On the "Theory of Territory of Information": An Interview with Akio Kamio

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**PROFILE**

Akio Kamio is Professor of English linguistics at Dokkyo University, Japan. His academic interests have consistently been centered on language, although his B.A. from Keio University was in psychology. He later turned to the study of linguistics and received his M.A. from Tohoku University and his Ph.D. from Tsukuba University. His current research focus is twofold: One major project involves pragmatics and functional syntax; the other, a functional linguistic analysis ofaphasic speech. His recent works include "Territory of information in English and Japanese, and psychological utterances" (Kamio, to appear), and *The Future of Functional Linguistics* (in preparation), which he is editing as a volume of a series whose editors are Susumu Kuno of Harvard University and Ellen Prince of the University of Pennsylvania.

**INTRODUCTION**

Akio Kamio closely examines the nature of information as it is communicated in human language in terms of "territoriality," and claims that the notion of "territory" plays a major role in the selection of particular grammatical constructions in Japanese, English, and Chinese. Professor Kamio's theory on the "territory of information" also has strong correlations with issues of evidentiality, politeness, and modality.

This interview was conducted to gain insights into how Professor Kamio's theory developed and what types of studies might be relevant for future studies of the "territory of information," especially since the English version of his book (Kamio, in preparation) has not yet been published.
THE INTERVIEW

Kawanishi: You have been developing the theory of territory of information for more than 15 years. What actually inspired you to study this topic?

Kamio: As you may know, I majored in psychology. I was interested in the experiments for psychology in general. In particular, I was interested in the behavior of animals and in the research which investigates the behavior patterns of animals and their instincts. This area of research is called ethology. Ethology began in Europe and developed mainly from the 1930s to the 1950s. It spread to the U.S. and there have many very insightful studies on the instinctual or innate nature of the behavior patterns of many species. One of the major findings of this school of research is that almost all higher animals have territory. For example, a kind of fish called the stickleback has a very definite concept of territory. When it begins to mate, it usually establishes a certain area as its territory. No other fish is allowed to enter there. If some other fish does enter into that territory, then the stickleback attacks it. Only the female fish which is going to mate is allowed to enter. In the case of humans, we want to keep certain spaces around ourselves as our territory. I became very interested in territorial phenomena in general. One day, an idea occurred to me that there might be some reflections of the notion of territory in human language.

As you may know, in Japanese linguistics, there are several scholars who proposed the notion of territory in their studies. For example, the late Dr. Sakuma, in his work published in 1951, proposed the notion of territory. In his explanation, Dr. Sakuma referred to the domain of the demonstratives: ko- and so-. Professor Shiro Hattori, in his 1968 work, proposed a very similar notion which he calls in Japanese seiryoku han’i which corresponds exactly to "territory" in English. There are several pioneering studies on the concept of territory in Japanese linguistics. As far as I know, however, every previous attempt was restricted to the lexical level or, at most, the phrasal level. I think my proposal is the first attempt to extend the notion of territory into the domain of the proposition or information expressed by a sentence or utterance. I found the phrase "territory of information" to be very suitable for what I was thinking about then. I should, however, add that the term "territory" in this sense has almost nothing to do with a physical territory, since it applies to propositional information.

I noticed the possibility of applying the ethological notion of territory to propositional information in Japanese. Take, for example, an utterance in the form of a declarative sentence which expresses information in a very clear and definite way, such as Taroo wa byooki desu 'Taroo is ill.' In contrast with this, there are expressions like Taroo wa byooki deshoo 'Taroo is probably ill,' Taroo wa byooki rashii 'Taroo seems to be ill,' or Taroo wa byooki kamo shirenai
'Taroo might be ill.' These latter three constructions express basically the same information as in the straight declarative sentence. However, the message is much more vague and/or much more indefinite. It was some time around 1976 or so, that I hit upon this idea that there are these two kinds of sentential forms, i.e., the direct (definite) form and the indirect (indefinite) form. This distinction seemed to correspond to the notion of being inside or outside of a particular territory. This was the beginning of my study.

Kawanishi: Please tell us about the development of this theory during the past 15 years. What were the major changes or differences from 1979 to now?

Kamio: First of all, although almost 15 years have passed since my first paper, there were some periods in which I did not do any work on the territory of information. So, let me explain in chronological order. After publishing my 1979 paper, I was quite satisfied. I believed that I had achieved something. I could not think of any way to develop it further. I was also interested in formal syntax at the time. My interests were in both syntax and pragmatics so, in the interim, I wrote two or three papers on the phrase structures of Japanese noun phrases.

