied the self-organization treated in the science of complex systems to living organisms, and it considers living organisms to engage in self-organization within the *ba*. In other words, the individual cells that make up a living organism and the living organism itself are situated within a single *ba* where they are not differentiated and where they interact. In the same way, the life of the earth as a whole (the natural environment) and individual living organisms are considered to exist within a single *ba* within which they are not differentiated and within which they interact. Human beings and nature, the self and the other, interacting as single entities within a *ba* of this kind, are viewed as living organisms. Each individual cell has a self and engages in its own unique activity, and even while doing so acts cooperatively with other cells, whereby it is also interacting with the activity of that creature's body as a whole. Dr. Shimizu refers to this as twofold life (dual mode thinking). While such entities live as individual cells, they are also living as parts of living organisms. In the same way, while individual human beings are living as individuals, they are also assimilating environmental information, interacting with other living organisms and the environment, and living as parts of living organisms, as well (Shimizu, 1996).

Such a conceptual approach is not by any means eccentric or outrageous. It is, rather, deeply in agreement with present-day science. This point will be examined below.

2 BA Theory and Present-Day Physics

Modern science is founded upon elemental reductionism, which breaks things down into elements called molecules, atoms, and quarks, and combines those elements as its explanation for everything. Such science is said to have reached a dead end. The reason for this, it is said, is

that such science is inconsistent with the real world understanding that just gathering together parts is not enough to yield the movement of a whole.

Modern science is structured to separate the human consciousness (the subject) and the object (the thing) entirely, so that consciousness is looking at the thing from outside that thing. Considering this more strictly, however, it is apparent that the subject and the object are not unambiguously differentiated, and the self and the other have aspects in which they are not unambiguously separate. The subject and the object, the self and the other are interacting entities, and modern science has ignored the aspects in which such connections exist.

Ba theory was born out of the systems of the natural world, and it is compatible with the way of perceiving nature suggested by present-day physics (quantum field theory). Present-day physics does not consider things as independent entities that have self-existence apart from the *ba*. In that sense, the conceptual approach of *ba* could be said to underlie the present-day scientific conceptual approach.

Physics made the transition from Newtonian mechanics to quantum field theory during the 20th century, and the science of complex systems appeared at the end of the 20th century. The basis of elemental reductionism is in Newtonian mechanics, and so it is not compatible with todays' physics. *Ba* theory is compatible not only with the science of complex systems, but also with quantum field theory, and it finds support in both. As noted above, *ba* theory is concerned with the holistic *ba* that is in the background of the individual (entity), and its focus is not as much on the individual as it is on the *ba* in which that individual is situated. In present-day physics, the individual does not have real existence as an individual, but is rather an entity that repeatedly gathers, scatters, comes into being, and passes out of existence within the *ba*. The individual is able to determine the location and kinetic energy of that activity, and in this it first becomes able to determine its real existence as an individual. Present-day physics (quantum field theory), however, has clearly shown that the location and the kinetic energy of an individual cannot be determined simultaneously. The properties of the individual entity cannot be definitely established except in the *ba* within which it is situated. Modern elemental reductionistic science dissevers the individual from the *ba* to study its properties, but an individual that is apart from the *ba* does not exist.

3   BA Theory, Brain Science, and Ethology

As discussed in Section 1, the distinguishing characteristic of *ba* theory is that it is a conceptual approach of non-separation of subject and object that does not divide up the subject and the object, and a conceptual approach of non-separation of the self and the other that does not divide up the self and other people. In *ba* theory, the object is not situated someplace far removed from the self that is the subject. Rather, it considers the self that is the subject and the thing that is the object as both being situated within a single *ba* that includes the self. Furthermore, the self and other people are not considered to be completely divided. Rather, they are seen as existing in a unitary manner within the *ba*. This conceptual approach accords well with present-day brain science and ethology.

In present-day brain science, the conscious activity of the human being (the subject) is not situated at some place removed from the physical matter called the brain (the object), nor are the things that we have been discerning so far as objects accurately reflecting the outside world. Brain science has made clear, rather, that they are selected, processed, changed in shape, and put into order by the brain. In other words, it is not possible to elucidate the object without referring to the subject, and not possible to elucidate the subject without referring to the object. In that sense, either is a self-referential entity. This is in accord with *ba* theory. There is also the fact that the brain has neurons that fire in the same way for actions by the self and actions by the other. Brain functions that point to a cooperative collectivity between the self and the other are coming to light (Iacoboni, 2008). Heidegger's co-existence is also being demonstrated.

Human beings think that they are consciously and freely controlling the body of their self, but it is only a portion of the human being's activity that is under the control of the consciousness. In most cases, there is sensory input that is not conscious, and perceptions are being shaped in ways that the person does not realize (Shimojo, 1996). Moreover, human beings initiate action before they are conscious of it. Even though the intention has been to issue an order from the frontal lobe to press a button, the order has already been issued before that, unconsciously, and the action of pressing the button is already being carried out before awareness of it comes (Libet, 2005).

In other words, human beings communicate by transmitting and receiving information to and from each other without being consciously aware of it. Apperception of the conscious information transmission alone will not enable apperception of the content of the communication. In order to think about communication, it will be necessary to think about the *ba* that also includes the transmission and reception of unconscious information.

There is also empathy between one human being and another, and human beings are inclined to feel considerate toward other people. That feeling of consideration links the self and the other together, and gives rise to the human attitude of cooperation with other human beings. That this kind of empathy and cooperativeness are not the unique possession of human beings is also being made clear by ethological research. It has been established that there are cases when even animals other than human beings or other primates have empathy one for the other, and take cooperative action that shows consideration of one for the other (de Waal, 2010.) This is in accord with *ba* theory, which takes the view that human beings and animals alike possess within their self a function that sustains a larger holistic life, and that, between them and the other, they possess a non-separate existence.

Furthermore, in order to grasp living organisms as entities that possess this kind of non-separateness of subject and object and non-separateness of the self and the other, the approach is not to think from a position that dissevers the object from the subject, nor to think from a position that dissevers the other from the self, nor that the object and the other are entities with independent self-existence separate from the subject and the self. It is necessary rather to understand that they exist within the interrelatedness of the subject and the self. That is the approach taken in *ba* theory.

4 BA Theory and Linguistics

Modern society has held to the understanding that the human subject is free and moves its body according to its own free decision-making. Present-day biology and brain science, however, are showing that this understanding is mistaken. The body (including the brain) and the subject cannot be understood apart from each other. Nor can the body be understood as something that is formed apart from the environment. On the one hand, the images of the body and the object that possess individuality are formed, and on the other hand, the subject (the ego) that possesses individuality is formed, both amid the interactions of the body and the environment.

We human beings float suspended in our mothers' amniotic fluid during our fetal stage. It is within the environment of this maternal body that we take in nutrients, hear the sounds of our mothers' heartbeats and talking voices, and develop as fetuses. After we are born, as infants we feel the sensations of touching, smelling, and tasting our mothers' skin, we hear our mothers' voices, and we form our mechanisms of visual perception in accordance with environmental conditions. The brain also grows the cells required to adapt to that environment, while unneeded cells, on the other hand, die away. That is to say that brains (i.e., bodies) possessing their respective individuality are brought into being in interaction with the environment.

An interaction begins between the newly born infant and its mother whereby they smile at each other. It is thought that this interaction forms mirror neurons (MN), which react in the same way to activities of the other as to activities of the self. The brain undergoes self-organization through interaction with the other. It has been reported that even infants as young

as six or seven months have already developed neurons that distinguish the actions of human beings, the natural movements of things, and the movements of human beings on television (Shimada & Hiraki, 2006). That is, human beings are already capable during infancy of distinguishing the movements of real human beings from the movements of other things and from virtual images. As these MN undergo self-organization, the activities of the self and the activities of the other are formed in an increasingly unitary manner so that the movements of the self are patterned after the movements of the other, and it becomes possible for the activities of the other to be sensed from the activities of the self. (This is the reason that mother and child are observed in a unitary manner.) Meanwhile, the brain cells that distinguish the self and the other start to become active. (These are thought to be brain cells in a different location from the MN. Research on the brain function of patients with mirror sign or asomatognosia has been reported to show that neurons capable of self-awareness are located in the right supramarginal gyrus (cf. Feinberg, Haber & Leeds, 1990: Uddin et al., 2006)). This activity gives rise to a separation of the self and the other. The MN automatically give a profound understanding of hand movements and bodily gestures by other people, and make it possible to mimic those gestures. The existence of the MN makes it possible for people in a particular *ba* to share an understanding of the dense layers of meaning in the words they speak to each other. When viewing another person stretch out his hand to a tea cup and grasp it, and this action takes place in scenarios (a) where there is no particular context, (b) where the context is that the tea is finished, and (c) where the context is that the person is starting to have the tea, then comparison of these scenarios shows that MN activity becomes increasingly active from (a) to (c), in that order (Iacobini, 2005). This suggests that there is a system within the brain that reacts with instantaneous understanding to the intentions of another human being, so that there is no need to put oneself in the other person's position and infer those intentions.

One explanation of how it becomes possible for a human being to understand the hearts and minds of other people is in the theory of mind, which finds that the ability to place oneself in the position of other people and infer their state of mind means that it is possible come to understand the mind of the other. While the theory of mind can be applied to children at the age of four and up, however, the diagnosis of autism is made at ages two to three. At this stage, what the theory of mind refers to as the false-belief task is not useful. It is more appropriate to think of autism as occurring not because that person is incapable of putting a theory of mind into practice, but rather because there is an impairment in that person's ability to mimic others. The cause of dysmimia is thought to be in an impairment of the MN.

The important point here is that the operation of the MN is not operation of a nervous system in which the self imitates the other and the self and the other are separate from the beginning. The theory of mind is structured so that the self and the other are separate, and the self infers the actions of the other from the viewpoint of the other. In the MN, however, the self and the other are not separate in the first place. The conduct of the other and the conduct of the self are not distinguished one from the other, and the MN reacts in a similar manner to both. Human beings are entities in which the self and the other are originally non-separate. They are co-existences. From that *ba* of non-separateness, the self and the other gradually separate, and the separation of mother and child comes about, but that co-existence does not pass away. In other words, at the same time that human beings exist as individual entities, they are also "being with" (Mitsein) as a kind. The human being is an entity with complementary existence as individual and kind (Kido, 2005).

This kind of co-existence characterized by non-separation of the self and the other is also at the foundation of language, which is thought to come into being through interaction of the self and the other. We inhabit similar environments, and the body basically has the same structure for all of us. The surrounding world that human beings live in and the sensory mechanisms with which human beings are endowed are also things they have largely in common. Under these circumstances, the interaction between the surrounding environment and the sensory

mechanisms leads, on the one hand, to the creation of sensory mechanisms that are adapted to the surrounding environment, and on the other hand, the surrounding environment is articulated by these sensory mechanisms. As a result of this kind of interaction between the environment and the body, an image of the semantic content of language, or in other words, of the signified, is formed. This becomes the foundation upon which linguistic gestures and voices are linked together as signifiers, which is thought to bring sign language and spoken language into being. The result of this is that languages all possess similar kinds of syntactic structure and translation is made possible. There have been reports that MN functionality is also involved in the encoding of these syntactic structures and other such hierarchical structures (Molnar-Szakacs, Laplan, Greenfield & Iacobini, 2006).

Interaction also occurs between the human being's consciousness and body. In other words, there are aspects in which the consciousness controls the body, and there are aspects in which the body controls the consciousness. That is interaction. Human beings use their bodies to articulate their environment before they start to speak in language, and they apprehend the meaning of actions through the interaction of mother and child. This can also be understood from the way in which bodily movements have a deep prior involvement in the formation of language concepts (Glenberg & Kaschak, 2002). Two examples that indicate how language is created by interaction between the self and the other are the talking heads experiment (Steels, 2001; Steels et al., 2002) and the creation of Nicaraguan sign language (Kegl, 1994). In the talking heads experiment, a device is set up that has one agent that assigns a new word to a certain code pattern displayed on a white board while another agent watches this process. If that second agent matches the code pattern assigned to the word, then the word can be considered to have been encoded. It was discovered that when several thousand interactions are reiterated using this kind of experimental device, a vocabulary is gradually brought together and encoding emerges. As to the sign language in Nicaragua, it was found that the repeated interaction by hearing-impaired children there using hand and body gestures resulted in the emergence of a new sign language. These cases can both be assessed as the occurrence of self-organization in a *ba* where the self and the other interact, giving rise to language by emergence. Conversations that do not have any scenario structure advance as each participant takes in the words uttered by the other, through their responses, they originate a series of utterances. A common understanding proceeds to develop in that process, and it is thought that the concrete meanings of the linguistic expressions used in the conversation become encoded in a still more concrete manner. A *ba* for these interactions of the self and the other therefore exists at the foundation of language.

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Company Brochures:
Move-Specific Linguistic Realizations of
the Self and the Other

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Abstract. The study examined a corpus of company brochures from the websites of major engineering companies in Hong Kong. It identified the move structure of the brochures, followed by the key semantic categories specific to the moves. It was found that pronouns are used in certain semantic categories in certain moves in the company brochures. The paper aims to examine the functions of the pronouns in expressing the self and the other in the company brochures in engineering companies which reflect the broader communicative purposes that characterise the genre of company brochures.

Keywords: Semantic categories

1   Introduction

This paper describes a corpus study of the use of pronouns and determiners in expressing the self and the other in the genre of web-based English company brochures in engineering companies in Hong Kong (Cheng, 2011). The design, construction and consumption of English company brochures constitute professional communication in English, which has been an important focus of teaching and research within the English Department of the Hong Kong Polytechnic University. The departments" Research Centre for Professional Communication (RCPCE) has been set up since 2006, with the mission "to pursue applied research and consultancy to deepen our understanding of professional communication in English and better serve the communication needs of professional communities."

The present study usefully combines the research approaches of genre analysis (Bhatia, 2004) and corpus linguistics (Sinclair, 1991), and combines different corpus linguistic programs. This study was designed to examine how *Ba* theory (場) can be employed in the discussion of project findings. *Ba* theory holds that "living organisms live in the *ba* of non-separation of the self and the other" (Professor Emeritus Hiroshi Shimizu) and stresses "non-separation of subject and object, and non-separation of the self and the other" and that "they do co-exist in their relativity" (Professor Otsuka's Lecture, 2011). In *ba*, both the subject and the object and both the self and the other are encompassed. So the subject "I," for instance, exists both independently and dependently with the other.

Otsuka (2011) compares the notion of "context" in Pragmatics and the *ba* theory. Context is considered to be "*dynamic*, not a static concept: it is to be understood as the continually changing surroundings, in the widest sense, that enable the participants in the communication process to interact, and in which the linguistic expressions of their interaction become intelligible" (Mey, 2001: 39). In *ba*, the "environment" includes, rather than between, both the speaker and the listener in the "shared ground beyond a mutual body perception held by both the speaker and the listener" (Otsuka, 2011). In *ba*, the unity of the self and the other is born.

Company brochures, similar to other publicity materials, such as booklets, leafletspamphlets and flyers, are brief, sales-oriented pieces of writing presented in a limited

space with the widespread use of visuals (Bivins, 1999: 168; Newsom and Carrell, 2001: 413). Company brochures are found to fulfill multiple communicative purposes simultaneously: to inform or educate customers and clients, by answering questions and providing sources for additional information (Bivins, 1999; Newsom and Carrell, 2001; Osman, 2006), to persuade customers to buy a product, service or idea (Bhatia, 2004; Dyer, 1993; McLaren, 2001; Askehave & Swales, 2001; Osman, 2006), and to impress upon potential customers or trading partners for long-lasting trading relationships (Askehave, 1998: 199).

Cheng (2011) conducted a corpus linguistic genre study of company brochures (N=20) obtained from the websites of twenty companies with engineering or surveying operations in Hong Kong. The Corpus of Company Brochures (CCB) contained 49,228 words. The aim of Cheng's (2011) study was to describe the move-structure of the twenty brochures and the lexico-grammar and semantic fields that constitute the CCB and individual moves in order to reveal the "aboutness" (Phillips, 1983, 1989) of the engineering company brochures so that professionals and practitioners become competent members of their professional community.

The present corpus-based genre study, also based on the CCB, sets out to examine the use of pronouns and determiners in the moves of the company brochures, and findings will be accounted for in light of *Ba* theory. Pronouns and determiners are words that express meanings related to the self and the other. By examining the kinds of pronouns and determiners, as well as the relative distribution of use in the environments of specific moves within the broader environment of the company brochures in surveying and engineering in Hong Kong, the study aims to find out how the speakers, represented in the company brochures, perceive their relations with the listeners, represented by the intended readers of the company brochures.

2   Method of Study

The data examined in this study were twenty company brochures obtained from the websites of twenty companies with engineering or surveying operations in Hong Kong. Individual brochures in the Corpus of Company Brochures (CCB) (49,228 words) ranged from 486 to 10,478 words, with an average length of 2,530 words.

The corpus linguistic programs used were ConcGram 1.0 (Greaves, 2009) and *Wmatrix* (Rayson 2008). *ConcGram 1.0* (Greaves, 2009) was designed specifically to fully automatically find co-occurrences of words and/or phrases, i.e. concgrams, across a wide span irrespective of constituency and/or positional variation. A concgram is made up of words which co-occur contiguously and/or non-contiguously, and includes all instances when one or more words are found between the co-occurring words (i.e. constituency variation), and if the co-occurring words are in different positions relative to one another (i.e. positional variation), e.g. "play a role," "play a key role," "have a role to play" (Cheng et al. 2006, 2009). *Wmatrix* (Rayson, 2008) is a software tool for corpus analysis and comparison (Figure 1).

Figure 1. *Wmatrix*

3 Findings and Discussion

In Cheng (2011), the twenty company brochures were analysed as a genre and seven moves, with Move 4 consisting of four steps, were identified (Table 1). Three moves, Move 1, Move 4 and Move 7, were found to be obligatory.

Table 1. Move-structure of company brochures in surveying and construction engineering in Hong Kong

Move Structure	%	Word count (49,228)
Move 1: Establishing the company's professional image	100% (obligatory)	267
Move 2: Introducing contents and organisation of brochure	35%	285
Move 3: Establishing relationships with potential partners	20%	1,058
Move 4: Promoting the company	100% (obligatory)	42,581

Step 1: Providing the company's background information	95% (obligatory)	14,160
Step 2: Detailing products and/or services	85%	14,840
Step 3: Highlighting the value of significant products or projects	35%	7,563
Step 4: Listing job reference	70%	6,018
Move 5: Describing corporate social responsibility	20%	2,134
Move 6: Looking to the future	10%	122
Move 7: Soliciting response	95% (obligatory)	2,781

Table 2. Most frequent twenty semantic fields in CBC

Semantic fields 1-10	Semantic fields 11-20
1. Grammatical bin	11. Location and direction
2. Unmatched	12. Business: Selling
3. Numbers	13. Objects generally
4. Personal names	14. Helping
5. Business: Generally	15. In power
6. Geographical names	16. Belonging to a group
7. Pronouns	17. Science and technology in general
8. General actions / making	18. Getting and possession

9. **Architecture, houses and buildings**	19. **Time: Period**
10. **Places**	20. **Other proper names**

Analysis of move-specific semantic fields in the CBC shows frequent use of "Pronouns" in a number of moves (Table 3), with the semantic field of "Pronouns" ranking second, after Grammatical bin, in Move 3: Establishing relationships with potential partners, Move 4 Step 3: Highlighting the value of significant products and projects, Move 5: Describing corporate social responsibility, and Move 6: Looking to the future. In Move 2: Introducing contents and organisation of brochure and Move 4 Step 2: Detailing products and/or services, "Pronouns" rank fourth.

Table 3. Move-specific semantic field analysis

Move Structure	Top ten semantic fields
Move 1: Establishing a professional image of the company	Grammatical bin; Unmatched; Architecture, houses and buildings; Business: Generally; General actions/making; Science and technology in general; Substances and materials: Solid; Personal names; **(9) Pronouns**; Putting, pulling, pushing, transporting
Move 2: Introducing contents and organisation of brochure	Numbers; Grammatical bin; Paper documents and writing; **(4) Pronouns**; Business: Generally; Geographical names; Speech acts; Science and technology in general; Personal names; Education in general
Move 3: Establishing relationships with potential partners	Grammatical bin; **(2) Pronouns**; In power; Unmatched; Business: Selling; Belonging to a group; General actions / making; Helping; Architecture, houses and buildings; Location and direction

Move 4: Promoting the company **Step 1**: Providing background information of the company **Step 2**: Detailing products and/or services **Step 3**: Highlighting the value of significant products or projects **Step 4**: Listing job reference	1. Step 1: Grammatical bin; Unmatched; **(3) Pronouns**; Business: Generally; Personal names; General actions/making; Numbers; Geographical names; Architecture, houses and buildings; In power 2. Step 2: Grammatical bin; Unmatched; General actions/making; **(4) Pronouns**; Objects generally; Helping; Business: Generally; Business: Selling; Geographical names; Education in general 3. Step 3: Grammatical bin; **(2) Personal names**; Business: Generally; Unmatched; Architecture, houses and buildings; Numbers; Time: Period; Places; Geographical names; General actions/making 4. Step 4: Unmatched; Personal names; Numbers; Business: Generally; Grammatical bin; Geographical names; Substances and materials: Solid; Places; Money generally; Architecture, houses and buildings
Move 5: Describing corporate social responsibility	Grammatical bin; **(2) Pronouns**; Helping; Belonging to a group; Unmatched; Personal names; Green issues; Education in general;
	Giving; General actions/making
Move 6: Looking to the future	Grammatical bin; **(2) Pronouns**; Time: Future; Numbers; Places; Location and direction; Residence; Existing; Unmatched; Personal names
Move 7: Soliciting response	Numbers; Unmatched; Personal names; Telecommunications; Geographical names; Business: Generally; Grammatical bin; Vehicles and transport on land; Location and direction; Information technology and computing

Also applying *Wmatrix*, the study analyses the CBC in terms of parts-of-speech (POS) in order further examine pronoun usage in the moves. As an illustration, Table 4 shows up to the top ten move-specific POSs in Moves 1-3. It is found that in Move 3: Establishing relationships with potential partners, "possessive pronouns" rank sixth.

Table 4. Top ten POSs in Moves 1-3

Move Structure	Up to top ten POSs
Move 1: Establishing a professional image of the company	single common noun; general adjective; plural common noun; singular proper noun; base form of lexical verb; article; general preposition; for (as prep); past tense of lexical verb; -ing participle of lexical verb
Move 2: Introducing contents and organisation of brochure	single common noun; cardinal number; general adjective; plural common noun; singular proper noun; base form of lexical verb; article; hyphenated number; single article; coordinating conjunction
Move 3: Establishing relationships with potential partners	single common noun; general adjective; plural common noun; general preposition; coordination conjunction; **(6) possessive pronouns**, pre-nominal; base form of lexical verb; article; infinitive **[(11) 1st person plural subjective personal pronoun (*we*)]**

Table 5 below shows move-specific POSs, meaning that some POSs are found in one move but are not shared between moves. It shows that in Move 3, the move-specific POS is the first person plural subjective personal pronoun (*we*) (ranked eleventh), and so "we" is used in these company brochures to achieve the communicative function of establishing relationships with potential partners.

Table 5. Move-specific POSs

Move	Part-of-speech
Move 1: Establishing a professional image of the company'	past tense of lexical verb
Move 3: Establishing relationships with potential partners	**1st person plural subjective personal pronoun (*we*)**
Move 4 Step 4: Listing job reference	unit of measurement

Move 7: Soliciting response	single locative nouns'
	'unclassified words' containing addresses and URLs
Move 3: Establishing relationships with potential partners	'infinitive' to describe purpose and promise action
Move 6: Looking to the future'	'infinitive' to describe purpose and promise action

It has been noted in Table 3 Move-specific twenty semantic field analysis that "Pronouns" are frequently used in a few moves, ranking the second after "Grammatical bin." Further analysis was hence carried out to find out what the pronouns were. Table 6 lists up to the top twenty pronouns in Move 3, Move 4 Step 1, Move 5, and Move 6.

Table 6. Top twenty pronouns and determiners in Moves 3-6

Move (percentage)	Up to top twenty pronouns and determiners
Move 3: Establishing relationships with potential partners (8.62%)	*our, we, its, their, that, us, them, I, they, which, it, this, you, ourselves, itself*
Move 4 Step 1: Providing background information of the company (2.69%)	*our, we, its, it, that, which, I, their, they, his, one, who, us, my, them, your, its own, what, everything, me*
Move 5: Describing corporate social responsibility (5.05%)	*our, we, its, it, their, that, which, his, those, who, us, they, everyone, their own, this, ourselves*
Move 6: Looking to the future (4.62%)	*our, we, that, it, you, our own, this, one, its*

It is found that across all the moves (and step), "our" and "we" are the most frequently used pronouns, followed by "its," "it," "that," and "their." As the present study is concerned with examining the linguistic realizations of the self and the other in company brochures, the CBC was analysed by identifying and quantifying pronouns that indicate the self and the other. Table 7 shows the pronouns that indicate the self (*our, we, us, ourselves, I, my, me, ourselves*) and the other (*you, your, they, their, they, them, his, everyone*). Findings show the much more frequent use of pronouns of the self, with "our" and "we" particularly used much more heavily, in the moves, compared to those of the other, particularly "they" and "their."

Table 7. The self and the other

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Move	Pronouns (frequency)	
Move 3: Establishing relationships with potential partners (8.62%)	⌐	our (31), we (31), us (2), I (2), ourselves (1)
	⌐	they (1), you (1)
Move 4 Step 1: Providing background information of the company (2.69%)	⌐	our (98), we (65), I (13), us (6), my (3), me (2)
	⌐	their (11), they (8), his (5), them (3), your (2)
Move 5: Describing corporate social responsibility (5.05%)	⬜	our (26), we (22), us (2), ourselves (1)
	⬜	their (6), his (3), they (1), everyone (1)
Move 6: Looking to the future (4.62%)	⬜	our (15), we (5)
	⬜	you (1)

After discussing the findings about move and step-specific pronouns, the following discusses the findings from examining three-word concgrams with pronouns, namely "our" and "we," as the user-nominated search words in Moves 3, 4 (1) and 5. Tables 8-10 below illustrate how three-word concgrams reveal the aboutness of the specific moves. Table 8 shows that in Move 3: Establishing relationships with potential partners, "our" is co-selected with positive words such as "achievements," "advantage," "appropriately," "encouraging," "satisfaction," "reputation," "achievements", and with "reason."

Table 8. Move 3: Establishing relationships with potential partners - Top 20 three-word concgrams with 'our'

our	achievements	believe	2
our	achievements	continue	2
our	achievements	Mr	2
our	achievements	operate	2
our	achievements	reputation	2
our	achievements	appropriately	5
our	achievements	because	4
our	achievements	clients	3

our	achievements	Encouraging	2
our	achievements	Mr	2
our	achievements	Nien	3
our	achievements	Robert	3
our	achievements	satisfaction"	2
our	advantage	important	2
our	advantage	most	2
our	advantage	quality	2
our	advantage	achievements	3
our	advantage	appropriately	3
our	advantage	because	2
our	advantage	more	2

Tables 9-10 show "our" and "we" co-selected with words in Move 4 Step 1. The pronouns "our" co-selects with "adheres" and "bears" (Table 9) and the pronoun "we" co-selects with "aspire" and "claim" (Table 10) and other words that provide background information of the company.