In the 1980s, I was given two years leave from Tsukuba University, where I was then teaching. I was invited to the Yenching Institute at Harvard University for two years as coordinate visiting researcher with Professor Susumu Kuno from August 1983. I still remember one moment very clearly. After about one month had passed, as I was talking with Susumu, he asked me to explain again the concept of territory of information. He seemed to be very impressed at that time and immediately encouraged me to develop the idea further, certain that I would be able to construct an entire linguistic theory based on the ideas expressed in my 1979 paper. I was very pleased, of course, and encouraged by his remarks.

Since I had time to conduct research and had no teaching obligation throughout the duration of this leave, I would be able to focus all of my attention on research. I began to reconsider the idea of territory of information. After about six months or so, I was able to build up the basis of this theory in which the notion of territory plays the crucial role, expanding my views on various phenomena and tying them together to build up a coherent, systematic theory, one by one and step by step. And then, in 1985, I was invited as a guest lecturer by Professor Akatsuka to present the outline of my theory of territory of information at the Japanese Language and Linguistics Conference, which was held that year at UCLA.

As you may know, professors of my generation in Japan usually do not have a doctoral degree. I did not have one either. Susumu also recommended that I pursue a Ph. D. degree by submitting a dissertation based on the theory of territory of information. I left Harvard in 1985, and had finished almost two
thirds of my dissertation. In the process of writing and developing my theory, I discovered many interesting connections that the theory had with other, more general, ideas relating to theories in discourse analysis or functional linguistics. So, the scope of the dissertation gradually became bigger and bigger. After I came back to Japan in the fall of 1985, I needed two or three more months to finish my work and submitted the dissertation to my Ph.D. committee at Tsukuba University. There were a lot of formalities involved in the process, and it was in February 1987 that I got my doctor of literature degree from Tsukuba. My 1987 dissertation, which was actually written between 1984 and 1985, represents one stage in the development of my theory. Then several months after I got the degree, I noticed there were a number of inadequacies in some of the minor points or fine details in that work.

Around that time, Susumu strongly recommended that I publish the work in English in the United States. My doctoral dissertation was written in English, but I had made up my mind to first publish a book in Japanese, and after that, I would do an English version of it. I prepared the manuscript for the Japanese version between 1988 and 1989, and it was published in 1990.

It was after that a major change in my theory occurred. My theory can now be divided into two. The first half is represented by my works before 1990. The other half, by my works after 1990. The real change has to do with my first conception of the territory of information as a two-valued notion, i.e., an all or nothing kind of thing; a given piece of information either falls into the territory of information of the speaker or not at all. According to this notion, the given piece of information has the value of one or zero. If it is valued at one then it falls into the speaker's territory. If valued at zero, then it falls outside of the speaker's territory.

When my 1990 book was published in Japanese, it was reviewed (in English) by Professor Takami of Tokyo Metropolitan University. Professor Takami suggested that the notion of territory might be multi-valued rather than part of a two-valued system. I began to think about this multi-valued notion for the territory of information, meaning that a given piece of information could fall very deeply into the speaker's territory, only shallowly into the speaker's territory, or the outside of the territory. In this way, a given piece of information can take any value between one and zero, for example. If the value is closer to one, the information is closer to the speaker. Susumu Kuno, when reading an earlier version of my 1994 article, pointed out the need to change the notion of the territory of information from a two-valued system to multi-valued one. It was he who first suggested this type of representation which appears in the 1994 paper as indicated below:
Table 1: Utterance Forms and Their Definitions

<table>
<thead>
<tr>
<th>Case</th>
<th>Definition of case</th>
<th>Utterance form</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1 = Speaker &gt; Hearer = 0</td>
<td>direct form</td>
</tr>
<tr>
<td>B</td>
<td>n &lt; Speaker ≤ Hearer = 1</td>
<td>direct -ne form&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>BC</td>
<td>1 = Speaker &gt; Hearer &gt; n</td>
<td>daroo form&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>CB</td>
<td>n ≤ Speaker &lt; Hearer</td>
<td>daroo form</td>
</tr>
<tr>
<td>C</td>
<td>n &gt; Speaker &lt; Hearer = 1</td>
<td>indirect -ne form</td>
</tr>
<tr>
<td>D</td>
<td>n &gt; Speaker = Hearer</td>
<td>indirect form</td>
</tr>
</tbody>
</table>

Kawanishi: As you mention, your theory of territory of information has some correlation with issues of modality, evidentiality, and politeness. What is the interrelation of your theory to these fields?