Table 9. Move 4 Step 1: Providing background information of the company –
Top 20 threeword concgrams with 'our'

Our	adheres	aspect	2
Our	adheres	business	2
Our	adheres	core	2
Our	adheres	Every	2
Our	adheres	markets	2
Our	adheres	mission	2
Our	adheres	bears	4
Our	adheres	customers'	4
Our	adheres	ETHOS	4

Our	adheres	hints	3
Our	adheres	other	5
Our	adheres	trademarks	2
Our	adheres	we	4
Our	bears	Group	2
Our	bears	history	2
Our	bears	members	2
Our	bears	staff	2
Our	bears	thousand	2
Our	bears	witness	2
Our	bears	years	2

**Table 10. Move 4 Step 1: Providing background information of the company –
Top 20 three-word concgrams with 'we'**

We	aspire	customer	2
We	aspire	dimension	2
We	aspire	do	2
We	aspire	provide	2
We	aspire	service	2
We	aspire	as	2
We	aspire	claim	5
We	aspire	dimension	5
We	aspire	formerly	3
We	aspire	improved	5
We	aspire	Kong's	4
We	aspire	local	3
We	aspire	makes	2

We	aspire	Wah	9
We	aspire	wide	4
We	claim	pride	2
We	claim	provide	2
We	claim	Today	2
We	claim	truly	2
We	claim	as	2

The following Figures 2- show the concordance lines of pronouns used in some of the moves. Figure 2 shows the pronoun „we" (N=31) in Move 3: Establishing relationships with potential partners.


```
1   improves work efficiency and professional ethics. We also believe organizational structure and discipli
2   ing service systems, maintenance and renovations. We are also backed by Hopewell Construction Company L
3   than just buildings, we are designing lifestyles. We are at all times understanding the needs and antic
4   ur customers, shareholders, and business partners we are constantly creating and providing excellent va
5   rson "We are designing more than just buildings, we are designing lifestyles. We are at all times unde
6   g – Registered Architect and Authorized Person "We are designing more than just buildings, we are des
7   and greatest contribution to the society.  Today, we are full of proud that EMMIXR has become a top bra
8   ant advantage is in the quality of our staff, and we are proud to lead such a professional, energetic a
9   nstruction, and professional facility management. We are solution-focused, environmentally responsible
10  omotions and sponsorship of continuing education, we award and encourage younger members of our staff f
11  a small company to a diversified specialist firm. We bel ieve that the reason for our growth and succes
12  ross the broad spectrum of businesses we operate, we believe our reputation and our achievements will c
13  e of philosophy and principles towards our work. We believe that teamwork is an unbeaten energy resour
14   (HITEC) "Fresh thinking comes from fresh minds. We encourage that internally at Hopewell in developin
15  d information on market potentials. Through them, we envisage our business opportunities." Mr. Andrea
16  lls through company sponsored education programs. We frequently participate in international competitio
17   relationship with our customers. It is from them we get our first hand information on market potential
18   serve our customers with expertise. Furthermore, we have also invested heavily in state-of-the-art har
19  n since its establishment. Driven by this vision, we have been increasingly committed to provide excell
20  ng services of construction materials since 1976. We have grown tremendously from a small company to a
21   staff. In order to maximize corporate potential, we have put in lots of effort to train up a professio
22  erience in corporate affairs and administration "We invested in the people and created the professiona
23  's about where they live, work, shop, and play - we look at their lives as a whole and thus deliver co
24  tions to keep ourselves on the competitive edge. We maintain that our most important advantage is in t
25  hilosophy across the broad spectrum of businesses we operate, we believe our reputation and our achieve
26  ment system. Regardless of technology or quality, we pledge to excel in the industry.  Customers Come F
27  ild a Better Future  With our excellent products, we pledge to promote green construction for quality l
28  e strengthens staff loyalty and self-improvement. We provide ample incentive schemes to award our emplo
29  ssing needs in an immediate and flexible fashion. We treasure long-term relationship with our customers
30  et-oriented with a holistic approach to business. We understand market needs and tailor our services ap
31  naging Director's message  As the founder of GCE, we welcome you to know more about our company. Throug
```

Figure 2. Move 3: Establishing relationships with potential partners: 'we' (N=31)

From the concordance for "we," it is clearly evident that the company brochures describe people (*our clients, our customers, shareholders and business partners, our staff*, etc.) and vision, commitment, practices, achievements and ideologies (*invested in the people, solution-focused, environmentally responsible, award and encourage younger members of our staff, treasure long-term relationship with our customers,* etc.) as well as their products and services in order to build relationships with their potential partners. The pronoun "we" also co-selects words that show the relationships with the other, such as "*also backed by Hopewell Construction Company*," "*Through them ... envisage our business opportunity*," "*welcome you to know more about our company*," "are designing *lifestyles*," "*teamwork*," "*understand market needs and tailor our services*," explicitly revealing *ba*, where "the unity of the self and the other is born" (Otsuka, 2011).

Figure 3 below shows a pronoun of the other, i.e., "they" (N=8), in Move 4 Step 1: Providing background information of the company. The pronoun "they" can refer to projects, customers, or trading partners. Some instances of "they" are observed to coselect with pronouns of the self, i.e., "our business" (line 1), "more confident in us" (line 5), "think of nobody but us" (line 8).


```
1    ments are an important component of our business. They also realise Hongkong Electric's commitment to gr
2    ts SHKP developments apart in the market, whether they are large-scale residential projects, luxury resid
3    ries has a distinct focus of expertise. Together, they drive the success of our group locally and oversea
4    e to maintain the new Rolls-Royce engine types as they enter the market and become operational. HAESL is
5    he clients are more confident in us, so that when they have Housing Authority projects to do and need a p
6     parts back to a fully restored condition so that they have the same integrity and durability as new part
7    ts have been comparatively more difficult because they require more new techniques and equipment. However
8    to do and need a plumbing engineering contractor, they will think of nobody but us."  Having built his ca
```

Figure 3.   Move 4 Step 1: Providing background information of the company: 'they' (N=8)

The last concordance discussed in this paper is "our" (N=15) taken from Move 6: Looking to the future (Figure 4). The unity of the self and the other is clearly revealed in some instances of word co-selection with "our," including "customers and the community" (line 3), "endeavour to be a good neighbor" (line 6), and "environment" (line 7).


```
1    n this remarkable success, we will continue to do our best not only to surpass our own standards of reli
2    g ample recreation and green space. Demonstrating our commitment and confidence in China, Hopewell New T
3    service and quality, but also the expectations of our customers and the community.  36  Into the future,
4     effective and environmentally friendly energy to our customers. This remains a constant goal - one that
5    ability, and that of our environment, is based on our effective adoption of new and proven technologies
6    customer service will continue unabated, as will our endeavour to be a good neighbour and corporate cit
7    for excellence.  Our sustainability, and that of our environment, is based on our effective adoption of
8    r the years and intend to surpass in the future. Our focus on setting new benchmarks in excellence for
9    serviced residences, and hotels. Here are some of our future projects.  Hopewell New Town in Guangzhou H
10   lace to work and live, while continuing to expand our international business, building upon our worldwid
11   will continue to do our best not only to surpass our own standards of reliability, service and quality,
12   success and will be a momentum for future growth. Our property portfolio will include office and retail
13   s and the community.  36  Into the future, we see our role as continuing to work conscientiously to prov
14   ng upon Our worldwide reputation for excellence. Our sustainability, and that of our environment, is ba
15    expand our international business, building upon our worldwide reputation for excellence.  Our sustaina
```

Figure 4. Move 6: Looking to the future: 'our' (N=15)

4   Conclusion

The present corpus-based genre study has analysed a corpus of twenty company brochures in the field of surveying and engineering in Hong Kong. Focusing on pronouns of the self and the other, the study shows important findings about the non-separation of the self and the other. Corpus textual evidence shows that such pronouns co-select with words that emphasise the inter-relations between the self and the other; how they and their thinking and behaviours influence each other; how they co-exist in the professional and business environment; and how they form intricate co-operative and collaborative relationships to work toward common goals.

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Describing Space as an Intersubjective Activity: Examples from Ishigaki∗

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Abstract. Based on data collected during field visits to Ishigaki Island (the main island of the Yaeyama Islands, the southernmost of several island groups in the prefecture of Okinawa, Japan), this study explores how speakers in Ishigaki express space. Findings suggest that speakers in Ishigaki change their spatial frame of reference depending on interlocutors' background and that they often choose a frame of reference that seems to be most convenient and comprehensible to their interlocutors. The research shows that describing space, especially giving directions is an intersubjective activity emerged in an interactional setting.

Keywords: a spatial frame of reference, intersubjectivity, indexicality, interaction, Ishigaki.

1   Introduction

When we talk about space, we locate our reference point to our body, a nearby spot, or a far-away place. Ways in which human beings perceive and express space vary from language to language, as recent studies of spatial cognition and language revealed striking differences across cultures (cf. Pederson et al. 1998; Haviland 1998, 2005; Levinson 2003 among many others). This paper attempts to demonstrate diversity in spatial description within one language.

In previous works, there was a tendency to argue for a one-to-one correspondence between language and a particular frame of reference except for some bilingual cases. In this paper, I would like to point out that describing space, especially giving directions is an intersubjective activity. In Ishigaki's case, speakers take their interlocutors' background or knowledge of geography into consideration and choose the most appropriate, or in many cases, the other-directed frame of reference. Therefore, the use of a frame of reference is not necessarily predetermined. Rather, the choice serves as an index to assess what kind of common ground speakers try to establish with their interlocutors.

2   Theoretical Frameworks

2.1   A Spatial Frame of Reference

Based on the results of cross-linguistic studies in a number of field sites around the world, a functional typology of linguistic encoding of space was presented and three spatial frames of reference were identified: Relative (ego-centric), Absolute (environmental), and Intrinsic (Pederson et al. 1998). In the relative system, referents are referred to by the spatial configurations vis-a-vis the speaker (e.g. 'right' and 'left'), as in "The man stands on my <u>right</u>." The spatial relation changes as the speaker's location changes. In the absolute system, the frame of reference requires fixed bearings such as 'north', 'south', 'east', and 'west,' as in "Okinawa is on the <u>south</u> of Tokyo." The spatial relation is stable as the orientations are based on fixed environmental features. In the intrinsic system, the frame of reference is identified in terms of the referent's own characteristics –i.e., 'front,' 'back,' 'mouth,' and 'foot,' as in "Flowers touch the <u>mouth</u> of the vase."[1]

While contemporary Japanese possesses the three types of frame of reference (hereafter, FoR), it is believed that it relies overwhelmingly on the relative system, at least in the Metropolitan Tokyo area (Pederson et al. 1998). The terms *migi* ('right') and *hidari* ('left') are considered the dominant linguistic encodings of space in Japanese. However, some empirical studies present the data against the previous discussions on the dominance of the relative system in Japanese (Inoue 2002, 2005; Kataoka 2005; Takekuro 2007; Matsumoto 2009). These recent findings suggest that the relationship between language and a spatial FoR is not based on a one-to-one correspondence. The aim of this paper is to exhibit communicative practices based on the absolute FoR in a rural community outside the Japanese mainland. By presenting linguistic and gesture data collected on Ishigaki Island in Okinawa, this paper will show that the choice of the FoR is not predetermined but changes according to interactional contexts. In particular, I analyze examples in which speakers choose a FoR that is less confusing to their interlocutors.

2.2 Linguistic Anthropological Perspectives

Before analyzing data in the next section, I shall explain important theoretical perspectives of this research. First and foremost, this paper presupposes that social interaction including describing space is a boundless activity of human life and is momentarily created. Social interaction is constantly changes its shape and meaning. A new piece of information at one moment becomes an old piece of information at a next moment. What was said 'there and then' provides with the background for what is said 'here and now' and what can be said in the future. As Bakhtin (1981[1935]) discusses, participants in interaction use various "voices," such as reporting someone else's speech, mimicking someone, and speaking as someone else, all of which come from and engage with others' words and with the words of those who have spoken before (cf. Du Bois 2003). Since a particular instance of language use in social interaction has much to do with what happened previously, it is understood only by taking sociocultural and interactional context into account. Analyzing interaction in context enables us to understand why participants say certain things in certain situations. Then, as a next step, it is critical to have an analytical and theoretical means that will make it possible to connect a particular instance of language use with a particular aspect of context. Following Jakobson's communication model grounded in semiotic theory, Koyama (2009) points out that the sociocultural universe in which social interaction occurs is anchored on *origo*, the deictic center of discourse. As *origo* is situated in the center of the "here-now" and ever-changing context, basing the analysis on *origo* will reveal the ways in which social interaction is indexically anchored at each moment.

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[1] Other researchers have defined these notions using different terms. In this paper, I will use Levinson's (2003) notions and terminology as a point of departure. Levinson, however, merged the absolute and intrinsic systems that he and his collaborators established in their previous work (Pederson et al.1998) into one category called the absolute system for the fact that the frame of reference does not change even if the speaker changes his/her location. In the analysis, I will use this two-way system rather than the original three-way system.

In what follows, I will describe the notion of indexicality, one of the fundamentals in semiotically-grounded research of linguistic anthropology, because indexicality will provide an excellent point of departure for examining constituent elements of communicative acts, verbal or nonverbal.

2.3   Indexicality

An "index" is one of the constituents along with "icon" and "symbol" in Peirce's (1955) tripartite system of signs. In Peirce's terminology, an index is representative of the object by virtue of "being really affected" through a dynamic or causal relation to the object. For instance, a knock on the door is an index of the presence of a visitor; a weathercock is an index of the direction of the wind. When a sign is an index, it stands for the object neither by similarity nor convention, but by contiguity with it. In this sense, an indexical sign is existentially bound to the object and can be interpreted only through taking the situated social context into consideration. Without contextual information, it is impossible to provide and specify the meaning of an index, therefore the sign becomes meaningless.

The adjective "indexical" and noun "indexicality" are used to describe linguistic signs that signal or point to certain features of the communicative context (Jakobson 1960, Lyons 1977, Morris 1938, Peirce 1955, Silverstein 1976). Linguistic indexicals include but not limited to regional accent, pronouns, demonstratives, deixis, tense, and honorifics, whose tokens stand in dynamic and existential relations to their objects. As indexicals bear a direct connection with the object, the interpretation of indexical signs depends on the context in which it occurs.

Similar notions of indexicality are worth noting. Gumperz (1982) has identified a subclass of indexical signs, which he calls "contextualization cues". Contextualization cues indicate how an utterance is to be understood and what its rhetorical role in a sequential discourse is, therefore invoke the framework of interpretation of sociocultural context. Goffman (1974) defines "footing" as the position or alignment an individual takes in uttering a given linguistic expression. Bakhtin (1981[1935]) presents the notion of "voice". In interaction, participants use various "voices", such as reporting someone else's speech, mimicking someone, and speaking as someone else, all of which are indexed by linguistic features. A variety of these notions describing the more or less the same phenomena of indexicality suggest that the indexical function of language is central to communicative practice and serves to establish social relationships in context.

Silverstein's (1976) view of indexicality is most relevant to this study. Following semiotic traditions of Peirce, Jakobson, and Jespersen, Silverstein presents a two-way classification of indexical types: presupposing and creative. A presupposing indexical sign points to some contextual aspect independently known. In this sense, the sign presupposes the aspect. A creative indexical sign can make a particular contextual feature operative in the communicative context, by picking out the referent. For example, an honorific expression such as *vous*, on the one hand, functions as a presupposing index when it points to the addressee's higher status in a social context where status difference exists between interlocutors. On the other hand, the use of *vous* to a friend who is commonly referred to by *tu* can function as a creative index when it foregrounds relevant aspect of the context, such as deference, coldness, irony, humor, or sarcasm. Because of these two aspects, indexicals become primary tools to maintain and create social and psychological worlds among interlocutors.

In this paper, I take this semiotic notion of indexicality as the point of departure for analyzing interlocutors' choice of FoR in social interaction. My aim is to determine how describing space communicates indexically.

3   Ishigaki Island

Ishigaki Island is one of the Yaeyama Islands, the southernmost island group in Japan, lying 420 kilometers southwest of Naha on the Main Okinawa Island. Ishigaki Island is 2,200

kilometers south of Tokyo and 250 kilometers west of Taiwan. It belongs to the subtropical climate zone. The island is about 120km in circumference and surrounded by coral reeves and beaches. Every year more than seventy thousand tourists visit the island, which has a significant impact on the island's economy. Among the island's estimated population of 47,000, ninety percent lives in Ishigaki *shigaichi* (downtown), which is marked by parallel roads leading a few blocks north from the port and by crossroads running west-east along the coast (See Map 1).

On Ishigaki Island, speakers, especially of the older generation, speak the Yaeyama dialect or varieties of the Ryuukyuu Dialect in addition to Standard Japanese.[2] Today, most young speakers claim that they cannot speak or understand the Yaeyama dialect. But their speech contains accentual patterns and lexicons that are characteristics of the Yaeyama or the Ryuukyuu dialect.

4 Data Analysis

This section presents data collected in several field trips to Ishigaki Island. The analysis reveals that (1) the absolute FoR is ordinarily observed in Ishigaki speakers' speech and gesture; and (2) speakers choose the FoR according to the interlocutors' background.[3]

4.1 Switching Frames of Reference

As a popular holiday resort and place for retired life, many people visit or move to the island throughout the year. To most islanders living and working in downtown Ishigaki, interaction with tourists or new settlers from other prefectures is an everyday matter. Then, what happens when local islanders and tourists from other prefectures meet and talk about space? Which FoR is chosen? This section analyzes how Ishigaki speakers in downtown Ishigaki give directions to non-Ishigaki speakers and examines whether or not the FoR used in Ishigaki speakers' directional descriptions remains constant across different interlocutors.

Before analyzing the data, I should introduce the local practice of giving directions. In downtown Ishigaki, people use *agaru* ('to go up/climb') to go from the ocean towards the direction of Mt. Omoto which is located in the middle of the island and *sagaru/oriru* ('to go down/descend') to go towards the ocean from Mt. Omoto. The terms are said to reflect the gentle slope leading to Mt. Omoto from the ocean. The same expressions are used in the town of Shiraho to the northwest of downtown Ishigaki, though compass directions of what *agaru* and *sagaru/oriru* point to in Shiraho and downtown Ishigaki are different.

In downtown Ishigaki, spatial description is based on two coordinates: the south-north and east-west. To describe the south-north coordinate, as mentioned earlier, the terms *agaru* and *sagaru/oriru* are used. To describe the west-east coordinate along which several long roads run parallel, the terms *hidari/migi* ('left/right'), *nishi/higashi* ('west/east') of Standard Japanese, or *iri/agari* ('east/west') of the Naha dialect are used.[4] In downtown Ishigaki, I consider the terms left/right as using the relative FoR and the terms west/east as using the absolute FoR. Using these frames of reference as a point of departure, I investigated which spatial FoR would be used to a pair of non-Ishigaki speakers and to a pair of native Ishigaki speakers when the two pairs separately asked for directions (to locations A and B on Map 1) from randomly-chosen subjects who are natives of Ishigaki.[5] Data-collecting interviews were conducted on the flat part

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[2] Varieties spoken on the Yaeyama, Miyako, Okinawa, and Amami Islands are known as Ryuukyuu Dialect as a whole. Since Ishigaki Island's population includes groups of settlers whose ancestors came from these and other islands, speakers of the older generation speak dialect varieties that their ancestors spoke on their home islands. However, those islands are so far apart in the Pacific Ocean that dialect varieties are often mutually unintelligible.

[3] Here, Ishigaki speakers refer to natives of Ishigaki Island.

[4] Precisely speaking, the west/east distinction is not accurate to compass. It has to be north-west/south-east, but people conventionally use the terms 'west' and 'east' to describe the direction indicated in the dotted line on Map 1.

[5] Here, locations A and B are heuristic. The directions and routes that people described were not limited to the ones that appear on the map.

of downtown Ishigaki, in order to avoid the geographic bias and not to influence speakers to use the terms *agaru*, *oriru*, and *sagaru* that inherently include upward and downward movements.
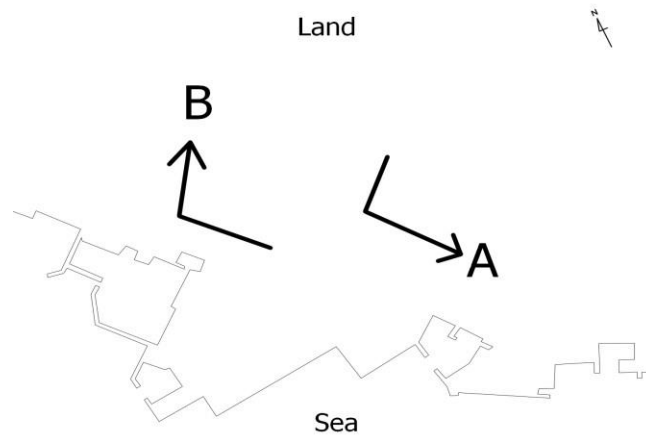
Map 1: Two directions interviewed in downtown Ishigaki

Tables 1 and 2 below show the results of the interviews. Ishigaki speakers tend to discern the use of the FoR depending on interlocutors' background.

Table 1: The FoR to describe location A

FoR	To Non-Ishigaki Speakers (N=18)	To Ishigaki Speakers (N=15)
Relative	60%	16%
Absolute	20%	68%
Others	20%	16%

Table 2: The FoR to describe location B

To Non-Ishigaki Speakers (N=13)	To Ishigaki Speakers (N=10)
59%	14%
41%	76%
0%	10%

First, let me explain the results in Table 1. The two pairs of non-Ishigaki and native-Ishigaki speakers collected descriptions of the route to the location A. As shown in the left column of Table 1, most subjects used the term *hidari* ('left') when they explained the route to non-Ishigaki speakers.

(1) *kono michi o itte X ni tsuitara shingou o **hidari** ni magatte…*
this road O go X LOC arrive.then signal O left LOC turn
'Go on this street and (when you) arrive at X, turn left at the signal…'

Some used the expressions *oriru* and *sagaru* together with *hidari* as in (2).

(2) *sugu soko o orite… **hidari** ni itte*
immediately there O go down left LOC go
'Go down immediately there and …. go to the left.'

Then, the pair of native Ishigaki speakers asked the same question. As appears in the right column of Table 1, subjects did not use the term *hidari* ('left') when they talked to natives. Rather, they used cardinal direction terms such as *higashi* and *agari* or/and the expression *oriru*, as in (3) and (4).

(3) *Zya   no   kado   o   orite   agari sa*
    Zstore   NOM   corner   O   descend   east SFP
    'Go down at the corner of Store Z and it's on the east.'

(4) *asuko   o   orite   Zya   de   higashi   ni   ikuto*
    there   O   descend Zstore LOC   east   LOC   go and
    'Go down there and go to the east at the Z store.'

Among native Ishigaki speakers, subjects prefer to use the absolute frame of reference rather than the relative FoR. Thus, whether or not interlocutors are native Ishigaki speakers seems to make a difference in subjects' choice of the FoR in spatial descriptions of downtown Ishigaki.

Next, the same pairs of speakers asked a totally different set of subjects to describe the route to the location B as appeared on Map 1. The majority of the new subjects used the relative FoR to the pair of non-Ishigaki speakers, as in (5).

(5) *gasorinsutando   o   migi   ni   magatte*
    gas station   O   right LOC   turn
    'Turn right at the gas station.'

Half of the subjects combined the relative FoR with the expression such as *agaru*, as in (6).

(6) *gasorinsutando   o   migi   ni   agatte*
    gas station   O   right LOC   go up
    'Go up to the right at the gas station.'

On the other hand, when native Ishigaki speakers talked to each other, the majority of the subjects only used the absolute-based expression, *agaru*, as in (7).

(7) *gasorinsutando   no   kad   o   agatte*
    gas station   NOM corner O go up
    'Go up at the corner of the gas station.'

Without using expressions based on the relative FoR, native Ishigaki speakers can understand which way to turn by the expression *agaru*. Furthermore, only 20% of the subjects used the term *kita* ('north') to indicate the direction of the turn, although their descriptions also included the expression *agaru*. Thus, unlike the east-west grid, the north-south grid was not described by cardinal direction terms in downtown Ishigaki. Having the expressions such as *agaru* and *sagaru*/*oriru* seems to suffice, which results in no need to use the cardinal direction terms for the north-south grid.

Speakers in downtown Ishigaki commonly use both types of FoR in their spatial description but discern the use of FoR depending on interlocutors. In talking to non-Ishigaki speakers, people in Ishigaki tend to use the relative FoR, while preferring the absolute FoR among themselves. I also found that those who used the absolute FoR to non-Ishigaki speakers had little contact with non-Ishigaki speakers, such as dry cleaning company's workers, fish-market wholesalers, shoppers of the older generations, compared to those who routinely interact with tourists.

4.2   Describing Space in Everyday Interaction

In this section, I analyze the use of FoR in their everyday interaction between Ishigaki speakers and non-Ishigaki speakers. Examples suggest that speakers attempt to use a FoR that is

convenient and comprehensible to their interlocutors and that the absolute FoR functions as a group marker.

Example (8) shows an instance of interaction in which a relatively recent settler to Ishigaki asked for directions to an old Ishigaki speaker on the street. Here, S stands for the settler and N stands for the native. These two speakers go back and forth between the two frames of reference: the relative and absolute, by using another's supposedly preferred FoR rather than their own preferred FoR.

(8) S who was on her way to X's house was lost in a residential neighborhood within downtown Ishigaki. She got out of her car and asked N how to go to X's house.

1 S: *ano   x-san   no   otaku   kono   atari   desu   yone?*
       well Mr. X GEN house this   around COP   SFP
       'Mr. X's house is around here, isn't it?'

2 N: *sou   soko   soko   o   ☜hidari   ni   ittara   ne*
       yes   there there O   left   LOC   go   SFP
       'Yes, when you turn left,'

3   *arimasu   yo*
       exist.COP.POL   SFP
       'it'll be there.'

4 S: *a   hai   ☜higashi   desu   yone* (pointing ☜)
       oh   yes   east   COP   SFP
       'Oh, OK. It is east, right?"

5 N: *sou… hidari desu   yo   hidari*
       yes   left   COP   SFP   left
       'Yes. It's on the left, left.'

6   *hidari   ga   higashi   ne*
       left   SUB   east   SFP
       'Left means east.'

7 S: *hai higashi   desu   ne   higashi*
       yes   east   COP   SFP   east
       'Yes. It's to the east, east.'

8   *hidari   wa*
       left   TOP
       'To the left.'

To answer S's question in line 1, N repeated the demonstrative *soko* twice and said *hidari* 'left,' by pointing to the left at the same time. Based on the results of the experiment in the previous section, it might have been more natural for N to use 'east.' In fact, in a follow-up interview with N, she said that she immediately recognized S as a non-local person and that it was her quick reaction to use *hidari* for the sake of accurate communication. She also claimed that she would probably use *agari/higashi* ('east') to a local person. These metalinguistic commentaries can be misleading, since native speakers do not necessarily understand what they say and why they do certain things. Nevertheless, considering the fact that many Ishigaki speakers apply the absolute system to the east-west coordinate, it is not surprising that N instantly thought of the ease of understanding for S and said *hidari*.

S's response in line 4 was not a repetition of N's expression hidari but the expression hidari based on the absolute spatial system. As S expressed in the interview, before coming to Ishigaki, S used the expressions based on the relative FoR such as right and left. Only after living among Ishigaki speakers, did S start to recognize the importance of using the absolute system in the community and made conscious efforts to incorporate it to her own speech. She would like to pay respect to and get used to local linguistic and cultural practices as an "outsider," while she

wishes to be a full-fledged member of the local community as soon as possible. Her (persistent) use of the absolute system shows her strong feeling for the community's habitual linguistic practices.

S's choice of the absolute FoR suggests more points. First, S who has lived in Ishigaki for two years would like to show that she has acquired local linguistic practices, by making herself sound familiar with the absolute FoR, whereas so many tourists and visitors stick to the use of the relative FoR. S's choice of *higashi* in line 3 is an index that she is in a way an "insider" and knowledgeable on the culture there. Second, S's use of *higashi* can be seen as an example of hypercorrection (Labov 1972), because N, a local Ishigaki speaker, did not even say *higashi* but said *hidari*. To S, a spatial FoR not only functions to indicate directions but more importantly serves to show her respect to the local language and culture, her standpoint in the community, and her identity as a settler from a different prefecture. Thus, any choice of FoR bears highly indexical meanings and leaves as an important index to social interaction.

In line 5, N repeated *hidari* as in line 2 and in line 6, she finally said *higashi* to confirm. If N assumed that S would not have understood by hearing *higashi* and thus used *hidari* persistently, this could be a hypercorrection on N's side, since, as some Ishigaki speakers have the bias, using the east-west coordinate for directions seems to be available only to Ishigaki speakers. After N used both *hidari* and *higashi*, S used *higashi* and *hidari* in lines 7 and 8.

In this example, N used the relative FoR so that S would understand it better. On the other hand, S used the absolute FoR because S assumed that N was familiar with it. Which FoR is easier for both speakers and listeners to use and understand depends on space and directions to describe as well as where they are located. Even if the speaker has one FoR that is the most familiar and convenient, the same speaker might choose another FoR for the sake of their interlocutors' ease of understanding. In other words, participants in interaction express space intersubjectively, by often taking others' points of view. Furthermore, as S demonstrated, the choice of a FoR itself can be the means to express one's respect, membership, and identity.

This can be seen in the final example in which the absolute FoR functions as a group marker among Ishigaki speakers. In (9), three Ishigaki speakers, G, N, and A, discussed that they should avoid giving directions based on the absolute FoR to a non-Ishigaki speaker.

(9) At a store, three Ishigaki speakers (G, N, A) were chatting when K, a tourist from Tokyo, asked them how to go to a bakery.