Kamio: I have a pretty definite idea about this. I think the relation can be explained by using a diagram (shown below in Figure 1). Half of the theory of territory of information overlaps with the theory of evidentiality. The other half of the theory overlaps with the theory of politeness. I think the larger framework, which includes many aspects of evidentiality, territory of information, and politeness, may be termed modality.

![Figure 1: Relationship between evidentiality, politeness, modality, and territory of information.](image-url)
What I want to claim by this diagram is that, first, politeness and evidentiality are two different sides of the same coin. The intermediary role between evidentiality and politeness is the theory of territory of information; all these are subsumed under the very broad term, modality.

Kawanishi: Are you saying that politeness and evidentiality do not share any properties at all?

Kamio: I don't think they share any properties. For example, suppose that you and I are talking in a hotel lobby, and your mother appears but you do not seem to notice her. In that situation, in order to let you know your mother had arrived, an utterance like "She is your mother," would be very strange. Instead, I would probably say something like "Isn't she your mother?" "She is your mother" is a very definite statement. On the other hand, "Isn't she your mother?" is much softer and more polite. The reason why you would need to use this form and not the more definite one in this situation, I assume, can be explained completely by my theory of territory of information. The first form is a direct form of a statement according to my theory and is used to make a very definite and clear declaration. In terms of evidentiality, you must have some very definite basis of evidence for using this construction. On the other hand, you need much less of an evidential basis for an indirect form. You may have some questions regarding the identity of the lady, or you may have only a vague memory of her. From the side of evidentiality, there are evidentially strong forms and weak forms. The strong form is impolite as in She is your mother, and the weak form is polite as in Isn't she your mother?. An evidentially very weak form is very close to a highly polite form. An evidentially strong form is impolite.

Kawanishi: Where do you close the area of evidentiality and that of politeness in your diagram? Inside the modality boundary or does it extend to the outside? (refer to Figure 1)

Kamio: That is a difficult question. But given that evidentiality is defined as how the speaker is involved in terms of evidential bases, evidentiality must be subsumed under modality. Evidentiality should be included in the modality box. Maybe politeness would go outside of the modality boundary because one side of politeness is very social. In that regard, it should belong to the area of sociolinguistics, which is not completely included in the domain of modality in the usual sense. I have just finished preparing the English manuscript of my book for publication in Europe. In that book, the diagram that is shown here as Figure 1 will be included.

Kawanishi: Is this theory universal?
Kamio: As far as I have investigated so far, my theory is basically universal. I recently read about Tuyuca, a language which is spoken in Columbia and Brazil. This language has a varied evidential system which seems to be very different from that of Japanese or English. However, it would appear that my theory applies even to Tuyuca.

There are only three languages which I have studied so far within my framework (i.e., Japanese, English, and Chinese). The results from these three languages clearly show that my theory is basically universal. While there are cross-language differences, these differences are strictly limited to very minor or fine points. The basic framework, though, is definitely universal.

Kawanishi: *This theory of territory of information reminds me of the Japanese concept of uchi and soto or 'in-group and out-group.' Is there any relation between your theory and this concept?*

Kamio: I believe that the concepts of *uchi* and *soto* themselves have a very strong relationship to my theory of territory of information. At least I am very seriously thinking about such a possibility. As native speakers of Japanese, you and I have a system of territory of information for Japanese in our heads. So other non-linguistic or other patterns of behavior may reflect such a linguistic system in our heads. I think the concept which underlies the notions of *uchi* and *soto* may be the theory of territory of information, and not the other way around. In order to demonstrate this, we need to carry out huge amounts of sociolinguistic and cultural linguistic studies. We have to keep our minds open and be prepared to accept any conclusion if it is well-substantiated. I do not want to be dogmatic, but one interesting point, at least to me, is that the basis of the notion of *uchi-soto* is the theory of territory of information or what underlies the theory, and not the other way around. More specifically, I believe that the fine details, not found in languages such as English, which underlie the theory of territory of information may determine the senses of *uchi* and *soto*.

Kawanishi: *In the case of Japanese, there are two verbs of giving, kureru and yaru (ageru). In order to use these verbs, the notion of uchi-soto is crucial. The speaker must distinguish whether the giver and the receiver are in-group members or not.* Are you saying that the use of these verbs can also be explained by your theory?