1 A: *aa   ano x-ya   no   asoko no   kado   ka*
      well   that X-store   GEN   there GEN   corner Q
      'Oh, it is located on the corner of Store X.'

2 G: *chigau soshitara **higashi** de   zutto   **higashi***
      wrong   then   east   LOC   all way east
      'No, farther to the **east**, more to the **east**.'

3   *aruki masu   yo*
      walk COP.POL   SFP
      'It's quite a long walk.'

4 K: *a sou desu   ka*
      oh so   COP.POL Q
      'Oh, really?'

5 N: *sonna **higashi** tte wakannai   yo*
      such   east   QT   understand.NEG   SFP
      '(K) would not understand (what you mean) by "**east**".'

6 A: ***higashi** ja   wakannai*
      east   then   understand.NEG
      'Yeah, (K) would not understand it.'

7   *chanto   setsumei shinakucha*

```
                 properly  explain   do.must
                 'You need to explain it.'
8  G:    hai  hai  wakatteru
         yes  yes  understand
         'Yes, yes, I know.'
9        ((Seeing K))ano  higashi wa    kocchi  ☞ de
                     well   east    TOP  this way    LOC
                     'Well, east means this way.'
10 N:    higashi tte   ttara  ne
         east      QT   then   SFP
         'When you hear "east".'
11 G:    maa   dakara koko  o  orite
         well  so       here  O  go down
         'Well, so, you go down this way'
12       tsukiatari o  kocchi   ni     ☞ kou ☞
         deadend    O  this way  LOC        this
         'At the end of this street, you go this way,'
13       migi ni   iku  n    desu      yo
         right LOC  go   GEN  COP.POL  SFP
         'You go to the right.'
```

Among the three Ishigaki speakers, G is the only one who knows the bakery's location. In line 2, G said that the bakery was to the further east than the place where A initially described. Then, because A and N in lines 5 to 7 said to G that K would know understand where "east" meant, G in line 9 explained to K where "east" was. In G's explanations hereafter, G did not use "east." Instead, he used demonstratives with his finger gesture and said migi ('right') in the end in line 13. The example illustrates the shared understanding among Ishigaki speakers that giving directions based on the absolute system is too difficult for non-Ishigaki speakers to comprehend. This suggests that using the absolute system with ease can work as a group marker, (probably unconsciously) separating themselves from outsiders.

In this sections, I have analyzed the examples in which speakers choose a FoR not because it is the most obvious and conventionalized practice for themselves but because they prioritize precision and their respective interlocutors' convenience so that misunderstanding can be avoided. I have also seen the choice of a FoR can be the means to express one's respect, membership, and identity.

The choice of a FoR in Ishigaki seems to be influenced not only by the speaker's convenience but also by the intersubjective linguistic practice which is a product of participation framework. In this section, I shall reexamine the example (8) in order to discuss how intersubjectivity and indexicality of language correlate with each other.

As I have already mentioned, neither N nor S used a FoR that was supposed to be their familiar choice. They used a FoR that their respective interlocutor seemed to be most comfortable. N thought of S's convenience and took S's perspective on the one hand, and S thought of N's convenience and took N7s perspective on the other. Thus, both N's and S's experience were potentially shared and their perspectives were reciprocally exchanged. The very ability to take other's perspectives (in other words, reciprocal or intersubjective perspectives) is crucial for understanding a constant change of indexical signs. For instance, when speakers A and B interact with each other, referents of any indexical sign such as personal pronouns and demonstratives change from moment to moment, as their roles as speaker and hearer shift. The linguistic form "I" indexes different individuals as a speaker changes. On the other hand, linguistically different forms such as "I" and "you" may index the same individual depending on context. Under normal conditions, we are able to specify the

referent of such linguistic indexes and to continue our interaction, because we can transpose our perspectives based on the "reciprocity of perspectives" (Schutz 1973: 183; Hanks 1996: 258). Formally, linguistic expressions of the absolute and relative frames of references are completely different. Moreover, the two frames of references have different axes that are a human body and the environment. Nevertheless, many speakers in Ishigaki constantly take others' perspectives, by switching their FoR depending on context and transposing the two frames as speakers S and N did in (9). It is because we have the reciprocity of perspectives, by which we create the common ground.

5   Conclusion

Speakers in Ishigaki change their FoR depending on their interlocutors' background. Their choice of the other-directed FoR can be viewed as an outcome of intersubjectively negotiated linguistic practices. In describing space, referential meanings seem to be superseded because accuracy is required in most cases, but speakers also try to create a common ground of reference, in other words, a sphere of intersubjectivity. This becomes the vantage point from where shared social meanings are built through indexicality. In this sense, indexicality also makes intersubjectivity possible. Therefore, we should not just analyze the referential level of language but also consider what each token indexes in order to understand the ability of separate individuals to act within a common world.

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'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.*

the female   the speaker
Figure 1: Energy transfer expressed by (1a, b)
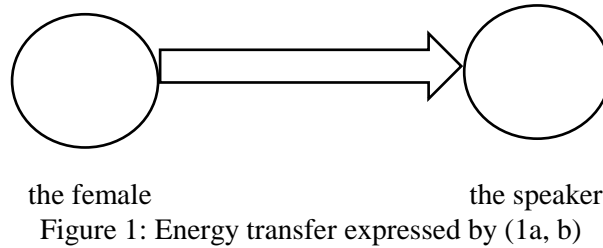
In Figure 1 there are two round circles and an arrow extending from the left circle to the right circle. The left circle represents the female and the right circle represents the speaker. The arrow indicates the energy transfer from the female to the speaker in terms of the hitting of the speaker by 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 not been settled

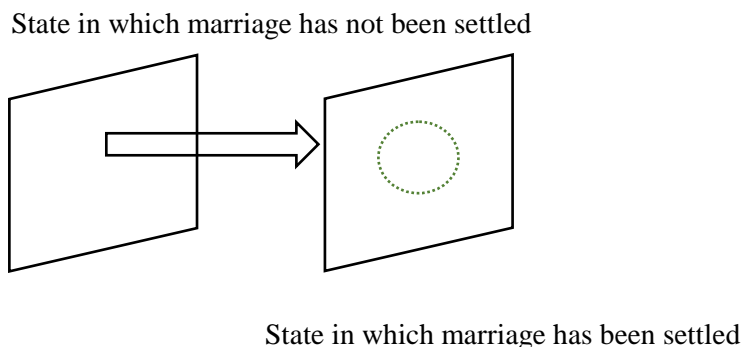State in which marriage has been settled

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).
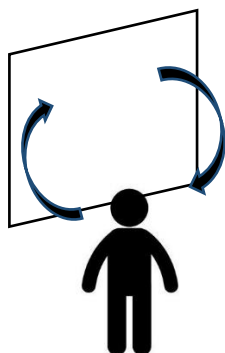
Figure 3: Event model without time shift

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. *Niwa-ni   ki-ga   aru*.
       garden-ni   tree-NOM   exist

   b.??*Niwa-de   ki-ga   aru*.
       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.??*Niwa-ni   paatii-ga   aru*.
       garden-ni   party-NOM   exist

   b. *Niwa-de   paatii-ga   aru*.
       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. *Niwa-ni   ki-ga   aru.*
          garden-ni   tree-NOM   exist

       b.??*Niwa-de   ki-ga   aru.*
          garden-de   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).
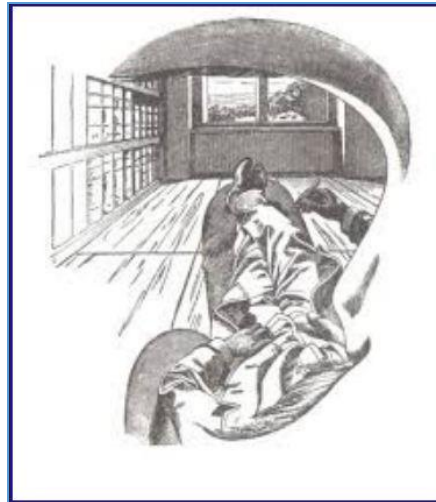
Figure 4: Ernst Mach's self-portrait [Mach 1906]

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).
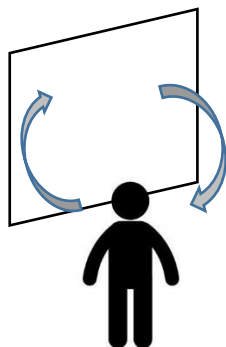

Figure 5: Event model without time shift (= Figure 3)

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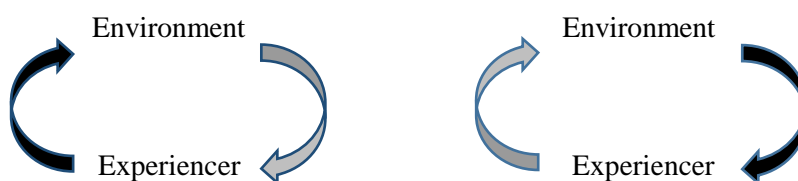
Figure 6: Exploration (left) and somatics (right)

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-ba*kari-*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).
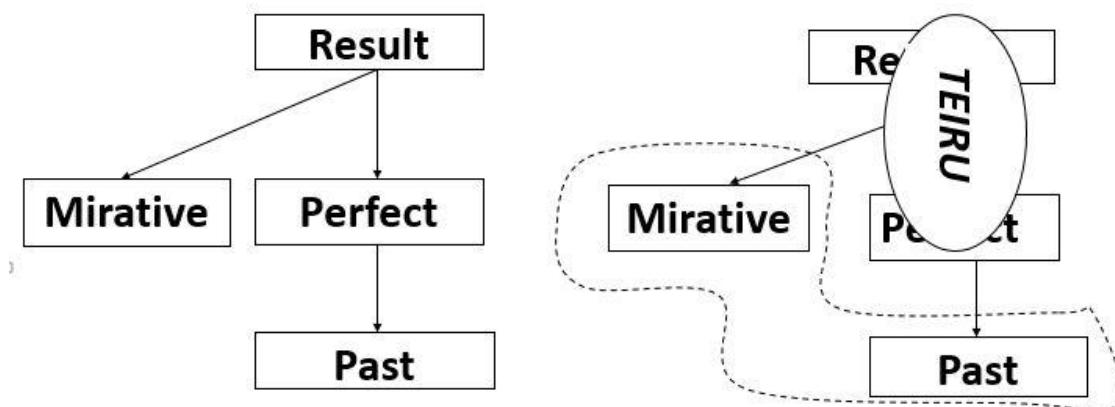
Figure 7: History of *ta*'s semantics [Sadanobu and Malchukov, 2011]

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,

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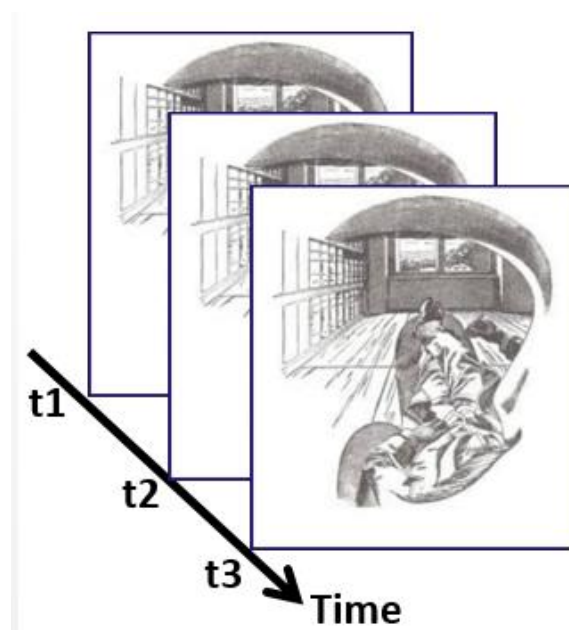
Here is an example of a connection between mirativity and pastness from a novel.

(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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Vocabulary and Modality in Weekly Column Articles: Adverbs and Sentence-Final Expressions

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Abstract. In composing a piece of written text, writers are expected to do so in accordance with the style, genre, context or *BA* congruent to the purpose and intended audience of the resulting passage. In the writings of non-native learners of Japanese, however, we find interesting examples of words and expressions that native speakers find "inappropriate." This suggests that clarifying what words and expressions are suitable for which kinds of text would help improve the way learners of Japanese acquire and improve their writing proficiency. In this paper, we mainly focus on adverbs and sentence-final expressions that appear in weekly magazine column sentences in which the writers state their opinions. The survey showed that the kinds of sentence-final expressions are varied, often with some modality elements. Among adverbs, those typically used for statements appear most often, suggesting some correlation between the adverbs and the sentence-final expressions. We also found relatively frequent use of adverbs that do not often appear in newspapers articles or technical papers.

Keywords: style, genre, modality, opinions, statement, sentence-final expressions, adverbs.

1 Introduction

In composing a piece of written text, writers are expected to do so in accordance with the style, genre, context or *BA* congruent to the purpose and intended audience of the resulting passage. When writing an academic paper or other formal documents with objective descriptions, adverbs such as "tyotto", which sounds colloquial, or sentence-final expressions such as "-hazu-da," which marks subjective judgments the speaker or the writer, are inappropriate and makes the resulting passage incoherent. In the writings of non-native learners of Japanese, however, we find frequent examples of such incoherence.

This suggests that clarifying what words and expressions are suitable for which kinds of text would help improve the way learners of Japanese acquire and improve their writing proficiency. In this paper, we mainly focus on adverbs and sentence-final expressions that appear in weekly magazine column sentences in which the writers state their opinions.

A pilot survey of relevant data showed that the kinds of sentence-final expressions are varied, often with some modality elements. Among adverbs, those typically used for statements appear most often, suggesting some correlation between the adverbs and the sentence-final expressions. We also found relatively frequent use of adverbs that do not often appear in newspapers articles or technical papers.

2 Related Research

2.1 Genre

Different genre categorization of written Japanese texts have been proposed and used from various perspectives and with diverse objectives. Hayashi (1977) listed three standards of categorizing written texts into "formal categorization" in terms of forms, styles and structures, "content categorization" in terms of "material and objects of description" and "functional categorization" in terms of actual functions of the written passages.

According to this categorization, both academic papers and commentary are grouped into the same category. Although both state opinions of the writers in persuasively, the way such arguments are developed and linguistic forms used are different. In academic papers, the write must develop their opinions in an objective manner but in commentary, subjective statements are not out of place. In addition to the criteria stated above, objective versus subjective manner of exposition must be added in the categorization scheme of Japanese written passages.

2.2   Characteristics of written passages by learners of Japanese

Various weaknesses have been pointed out regarding written passages by learners of Japanese. For instance, Sato (2000) lists the following: (1) characters (2) written forms (3) words and expressions (4) grammar and sentence structure (5) discourse (6) coherence in the development of material discussed and (7) coherence of linguistic forms. In relation to "coherence of linguistic forms" he mentions (i) frequent use of informal conversational words and expressions and (ii) styles of sentence final expressions, politeness, light-heartedness as against seriousness, and formality in terms of colloquialism as against formal expressions.

Takahashi (2008) points out errors in terms of "excessive self-expression of the writers subjectivity" and tackles with this issue in terms of "expressions addressing the readers" and "expressions addressing the proposition(al content)s" and suggests that these errors are triggered by "learners insufficient understanding of how expressions denoting the writers perspectives are constrained."

2.3   Sentence-Final Expressions

In Japanese written passages, the writer's attitude or stance to the propositions are expressed in the sentence-final expressions. What modality appears is related to whether the sentence is subjectively stated or objectively stated. Various researches have been conducted regarding the relationship of genres of the passages and sentence-final expressions that appear in those passages.

Hadano (1988) surveyed words and sentence-final expressions used in textbooks, experiment manuals and technical papers in scientific subjects and concludes that sentence-final expressions in research papers can be categorized into "statements of facts" and "statement of judgments" and the former can be exemplified by expressions such as "… did/do such and such," "… indicated/indicate such and such," "… obtained … result ….," and "… differ …," while the latter can be exemplified by expressions such as "… can be considered …," "we consider …," and "… can be viewed." Most express results and reflections by the authors and the variety of modality is limited.

Takahashi (2005) surveyed sentence-final expressions of (literary) essays into 82.5% of unmarked sentences without modality expressions and 17.5% of marked sentences with modality expressions, with diverse modality expressions. According to this study, passages with many marked sentences are descriptive and emotional, whereas unmarked sentences are logical and intellectual and concludes that (literary) essay includes elements of both.

A survey on sentence-final expressions characteristic of newspaper articles show that in the "local news" section of Japanese newspapers passive and stative forms are often used to feign

objectivity of the content to the readers. Choice of voices and aspects affect apparent objectivity of the passages.

The results of these studies make it clear that according to the genres of the passages, different sentence-final expressions are employed. However, we have not found analysis based on the distinction of passages into those in which authors present themselves to give subjective statements and those in which facts are stated objectively and existence of authors and strengths of their claims are hidden behind those fact statements. One problem with passages produced by learners of Japanese is that their subjectivity is overly expressed and analysis from this point of view would be in order.

2.4 Adverbs

According to the study of meaning and usage of adverbs conducted by the National Institute for Japanese Language and Linguistics (1991), adverbs are used to (i) elaborate on the action or state, (ii) express feelings and/or attitudes of the speaker and (iii) pre-state what is going to be expressed later in the sentence. Masuoka and Takubo (1994) categorize adverbs into adverbs of "condition/state," "degree," "quantity," "tense and aspect," "statement," "evaluation," "assertion," and "others (such as delimitation)." Speakers (and writers) act on and convey subjective judgments to listeners (and readers) by means of adverbs.

Frequency of word usage differ according to context or "*BA*" and adverbs are no exception. It is reported that in daily conversational discourse, use of adverbs are markedly more frequent than in written texts such as newspapers or novels or spoken utterances in news and commentaries (The National Institute for Japanese Language and Linguistics, 1991). Tanaka (2009), referring to an earlier survey results that show different adverbs are used in spoken discourse and written texts, in the former, such adverbs as "*moo* (already), *yappari* (as expected), *tyotto* (a little bit), *sugu* (right away), *ichiban* (first / foremost)" are frequently used whereas in newspapers and weekly magazines, "*sarani* (further), *mazu* (in the first place / first of all), *sudeni* (already), *tokuni* (in particular), *syoosyoo* (to some degree/extent), *mottomo* (foremost), *nao* (in addition), *tadatini* (immediately), *subete* (all)" are most frequently used. Adverbs of "tense and aspect" and "degree" abound. Some adverbs share similar meanings, such as "*moo*" and "*sudeni*," both of which mean *already* or "*ichiban*" and "*mottomo*," both of which mean foremost, but are used in different contexts or "*ba*."

In addition to the difference between written texts and spoken utterances, genre affects the usage of adverbs. Term papers and technical reports are "written passages with certain public nature" and are expected to "develop the main argument logically and with empirical support" (Kouno 2004) and aims to "convey information and opinions without emotional commitments" (cf. Kinoshita 1992). Thus, use of adverbs for subjective judgment does not belong.

Muraoka *et al.* (1997) conducted vocabulary frequency study of agricultural research papers, listing adverbs used. The most frequently used are adverbs of "degree" and "quantity" such as "*hobo* (for the most part)," "*hotondo* (most)," and "*mottomo* (the most)" and adverbs of "aspect" such as "*zyozyoni* (steadily)" and "*tuneni* (always)" and no adverbs of "statement" was listed. Based on this result, we can say that for research papers, adverbs of statements are not used as they are intended to state facts and results objectively.

As an indicator of genres of written texts, previous research such as Murata's (2000) suggested connecting particles may be effective. On the other hand, as adverbs are related to the expression of writer's subjectivity, we may be able to use them as an indicator of subjectivity and objectivity of passages.

3 Survey

3.1 The purpose of the survey

As discussed in the preceding sections, when learners of Japanese are instructed to produce some material, the distinction between written texts and spoken utterances or research papers and statements of opinions may not offer enough clues as to the different linguistic expressions employed. Thus, we would like to know differences in linguistic expressions that appear in subjective passages in which the writers can present themselves and objective passages in which the writers do not.

Here, we will take as an example column articles or commentaries on current affairs in weekly magazines as writers can present themselves in those passages and investigate what kinds of sentence-final expressions and adverbs show up.

3.2 The methodology

First we selected commentaries on current affairs among column articles in weekly magazines published and widely circulating in Japan. Fourteen column articles, most of which are commentaries on current affairs, are selected for analysis. Each article consisted of 450 to 780 words, with a total of 7570 words in the fourteen articles. The following are some of the specific details:

『AERA』2011 年 7 月 4 日号～25 日号
AERA issues of July 4th, July 11th , July 18th and July 25th of 2011
    ① 内田樹の大市民講座　「リアリスト」の現実逃避　（467 words）
    ② 養老孟司の大脳博物館　「むごい延命」の政治的な裏　（453 words）
    ③ 内田樹の大市民講座　復興相辞任で見えた新聞社の終わり　（482 words）
    ④ 養老孟司の大脳博物館　耐震基準は怪しい　（478 words）
『週刊金曜日』2011 年 7 月 1 日号～29 日号「風速計」
    ⑤ 菅首相と小泉元首相の相似形　北村肇　（433 words）
    ⑥ フィクションのネタばらし　石坂啓　（514 words）
    ⑦ 給費制の議論が再び始まった　宇都宮健児　（479 words）
    ⑧ 「独裁」を許す土壌　中島岳志　（488 words）
『週刊金曜日』2011 年 7 月 15 日、29 日号「メディア仕分け人」
    ⑨ 猿山的力関係で動くこの国　猿山から改革したらいいんじゃない？北原みのり（377 words）
    ⑩ ネット社会を軽視しては国は動かないですよ　香山リカさん 北原みのり（361 words）
『週刊朝日』2011 年 7 月 8 日号～29 日号「田原総一郎のギロン堂」
    ⑪ 市民運動家に戻った菅首相。「我一人突き進む」か。　（718 words）
    ⑫ 亀井氏の「菅落とし」の裏事情とその手腕　（781 words）
    ⑬ "日本の恥"菅首相がつぶした海江田氏のメンツ　（712 words）
    ⑭ 全国紙は「菅内閣は総辞職を」と共同宣言を出せ（695 words）

In this survey, we focused on adverbs and sentence-final expressions. We scanned, OCRed and proofed the text, and conducted lexical analysis using WinCha2000, thus following the part-of-speech categorization of ChaSen.

4 Results

4.1 Sentence-Final Expressions

ChaSen analyzes sentences based on "short unit", which is the shortest morphological unit in Japanese. This makes it difficult to figure out use of sentence-final expressions with modality, which we are interested in here, as they may be realized as combinations of "short units" thus we needed to look for those multi-unit expressions.

Among the sentence-final expressions that we found, there were 318 total words and seventy-five different words. Based on the distinction between marked and unmarked sentences suggested by Takasaki (2005), we divided those into sentence-final expressions with modality and those without. We counted 213 total words and thirty-four different words of sentence-final expressions without modality such as predicative sentences with verbs, predicative sentences with nouns, sentences ending with nouns, predicative sentences with adjectives. For sentence-final expressions with modality, we found 105 total words with forty-one different words. In other words, sixty-seven percentage of sentences show up without modality and thirty-three percent with modality. Sentence-final expressions that appear more than 10 times are for the most part without modality. With less frequency, expressions with modality are varied.

Table 1. Sentence final expressions that appear more than ten times

Sentence-final expressions	Freq	%
Verb-*ta*	38	11.9%
V	33	10.4%
V-*teiru*	24	7.5%
V-*dearu*	20	6.3%
A	13	4.1%
noka?	13	4.1%
V-*teita*	12	3.8%
nodearu	12	3.8%
noda	11	3.8%
N	10	3.1%
V-*nai*	10	3.1%

There were sixty-six sentences without modality that end in *-ta* (past or perfective) form and 146 sentences without modality that end in non-*ta* (non-past or non-perfective) forms. It has been pointed out that non-*ta* forms are often used in argumentative commentary or impression statements and for sentences of various topics in general and similar tendencies were confirmed in commentaries on current affairs.

We found forty-eight sentence final-expressions with aspectual elements, which consist of twenty-two percent of sentences without modality. The most frequently used is " … -*teiru*" with forty-two counts both in *-ta* forms and non-*ta* forms. This suggests that in commentaries on current affairs contain sentences that objectively state facts.

We summarized functionalities of sentence-final expressions with modalities based on the categorization in *A Dictionary of Japanese Sentence Patterns* (1998). We found twenty-four kinds of modality functionalities. Table 2 shows those with four counts.

Table 2. Functions of Sentence-final expressions

Function	Freq.	%	Sentence-final expressions
Claim/	24	23%	*noda*/*nodearu*

Explanation			
Question	13	12%	*noka*
The speaker's judgement	13	12%	*nodewa naika* *dewa naika* *dewa naidarouka* *hazuda* *janai no kashira*
Estimation	12	11%	*darou* *kamo shirenai* *youda*
Doubt	5	5%	*no darou ka* *darou ka*
Restriction	5	5%	*shikanai* *dakeda* *dake data* *bakari*
Hope, request	4	4%	*te hoshii* *tai*

Twenty-three percent of the sentence-final expressions are "claims and explanations" and modality for writer's subjectivity such as "questions" and "speaker's judgments" are often found. The distribution somewhat differs from those in literary essays reported by Takasaki [5], where the most frequent was 7% of "judgment" followed by 6% of "explanation" and they show up less frequently than in commentary on current affairs.

This categorization and the one employed in this study is slightly different and we cannot simply compare the percentages but according to Takasaki's categorization, probability is a kind of "judgment" and we can see the commonality between literary essay in that use of modality for "judgment" and "explanation" are frequent.

We notice in passing that there are many sentences in question forms, even though its functionality is categorized differently. By using (rhetorical) question forms, the writer may be trying to persuade the readers to follow the writer's lines of thoughts. Use of questions may contribute in changing modality into more objective ones.

4.2   Adverbs

There were 171 total counts of 101 different words analyzed as adverbs, of which 144 counts of 92 different words are considered below, excluding analysis errors of expressions such as "so" and "do".

Twelve adverbs showed up more than three times in the fourteen articles: *mattaku* (seven times), *ittai* and *sikkari* (six times), *hotondo* and *mou* (five times), *tozen*, *mada*, *motiron* (four times) and *genni*, *tuneni*, *dozini*, *mottomo* (three times).

Regarding the types of adverbs, we followed Masuoka and Takubo (1994) and divided adverbs into eight categories of "condition/state," "degree," "quantity," "tense and aspect," "statement," "evaluation," "assertion," and "others (such as delimitation). "

"Statement" most frequently show up but adverbs of "degree" and "tense and aspect" appear more often, which may be related to the fact that sentence-final expressions without modality show up often. Sentences without modality serve to convey facts objectively and adverbs of judgment may not easily co-occur.

Frequent use of adverbs of statement suggests that the writer's attitude toward the content or proposition is expressed. In commentaries on current affairs, we can find objective statements of facts and writer's attitudes toward those facts are simultaneously expressed.

What attitudes are expressed? In Table 3, we have summarized sentence-final expressions that are supposed to correspond to those adverbs of "statement."

Table 3. Sentence-Final Expressions Corresponding to Adverbs of "Statement"

Sentence-Final expressions	Freq.	Adverbs of "Statement"
Questions	12	*ittai, naze, hatashite, hyottoshitara, moshikasuruto*
Estimation	11	*osoraku, hontouhi, masahi, kanarazu, tashikani, tabun, doumo, tonikaku, nandaka*
Negation	9	*mattaku, douhimo*
Request/Order/ Hope	3	*nantoka, doushitemo*
Excitement	2	*konnani, nanto*

The most frequently used were adverbs of "statement" corresponding to questions. This may be related the fact that question forms are frequently used in sentence-final expressions with modality. The second group are adverbs of "certainty or probability." This may be related to the frequent use of "opinion" and "presumption" in modality. In commentary on current affairs, if the writers present themselves too strongly, the readers may hesitate to agree. It is conceivable that adverbs relating to questions or presumption are used in order to avoid such situations.

Among the adverbs use, we find such rather colloquial expressions that might be used in spoken utterances as *hyottositara*, *mosikasuruto*, *doumo*, *nandaka*, and so on. These adverbs may serve to convey the message of the writers to the readers in an accessible way, familiarizing the former to the latter and marking the presence of the former at the same time.

5   Summary

In this paper, we investigated sentence-final expressions and adverbs that appear in commentaries on current affairs. This was a small-scale pilot study but it suggested that in sentence-final expression among those passages, sentence-ending forms without modality showed up more often in terms of the total occurrence counts, which suggests that the writers explain the facts first and then state their opinions, which is the basic characteristics of commentaries.