Kamio: Yes. The basis of the theory of territory of information is now a linear psychological scale as shown in Figure 2 below. Basically this idea was proposed by Takami, who published his review of my 1990 book.
The maximum value is One and the minimum is Zero. If information falls at or near point (C), then the information is outside of the speaker's territory. If information falls at or near point (B), it falls into the speaker's territory but only shallowly. If it comes to point (A), then it falls into the speaker's territory deeply. Using this linear psychological scale, we can explain the behavior of yaru (ageru) or kureru. Suppose the speaker is at point One at the extreme left end of the scale and the speaker's very close kin is at point (A), a close friend at point (B), and a stranger at point Zero, the extreme right end of the scale. Suppose the kin is the speaker's daughter. Then a sentence like 'Stranger S gave money to my daughter' would be S ga musume ni okane o kureta. So if the giving is done from right to left on this scale, then it is expressed by the verb kureru. In the sentence 'My wife gave me money,' kureru is also used, Tsuma ga watashi ni okane o kureta because the direction is from right to left. Conversely, if the giving is carried out from left to right, then yaru (ageru) is used. So, 'I will give money to stranger S' would be watashi wa S ni okane o yaru. The sentence 'My friend gave money to a beggar' would be watashi no tomodachi ga kojiki ni okane o yatta and 'My daughter gave money to my friend' would be watashi no musume ga tomodachi ni okane o yatta.

Kawanishi: How about the giving activity among in-group members? In the case of 'My daughter gives something to my wife,' yaru (ageru) is used. Is this because both referents are equally close to the speaker?

Kamio: Yes. They are equally close to the speaker; that is why kureru is not used.

Kawanishi: This is interesting and useful for teaching Japanese.

Kawanishi: Would you say that your theory of information focuses primarily on the referential function of language or do interpersonal factors come into play as well? In your original work, you had just a two-valued scale, indicating an 'all or nothing' type of situation. However, you have a multi-valued scale for your new paper (i.e., Kamio, 1994). In this one, you added the cases BC and CB which require either a deshoo or janai type of ending. Aren't these kinds of endings used for interactional purposes?
Kamio: I would like to say that my theory concerns both aspects. On the one hand, my theory deals with information about something that happened somewhere by means of some instrument and so on. For example, 'X chased Y through the woods.' This kind of information clearly has to do with referential function. On the other hand, my theory also combines conditions that can be applied to the speaker and to the hearer. What kind of principle applies to the speaker or the hearer reflects the interpersonal character of the language. I think my theory has to do with both aspects of language.

Kawanishi: I noticed that you mainly discuss the types of sentences which may be uttered at the beginning of a conversation, not the response to a question or a repetition, for example. When you have a headache, you are supposed to use the direct form in Japanese since that expresses the speaker's inner feeling, as in Atama ga itai 'I have a headache.' But if you wanted to repeat that since you feel that the hearer may not have heard or understood what you said, then, you would have to modify the ending by adding the quotative marker tte, as in Atama ga itai-n da tte ba or Atama ga itai tte ba to say something like 'I said I have a headache' or 'Don't you understand, I have a headache?' These latter cases which are not uttered at the beginning of a conversation have to do with interpersonal functions. However, it seems that you mainly consider the types of sentences which are uttered at the beginning of a conversation. Is this correct?

Kamio: In the manuscript for the English book, I studied the territory of information in discourse. There are several findings about the discourse-related properties of territory of information. For example, one of my students, Takeshi Ito, noted that in discourse the formula defining the direct form (see Table 1) must be 1=Speaker>Hearer, rather than 1=Speaker>Hearer=0 as in Table 1. This is because in discourse the following type of adjacency pairs is quite natural.

A: Kimi no imooto-san kekkon sita-n daroo?
   'Didn't your sister get married?'
B: Ee, soo desu.
   'Yeah, that's true.'

In this exchange, B's utterance form is a direct form which abbreviates the utterance 'Yes, she got married.' Note here that A has considerable knowledge about B's sister. In fact, since A's utterance is in the daroo form, A must have the information within his territory (see the definition of Case CB in Table 1). Therefore, A's knowledge of the information cannot be assumed to be 0, as defined in Case A in Table 1. Observations like this suggest that the definition for a direct form must be 1=Speaker>Hearer, with 0 having to be removed from the specifications for the Hearer. Now I am willing to incorporate this kind of revision into my theory. So I think that the theory of territory of information
may be concerned with discourse phenomena in general and that, considering this revision, my theory does not exclusively concern discourse initial phenomena.

Kawanishi: In your theory, you listed those conditions which determine what information falls into whose territory (i.e., internal direct experience, information about expertise, external direct experience, and personal data). You said that the effects of the conditions are approximately equal, and that they can be combined with the effects of other conditions to produce a cumulative effect which is greater than that of any one condition alone (Kamio, 1994, pp. 85 & 91). Do these conditions follow any type of hierarchy? Are any of the conditions universal, or culturally unique? For example, internal direct experience might be universal, while personal information, especially regarding one's family might be culturally unique.

Kamio: These are interesting and important questions. As for the existence of a hierarchy among the four conditions, I think that it is quite possible. For example, the first condition, which concerns internal direct experience, seems inherently strong and thus information subject to this condition tends to fall within the speaker's territory very strongly. But so far, I have not found any reasonable way of establishing a hierarchy like this within my theory. Thus, this is one of the tasks that we will have to face in the near future. Regarding the universality or culture-specific differences of the four conditions, I have already shown in my forthcoming paper (Kamio, to appear) that English and Japanese have basically the same conditions, but that there are differences in detail among the four conditions. And I have argued that a small difference in the conditions leads to two different pragmatic phenomena in the two languages.

Kawanishi: Your analysis of the comparative study in English and Japanese sheds light on the discussion of the function of the sentential final particle ne. People tend to say that ne corresponds to either a tag question or a negative Yes/No Question in English. But, according to your theory this is not an accurate characterization.

Kamio: From the definitions of various utterance forms such as those given in Table 1, we can derive the definition of obligatory and optional ne. Although it is too complex to talk about the actual process of the derivation here, we can characterize the two kinds of ne in terms of our notation. On the other hand, we have already obtained a table for English that corresponds to Table 1 here. We can thus characterize the properties of a Yes/No Question form and a tag question in terms of our notation. If we compare these two kinds of characterizations, then we find that they are not mutually incompatible, that is, the defining property of ne is not quite wrong. It is explained in detail in my book (Kamio, in preparation) how the characterization of ne can be derived and how the comparison referred to above can be made.
Kawanishi: When one thinks about territory and how it applies to animals, one immediately thinks of it in terms of survival or protection. With respect to territory of information, what is it that is being protected?

Kamio: The answer is definite. It is EGO. Since territories in general are considered to be extensions of ego, what lies at the center of territory is clearly ego. Thus, animals as well as humans construct a territory as a means of protecting what lies at the heart of them, that is, their ego.

Kawanishi: Is that why this theory has a close relationship with politeness, such as face-threatening acts?

Kamio: Yes. I think so.

Kawanishi: Thank you very much for answering my questions and for providing us with your very interesting analysis on these territorial issues.

SUMMARY AND CONCLUSION

The theory of territory of information, which is considered to be universal as Professor Kamio claims, involves many aspects of human communication such as evidentiality, politeness, and modality. Also, Professor Kamio mentions that the study of territory of information is directly related to psychological notions such as ego, since it captures the basis of psychological distance as expressed in language.

Professor Kamio's theory of territory of information can apply to two different dimensions in Japanese: (1) in accounting for the choice of certain linguistic forms such as modals or sentence-final markers like ne, dar(o), or jan(ai), and (2) relating to the broader concepts of cultural attitudes such as the notion of *uchi* and *soto*, or 'in-group and out-group' relationships.

As mentioned by Professor Kamio, further comparative studies should be done in order to clarify these differences in other languages. Although the notion of territory of information is considered to be universal, the factors which determine the status of information from language to language or from culture to culture may vary. The theory of territory of information, therefore, may prove to be a useful tool in intercultural communication as well as in analyzing the properties of how these concepts are treated within one particular language.
NOTES

1 Japanese pronouns and demonstratives are marked by the prefixes ko-, so-, a-, and do-, which show the speaker's physical and/or psychological views on the referent. Ko- is used to refer to an item close to the speaker. So- is for an item close to the listener. A- is used when an item is far away from both the speaker and the listener. Do- is used to mark interrogative words. (cf. Maynard, 1990, among others)

2 -Ne is a sentential final particle to mark shared knowledge/information. It is used to indicate the speaker's request for confirmation or agreement from the interlocutor (cf. Kamio, 1994 pp. 95-96; Makino & Tsutsui, 1990).

3 -Daroo is an auxiliary indicating the speaker's conjecture. -Daroo expresses uncertainty since the speaker's conjecture is not based on any definite information or evidence (cf. Kamio, in preparation; Makino & Tsutsui, 1990; Maynard, 1990).

4 Kureru should be used (1) when the receiver is the speaker him/herself, and (2) when the giver is an out-group member and the receiver is an in-group member of the speaker. On the other hand, yaru (ageru) should be used: (1) when the receiver is an out-group member, and (2) when both the giver and the receiver are in-group members.

REFERENCES


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