In the previous research on sentence-final expressions in literary essays (Takasaki, 2005), it was reported that marked sentences with modality are considered more logical and intellectual. In comparison with literary essays, there are more sentences with modality (marked sentences) than those without (unmarked) in commentaries on current affairs. This coincides with the general perception that the latter is more logical and intellectual than the former. The relative ratio of sentences with and without modality may be an indicator for how logical and/or intellectual a given passage may be perceived in Japanese.

Adverbs appearing in commentaries on current affairs are somewhat different from those appearing in newspaper and weekly magazines as reported in Tanaka (1999) and adverbs of "statement" were most frequently used, reflecting the fact that the writers often express their attitude toward the statement of facts. On the other hand, it seems that among "statement of attitude," some are more direct expression while others feign some degree of objectivity. Among the ones often found in the pilot study reported here, we found those corresponding to question forms, which were presumably employed to set some balance between expressing attitudes of the writers and presenting themselves in the passage too overtly. These may be considered characteristics of commentaries on current affairs.

There are sentences with the first person expressions such as "I think that …." These are rarely used in research papers and newspaper articles. Use of personal expressions is also an important indicator as to the subjectivity versus objectivity of a given passage in Japanese.

6 Further Research

The pilot study reported here is limited in scope and further research with more substantial data is necessary to validate suggestions obtained by the pilot study regarding how the writer is reflected in the passages. Also, comparison with passages in different genres are indispensable to identify the true characteristics of a given genre. We will continue to conduct similar survey on passages in research papers, term papers and student essays.

In the study reported here, we considered what kinds of linguistic expressions may contribute to the writers' presence in the text by way of sentence-final expressions and adverbs. However, the writer's subjective judgments are reflected in adjectival and adverbial expressions and choice of personal expressions as well. Also, we would like to study what linguistics forms may contribute in expressing subjective content such as the writer's personal opinions in apparently objective manner. By collecting those linguistic expressions, we may be able to clarify what distinguishes apparently subjective passages and apparently objective passages, which would contribute in augmenting writing education for learners of Japanese.

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The role of listenership in the coproduction of a conversation:
Focusing on the contribution of laughter in Japanese interaction∗

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Abstract. This paper discovers the patterns and communicative functions of laughter as displays of listenership in Japanese conversational interactions. For this purpose, I discuss both general and deviant cases of laughter by focusing on the role of listeners and subsequently show how such patterns and functions could contribute to creating, enhancing, and maintaining mutual relations in an ongoing interactional process. Based on the findings, this study further suggests that three significant aspects, conversational roles, social roles, and shifting conversation, are tightly intertwined to achieve the coproduction of ongoing interactions. Finally, this study indicates that listenership activities through laughter can dynamically work as a bridge to facilitate such coproduction, which is embedded in each conversational context.

Keywords: listenership, laughter, coproduction of a conversation, Japanese interaction, discourse analysis

1   Introduction

Traditional studies on discourse analysis have focused on a speaker's activity; however, they have paid little attention to the contributions made by a listener, in particular, the relationship between listenership (or the listener's contribution) and laughter in a spoken interaction. One of the key elements in exploring the role of a listener is the coproduction of conversation. In addition, seeking the status of a listener is important in the Japanese communicational style, as it is based on the "listener-based mode" (Yamada, 1997: 38). Against these backgrounds, this study investigates the following factors: how the coproduction through laughter as a display of listenership can be achieved, and how this association relates to the Japanese communication style. Therefore, this study aims to discover patterns and functions of laughter as displays of listenership in Japanese conversational interaction in order to clarify how they can contribute to the creation, enhancement, and maintenance of mutual relations in an ongoing interactional process and explore some implications as to how listenership activities through laughter can dynamically work to facilitate such coproduction in Japanese interaction.

2   Previous studies

In this section, I overview the existing literature on listening and laughter activities and set up the basis for the current analysis.

2.1   The role of a listener

Recent studies on discourse have started dealing with a listener's contribution, whereas the status of a speaker was the main focus of older studies (Goffman, 1981; Tannen, 1989;

∗ This study is based on a part of the paper presented at An International Workshop on Linguistics of BA and the 11th Korea-Japan Workshop on Linguistics and Language Processing, which was held on December 11, 2011 at Waseda University, Tokyo. Some parts of the paper were slightly revised after the meeting.

Goodwin, 1986). Tannen (1989) suggested that the hearing and understanding activities of a listener "are dialogic acts because they require active interpretation, not passive reception" (100). In contrast to the traditional view, this quotation suggests that the listener actively participates in the ongoing interaction.

Moreover, according to Goffman (1981), listeners are divided into three types. The first type of listeners comprises those who overhear, second refers to those who are ratified participants but not specifically addressed by the speaker, and third comprises the ratified participants who are addressed by the speaker. This study considers, in particular, the third type of listeners because two participants interact with one another in the current data collection, and they are ratified participants.

Next, a certain process is required to fulfill the listener's role in an ongoing interaction. Conversation is considered as a coproduction done by both a speaker and listener; in fact, Clark (1996) characterizes it as a "joint action." The following three steps specify how the listener plays a role in achieving this coproduction. First, he or she signals to reveal his or her role in the coproduction through both verbal and nonverbal channels, such as verbal back channels, nodding, laughter, and smiling. Second, such signals show communicative functions, for example, agreement, disagreement, and acknowledgment. Third, mutual responding engagement occurs based on these signals and communicative functions. The speaker talks first, to which the listener responds. Subsequently, the first speaker gives a feedback, and such an engagement is the coproduction of a conversation. Based on these clarifications of the listener's role, this study defines listenership as "a fundamental contribution by the listening side to the co-production of [a] conversation" (Namba, 2011: 3).

2.2   The Japanese communicational style and identity

The significance of listenership can be understood in terms of cultural specifics and communicational styles. For instance, the Japanese style is characterized by the "listener-based mode" (Yamada, 1997: 38). In Japanese interaction, it is suggested that guesswork, which indicates "a strategy where players try to understand as much as possible from the little that is said" (Yamada, 1997: 37), has a solid connection with listenership. Further, Yamada (1997) emphasizes the status of a listener in Japanese communication as follows: "[f]or the Japanese, the responsibility of communication rests with the audience, making listener interpretation not only key, but the main mode of communication" (38). Due to such characteristics, Japanese communication is referred to as "listener talk" (Yamada, 1997: 38). It is universally acknowledged that the status of a speaker is more significant than that of a listener. However, all the aforementioned characteristics indicate that the contributions of the listener toward achieving the coproduction of a conversation are indispensable in Japanese communication.

2.3   Laughter

Initially, scholars investigating laughter paid attention to its causes, such as the "incongruity theory" (Schopenhauer, 1886). In recent years, the focus has gradually shifted to the interactional aspects of laughter in real communication. The first approach was based on conversational joking, and it revealed the two distinct functions "bonding" and "biting" (Boxer and Cortés-Conde, 1997). The second approach refers to taking a look at laughter itself, in particular, its interactional patterns (Jefferson, 1979; 1984; Glenn, 2003; 2010; Holt, 2010). Moreover, the functions of laughter were revealed; one of the positive functions was "affiliation," according to which "the hearer displays support of and endorses the teller's conveyed stance" (Stivers, 2008: 35). Further, Partington (2006) suggests that "[a]ffiliation can create the group-bonding effects of shared laughter" (18). Hence, such an affiliative function of laughter can build solidarity among participants.

In order to define laughter, one must understand the types of features involved in it. According to Laver and Hutchenson (1972), laughter is categorized as having vocal nonverbal features. They specified three types of features related to verbal and nonverbal behaviors: vocal

and verbal, vocal nonverbal, and nonvocal nonverbal features. A typical example of the first type is back channels (e.g., "uh huh"), which are spoken words as linguistic units. The second type, vocal nonverbal features, contains intonation, spoken emphasis and units. Laughter exemplifies this type. On the other hand, an example of a nonvocal nonverbal feature is nodding and facial expressions, which has neither vocal sounds nor actual meaning. In addition to this feature, Glenn (2010) suggests that "laughter is perceived both audibly and visually" (1499). According to him (Glenn, 2010), "(l)aughter is a phenomenon that combines different kinds of modalities: vocal (the production of laugh tokens or particles), facial expression (e.g. smiling) and body movement (e.g. the shaking of the torso)" (1499). Certainly, laughter involves such diverse features embedded in real communication. In this sense, laughter can be sought within a much more dynamic process.

3 Methods

In this section, I explain the data[1] used and analytical method followed for the current analysis.

3.1 Data

This study used 135 minutes of videotaped set-tasks, which were collected from Japan Women's University, Tokyo, in 2004. In this data collection, 23 Japanese female dyads participated. All the participants were native Japanese speakers living around Tokyo, and they talked for 5-15 minutes on a surprising event. There were two types of dyads: (1) two university students who were friends (11 dyads), and (2) a teacher and university student (12 dyads).

3.2 Analytical method

The analysis followed a twofold approach: general and deviant cases. The general case sheds light on the basic structures and functions of laughter in terms of the display of listenership by drawing on the structure of laughter (Jefferson, 1979). The structure of laughter consists of "invitation" from the speaker's side and "acceptance" or "declination" from the listener's side. "Invitation" is related to a speaker's action; as explained by Jefferson (1979), the "speaker himself indicates that laughter is appropriate, by himself laughing, and recipient thereupon laughs" (80). In addition, it is noted that "both laughables and laughter, singly or in combination, may invite laughter" (Jefferson, 1974; qtd. in Glenn, 2003: 81). The term "laughables" indicates that the "the occurrence of laughter marks its referent (usually retrospectively) as laughable— and, potentially, as humorous" (Glenn, 2003: 33). In this sense, laughables and laughter are inseparable and, hence, the invitation of laughter is done with these effects. In response to the speaker's invitation, a listener might react in specific ways, which are called "acceptance" and "declination" (Jefferson, 1979). In acceptance, the listener laughs following the invitation by the speaker to display "responsiveness and mutual ratification of a comic or lucid frame" (Glenn, 2003: 54). On the other hand, "declination" occurs when the listener does not laugh following the speaker's invitation, as Glenn (2003) points out that listeners may pursue non-laughing topical matters at the moment when the speaker invited laughter. In this manner, this study explores the general patterns and functions of laughter in Japanese interaction by following the structure of laughter. However, on analyzing closely, there should be a deviant case beyond the aforementioned general cases; therefore, the latter part of the current analysis considers such a case.

4 Findings

The findings of this study are mainly divided into two parts, general and deviant, as I mentioned in the previous section. In general cases, I clarify two patterns of laughter under the laughter structure: Initiation of the 1) speaker's laugher and 2) listener's laughter. Subsequently, I discuss the deviant case, which is not dealt with by the structure of laughter.

When discussing the patterns of laughter, I will begin by locating certain characteristics of the speaker's invitation and listener's laughter. The data reveal that the invitation of laughter by the speaker is achieved in three ways, 1) laughter plus laughables, 2) laughter, and 3) laughables, whereas the listener's laughter following the invitation occurs in two ways, 1) laughter and 2) laughter plus verbal utterances.

4.1   General cases

Based on the characteristics mentioned in the previous section, I discuss the basic patterns of laughter under the structures of invitation and acceptance. First, I consider the initiation of a speaker's laughter. In this manner, initially, the speaker's laughter appears and, then, the listener laughs in acceptance. In the following extract, a Teacher (T) tells her Student (S) of a surprising event in her daily life:

(1) The initiation of speaker's laughter: Onomatopoeia plus repetition
1T: *DEE uchi shujin gaa anou shinai o motteita n de*[*kendou no*[*shinai o mottetan dee*[2]
    "AND my husband, uhm, had a bamboo sword for playing *kendo*, so"
2S: [*hai*   [*hai*
    "yes yes"
3T: *sore(h)o da(h)shite kite*
    "(he) brou(h)ght i(h)t and,"
4T: *TSUN*[*tsu(h)n tte tsuite tsu huhu*
→ "(he) picked the person with it like 'TSUN ts(h)un,'" ((onomatopoeia))[3]
5S: [*tsu(h)n tsun HUHAHAHAHA*
→ "tsu(h)n tsun HUHAHAHAHAHA"
6T: *sumimasen okite kudasai*[*tte hh i(h)ttan desu(h)*[*ke(h)do(h), huhu*
    "(he) said 'excuse me, please wake up' thou(h)gh huhuhu "
7S: [*huhuh*   [*hai*
    "huhuh   yes"

T initiates laughter (line 4), and S laughs in response (line 5). In addition to laughter, T uses onomatopoeia as a form of quoting (line 4). This linguistic signal works by recognizing a laughable, and I call such signals "occasions." Quotations, repetitions, a change of voice, laugh particle, and surprise evaluations are some examples of occasions. In response to the onomatopoeia, S reflects on it and repeats it in the following line (line 5). In this sense, the onomatopoeia "*tsun tsun*" functions as an occasion. The key point is that S immediately laughs on hearing the previous onomatopoeia and laughter in T's utterance. In this manner, T initiates

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[2] The transcription convention is noted as follows:
  A: code for name of speaker   [: the point where overlapping talk starts
  ]: the point where overlapping talk ends   Capital letter: emphasizing
  Underlining: highlighting parts produced in a louder or more emphatic tone than surrounding talk
  (( )): commentary by transcriptionist   :::: sound stretch, e.g., Ah :::
  =: "latching" or contiguous talk, i.e., there is no pause after the completion of one utterance and beginning of
  another   (.): unmeasured micropause
  -: cut-off   ,: continuing intonation
  ↑: rising intonation of the sound that it precedes   .: (full stop) falling intonation
  (.7): the number indicates the length of a pause or silence measured in seconds
  ° °: portions that are delivered in a quieter voice than surrounding talk are enclosed between degree signs
  ·hh: inbreathing or inhalation, possibly laughter   h: (or (h)) aspiration, breathiness, possibly laughter
[3] This onomatopoeia expresses his way of picking a person, with a gesture.

laughter as the invitation through laughter and the onomatopoeia as an occasion and, subsequently, S accepts the invitation by laughing and repeating the occasion.

In contrast, the initiation of laughter occurs through not only the speaker but also the listener. In the following extract, Teacher (T) is a speaker, and Student (S) is a listener:

(2) The initiation of laughter by the listener (onomatopoeia)
((T tells a surprising event, in which a pigeon frequently came to the balcony of her flat and scared her.))
1T: *tokoro ga, kono mae no nichiyoubi wa* =
    "but, on the last Sunday,"
2S: =*hai*
    "yes"
3T: *nanka beranda no doa o aketera* =
    "like, when (I) opened the door of a veranda,"
4S: =*hai* =
    "yes"
5T: =*totsuzen batabatabataba* [*tatte*
→ "it was suddenly, like 'batabatabata' and,"
6S: [*HEHEHEHE hai*
→ "HEHEHEHE yes"
7T: *hato*[*ga, nanka beranda no oku no hou ni itarashii hato ga*
    "a pigeon which was in the back of the veranda,"
8S: [*ettu, ettu, a, haa, hai*=
    "oh oh, yes"

T uses onomatopoeia in the form of a quotation while describing the behavior of a pigeon (line 5), and S immediately reacts with laughter and a back channel (line 6). This exchange shows that laughter is absent in T's utterance, whereas S initiates laughter. However, S's laughter overwraps the previous production of T, precisely following the previous onomatopoeia as an occasion. This suggests that T invites laughter with such an occasion and S accepts it by initiating laughter.

In general cases, the existence of an occasion is rigidly connected to the invitation of laughter and a listener's accepting laughter. However, sometimes, the listener reacts with laughter by appreciating the previous speaker's production even when it has no occasion:

(3) Listener's initiation of laughter (without occasions)
((T is in the middle of telling a story. She tells a surprising event that a pigeon frequently came to her balcony and scared her a bit.))
1T: *anou(.)nanka kou(.)chotto shiawasena* [*kimochi ni mo narushii*,
    "uhm (.) like this (.) (I) feel happy, a bit and,"
2S: [*aa(h)aa(h)ha(h)i*
→ "rig(h)ht rig(h)ht ye(h)s" ((T's story continues.))

T is in the middle of telling her surprise (line 1), and S immediately reacts with laughter and back channels (line 2). In contrast to the previous extracts, there is no occasion, such as a quotation, repetition, or change of voice, in T's production. At the same time, the lack of such an occasion indicates that it is not easy to locate a laughable in such a production. On the other hand, S's immediate reaction, however, is motivated by the previous production and expresses her appreciation of the production. This listener's reaction suggests that she actively and creatively participates in the ongoing interaction without any cue from the speaker side, and she discovers her positive involvement.

The listener does not always react with laughter; when such laughter is absent, it is called "declination" (Jefferson, 1979). It is suggested that the listener needs to actively decline the

invitation. For example, a couple of pauses and a silence mean that there is a gap in the listener's response and that the listener is declining the invitation to laugh. However, in the Japanese data analyzed in this study, such a case was rare, even though the listeners' laughter was sometimes absent. Instead, their smiles and verbal acknowledgments were found to fill this absence. In this study, such a case is called "ambivalence," which is the third option after declination and acceptance. In the following extract, Student (S) is in the middle of telling a surprising event, and Teacher (T) is listening to S:

(4) Ambivalence
1S: @*de okitara a yabai mi*[*taina*
    "and when (I) woke up, (I found), like 'oh my God',"
2T: [*aa*
    "right"
3S: *nanka@ su(h)goi bikkuri* [*toka(h)tte dou desu ka*
→ "like (I thought) '(it's) really surprising,' how about (this surprise)?"

4T: [@***sou desu yo ne, tashi ka ni bikkuri tte no waa,***[4]
    "that's right, probably a surprise means"
5 ***bikkuritte sono shunkan*** [***teki na koto dakara***@
    "that moment in which something happened, so,"
6S: [@*aa, aa, aa, aa, hai*@=
    "right right right right yes"
7T: =@***sou desu yo ne a***[***a arimasu arimasu***@
    "that's right oh I have (the same experience), I have"

At the end of S's telling, she evaluates that her telling was surprising by initiating laughter (line 3), to which T reacts with an acknowledgment (lines 4 and 7), understanding (line 5), and a smile (lines 4 to 7), although laughter is absent. T's reaction overlaps with S's previous production, which suggests that such a reaction is strongly motivated by the previous one, in particular, S's evaluation that her telling was surprising. In addition, in her reaction, laughter is absent; however, she fills the absence of laughter through ambivalent reactions, that is, smiles and a couple of acknowledgment and understanding markers, which function as an indirect reaction. In a sense, such ambivalent reactions can avoid awkward situations and help to maintain smooth communication among participants.

4.2   The deviant case

In the course of an ongoing interaction, conversational contexts and roles do not always remain fixed; rather, they are dynamic and shift frequently. Laughter as a display of listenership plays a key role in facilitating such flexible and dynamic shifts. In the following extract, two students, R and L, are talking about a surprising event. R is facing an awkward situation because she has no surprise to tell. She finally manages to find one and tell it to L; however, L mocks R because the latter is telling a poor surprise:

(5) The shift from an awkward situation to humor
1R: = *EE:: bikkuri shita koto da yo ne(1.0)uuuun(.)*
     [*to ne,*
    "uhm, (we) talk about a surprise, right? (1.0) uhm"
2L: [*ºitaº* ((L bangs her leg on the chair))
    "ouch"

---

[4] The bold characters indicate that the listener uses ambivalent reactions, which contain smiles and acknowledgments without laughter.

3R: *nanka(0.8)jimoto no kooen ni::(.)karasu ga*
    "like (0.8) in the local park (.)"
4   *tairyoo hassei shiteru(0.5)koto(.)gurai*
    "lots of crows appear (0.5), that's (.) just,"
5   *ka(h)na(.)[bikkuri shiteru no ttehh*
→   my surprise, may(.)be hhh"
6L: [*hhhh ºbikkuri shita[yoº sore <u>BIKKURI</u> nano ka yo*
→   "hhhh (I)'m surprised, is that (your) SURPRISE?!"
7R: [*@chigau no(.)@*
    "no (.)"
8   *nanka:: bikkuri nan da yo nanka ne(.)hisashiburi ni(0.9)*
    "like (this) is a surprise, listen (.) after a long time,"

In this extract, pauses (line 1) suggest that R is facing an awkward situation. When she finally manages to mention her surprise, a couple of pauses show that she is still facing the awkward situation (lines 3 to 5) by emphasizing that her surprise is trivial (lines 4 and 5). Laughter happens at the end (line 5), and R reacts with laughter, as well (line 6). As explained earlier, R is in an awkward situation, and laughter should be rigidly connected to the situation. Subsequently, she deprecates herself in such a situation by laughing because she has no good surprise to tell. On the other hand, L's subsequent laughter obviously follows R's previous laughter. Moreover, L immediately repeats (line 6) R's previous evaluative comment, "*bikkuri*" (surprising), regarding what she experienced (line 5). This shows that the evaluation works as an occasion. In addition, there is some humorous exchange between R and L (lines 5 and 6). R treated her surprise as trivial in an awkward situation. L's reaction, "*sore BIKKURI nano ka yo*" (is that (your) SURPRISE?!), is teasing, and she is playing the role of a straight man under a humorous context. Following L's sharp reaction, R begins to repair her surprising experience (from line 7). There is some shift in conversational flow between R and L, as shown in Figure 1:

Figure 1. The ongoing conversational flow

R: Awkward situation → R: Funny man (self-deprecation) →L: Straight man   → R: Repair

Humor
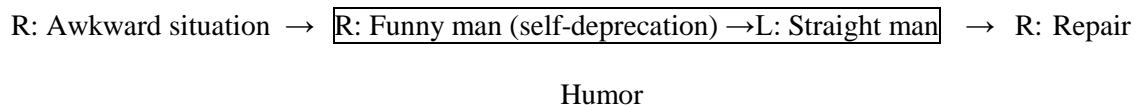
The conversation began under an awkward situation with the accompaniment of frequent pauses, as R had no surprise to tell (which is depicted on the left side of Figure 1). Subsequently, R deprecates herself by showing that she has only a trivial surprise to tell, to which L reacted sharply by mocking R. Moreover, both R and L fulfill not only their conversational role, of the teller and listener, but also their humorous role, which suddenly became embedded in this conversational flow by playing R's funny man and L's straight man[5]. In addition, this humorous exchange suggests that such an improvised role-play is negotiated through a flexible and dynamic ongoing interaction.

With respect to the role of a listener, L displays her listenership by mocking R through her sharp reaction and laughter (line 6). The current data reveal that the majority of the study participants who played a listening role displayed their understanding and acknowledgment toward the speaker through laughter, smiles, and various back channels. However, the above example showed another possibility, where the listener mocked her partner that fitted in well with the ongoing conversational flow. In other words, it was observed that such an improvised reaction was possible and even appreciated because the speaker and listener were friends. The listener's reaction suggests that she shares a strong and close relationship with the speaker, and

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[5] Oshima reveals this role-play as follows: "Japanese people are highly aware of the roles they are playing in humorous communication" (2006: 105).

they each play their distinct roles, of funny man and straight man, at the same time, which exemplifies their solidarity.

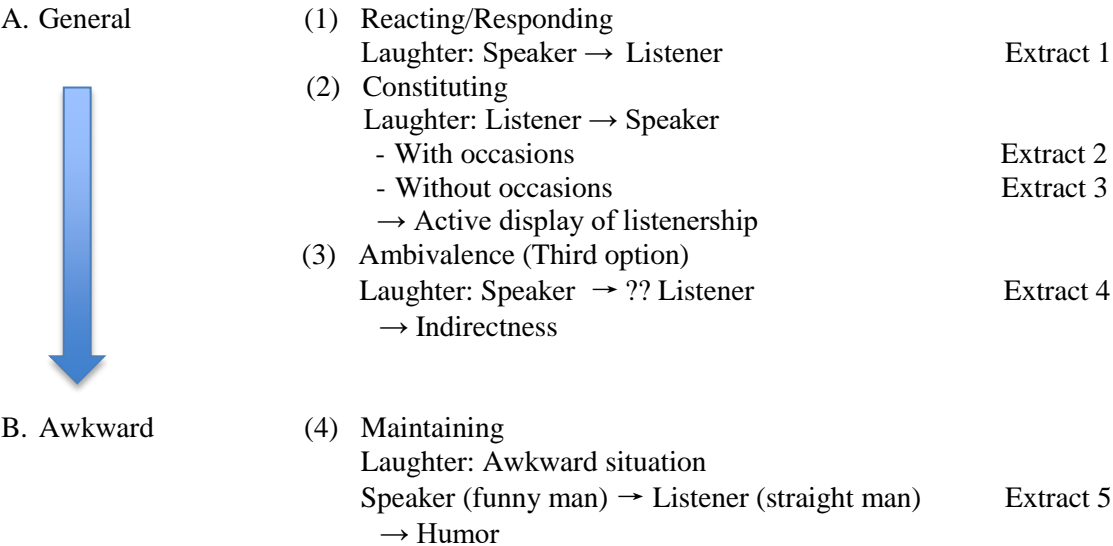## 5   The functions of laughter as a display of listenership

In this section, based on the patterns of laughter, I consider several functions of laughter in terms of the display of listenership. In the previous section, I initially discussed the general cases and then the other case, which was closely intertwined with the treatment of an awkward situation:

● General cases (invitation and acceptance/declination pattern)
(1) The initiation of laughter by the speaker → Acceptance by the listener
(2) No laughter by the speaker → The initiation of laughter by the listener (acceptance)
(3) The initiation of laughter → Ambivalence by the listener (third option)
● Awkward treatment
Laughter between the speaker and listener

With respect to (1), the listener reacts through laughter to the initial laughter of the speaker. In this sense, the function of this listener's laughter is identified as "responding/reacting." In contrast to (1), (2) lacks the speaker's laughter. However, the listener actively and creatively discovers a funny point in the previous production. Therefore, the second case indicates the active display of listenership compared with the first one. The second function of laughter is named "constituting." These two functions of laughter appeared in certain general cases; sometimes, laughter was involved in awkward situations. Laughter dealt with such situations in an ongoing interaction by "maintaining" not only the ongoing conversation but also the relationship between the participants (see Figure 2):

Figure 2. The functions of laughter in terms of listenership

A. General	(1) Reacting/Responding	
	Laughter: Speaker → Listener	Extract 1
	(2) Constituting	
	Laughter: Listener → Speaker	
	- With occasions	Extract 2
	- Without occasions	Extract 3
	→ Active display of listenership	
	(3) Ambivalence (Third option)	
	Laughter: Speaker → ?? Listener	Extract 4
	→ Indirectness	
B. Awkward	(4) Maintaining	
	Laughter: Awkward situation	
	Speaker (funny man) → Listener (straight man)	Extract 5
	→ Humor	

6   Listenership and the coproduction of a conversation

Based on the interactional functions of laughter that are closely associated with listenership, the extracts discussed in this study suggest that several aspects are interwoven toward achieving the coproduction of conversation. The first aspect refers to conversational roles. As shown in all the

extracts, the participants, speakers and listeners in the current database, fulfilled their role in each interaction; besides, they flexibly played the humorous roles of funny man and straight man in an awkward situation that was emergent and improvised interactional contexts. In addition to the conversational roles, the second aspect, social roles, was embedded in the ongoing interaction. For instance, the student and student dyad in the in-group relationship played the humorous role as mentioned above. In the out-group relation, role-play comprising the funny man and straight man was rarely observed, and such a conversational scene confirms that the participants shared an intimate relationship and the humorous interactions increased their solidarity. Moreover, the current data suggest that conversational moments are not fixed; rather, they are dynamic, as the third aspect: shifting conversation. Although all the extracts depicted such an aspect, the last extract was, in particular, prominent in terms of this aspect. In an awkward situation, self-deprecation by the speaker dramatically changed the forthcoming interaction, and the active listenership by the partner who played the role of a straight man created a humorous effect, which was embedded in the ongoing interaction, and achieved the coproduction of the conversation. In order to accomplish the coproduction of a conversation, these three aspects were tightly interwoven, and they referred to the emergent and spontaneous aspects of the ongoing interaction. Under this interwoven context, listenership could work as a bridge for creating the coproduction of conversation.

7 Conclusion

This study discovered the patterns and interactional functions of laughter as a display of listenership by considering both general and deviant cases. The findings of this study suggest flexible ways of achieving the coproduction of a conversation. In relation to these patterns and functions, I discussed how the above three aspects, conversational roles, social roles, and shifting conversations, work together to achieve the coproduction. A limitation of this study is that it considered only one deviant case, which played a significant role in deepening the discussion on the current coproduction of a conversation. I suggest that the other cases should be taken into account to understand the functions of listenership in relation to laughter and the manner of coproduction of a conversation. Despite this limitation, this study on listenership clarifies how people are connected to one another and how the communication between people can be established in a dynamic and flexible manner.

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