



# TERRITORY OF INFORMATION

AKIO KAMIO

*Dokkyo University*

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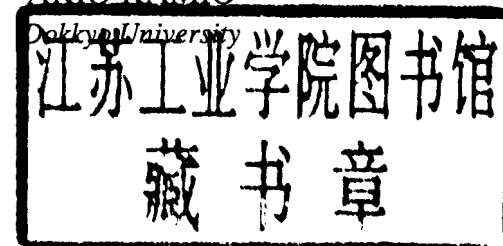
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## Preface

I majored in psychology when I was an undergraduate. The psychology I was trained in was mostly American experimental psychology, though some teachers paid attention to the European tradition and sometimes talked about it in classes. One such topic was from ethology, the study of animal behavior in natural environments. Although as an undergraduate I was not strongly attracted to the field, it struck me as a fresh approach and remained in my memory. In particular, the study of territory in animal behavior and, later, in human behavior left a certain impact on me although my understanding then was quite superficial.

Later, when I turned to the study of language and looked at Japanese, my own native language, I felt that the uses of certain expressions can be roughly characterized by the concept of territory applied to the realm of information. For example, the difference between such utterances as "Kyoo wa ame ga huru" (It rains today) and "Kyoo wa ame ga huru-daroo" (It will/may rain today) seemed to me to depend on the fact (so it appeared to me) that while the former falls within the speaker's territory, the latter does not. Hence, I thought, the former is definite and direct whereas the latter is linguistically indefinite and indirect. This was my entirely intuitive and non-technical analysis of the difference between these two utterances.

This idea, however, gradually took more and more definite shape in my mind. Although I was doing generative syntax then, my mind was beginning to lean toward the potentiality of this idea over the next few years. Thus, eventually I decided to pursue my intuitive conception of territory and to try to develop it into a coherent functional analysis of a part of Japanese. This materialized in Kamio (1979). The technical analysis and its writing proceeded fairly smoothly, but at some points I had a lot of difficulties. Thinking over such points often caused me to work till midnight. I can still remember vividly walking the deserted streets in my neighborhood in Fujieda, where I lived then, late at night, trying to calm down a mind frustrated by some problem.

The publication of Kamio (1979) marks the first stage of the development of the theory of territory of information. I was considerably satisfied with the printed paper, but I didn't think about a further development. Then, an important turning point in my life came: I was invited to the Harvard-Yenching Institute as a visiting coordinate researcher with Professor Susumu Kuno of the Department of Linguistics of Harvard University in 1983.

Professor Kuno strongly encouraged me to pursue my work on territory of information further. His encouragement made me confident in the potentiality of the theory. Therefore, I restarted my work on it, trying to systematize the idea developed in the 1979 paper and to widen its scope. During my two years' stay

at Harvard, the almost ideal research environment and Professor Kuno's constant encouragement lead me to write a fairly lengthy manuscript. After returning to Japan, I further developed the manuscript and in the spring of 1987, for the completed manuscript submitted as a dissertation, I was awarded the degree of the Doctor of Literature in linguistics from University of Tsukuba. (In the Japanese academic community, especially in the Humanities, a Ph.D. is not required when one becomes a university teacher, although this trend is changing.). Since University of Tsukuba requires the publication of a doctoral thesis, I published the revised content of my dissertation as Kamio (1990). The theory referred to as the "earlier framework" in this text is the version presented in this book.

A new stage in the development of territory of information was reached when I tried to publish the essence of the revised content in an international journal in English at the suggestion of my colleague, Professor Atsuo Kawashima. Once again, the one who triggered the movement into the new stage of the theory was Professor Susumu Kuno. At his new suggestions, I revised the theory considerably and the results appeared in two separate papers as Kamio (1994, 1995).

This book essentially represents this stage of the development of the theory of territory of information and attempts to cover as wide a range as possible at that stage. The theory will no doubt develop further and its development is being seen even at the time of writing of this preface. Further consequences and significance of the theory will be discussed in a future volume.

As noted in the brief sketch of the process of the development of my theory, I have been indebted to many people, but, as is already clear, Susumu Kuno's contribution is preeminent. Without his encouragement, insights, and even a financial assistance, the research leading to this monograph would not have been possible.

The second foremost contributor is Margaret Thomas of Boston College. Since the days when she was a graduate student at Harvard, she has acted as one of my principal informants on my research on English (the other was Paula Blank, now at the College of William and Mary, to whom I am also grateful), provided me with abundant information about various English expressions, and had a countless number of discussions with me. If it were not for her extremely sensitive and detailed observations, my research on English would have been drastically impoverished.

There are many other people, mainly of course linguists, whose contributions to this monograph cannot be disregarded. I am greatly indebted to Noriko Akatsuka, Karen Courtenay, Yang Da, Hartmut Haberland, Takeshi Ito, Takahiro Iwahata, Yuji Nishiyama, Ken-ichi Takami, and others who cannot be enumerated here, for their contribution to my work in various forms. Some may be apparent from the text of this monograph.

The final version of the manuscript was prepared during my stay at the Department of Linguistics and the Institute of Cognitive Science of the University of Colorado, Boulder. For this extremely pleasant research and writing environment, I am deeply grateful to Lise Menn, Walter Kintsch, and

Martha Polson. The institute provided the necessary equipment for the generation of the final text, for which I am deeply indebted to the latter two psychologists. William Bright kindly helped me with some reference. Zygmunt Frajzyngier and Minglang Zhou (of the Department of East Asian Languages and Literatures) kindly made the softwares for Czech and for Chinese phonetic symbols, respectively, available to me. I am also deeply indebted to these three linguists for this. Finally, Dokkyo University generously gave me a year of leave of absence and a research fund, which made the completion of the manuscript possible. I gratefully acknowledge it here.

The final version was prepared with the help of William Raymond, Tara Kerrigan, Yoshiteru Asano, and Makoto Hayashi. The last two unsparingly provided their time and effort in producing the final version. I thank these young people for their great effort.

February, 1997  
Boulder, Colorado

Akio Kamio

## CHAPTER 1

### Introduction

This book will be concerned with what I have called the theory of territory of information (Kamio 1979; 1987; 1990; 1991a; 1994; 1995). The notion of territory has been well known in studies of animal and human behavior.

Eibl-Eibesfeldt writes:

Most higher vertebrates (birds, mammals, reptiles) are territorial. They maintain specific areas known as territories as individuals or in pairs or closed groups, these territories are defended against intruders. ... Man is also disposed to take possession of land and to delineate between himself or his group and other individuals and groups. Group members respect the territorial claim of another group member.

(Eibl-Eibesfeldt 1989: 321)

Classic real examples can be found in ethology: one of them is observed in an aspect of the behavior pattern of a fish called stickleback. Before it begins to mate with a female, it establishes its own territory where no fellow sticklebacks are allowed to enter, except a female with which it is going to mate (Tinbergen 1951). Another well known behavioral manifestation of territory is human's tendency to occupy a certain space around him/her where he/she claims his/her own presence and exclusion of others quite naturally. For example, if one wants to sit down at an already occupied table in a restaurant, it is proper to ask politely if one may do so. If one fails to observe this rule, one releases anger in the other person (Eibl-Eibesfeldt 1975: 505). Another example was obtained through an experiment: if a person sitting at a table in a library is approached by another person, then he/she first tries to move away from the 'intruder' and, failing that, he/she erects artificial barriers against the latter with books, rulers and so on. If all these efforts fail, he/she leaves the table (Eibl-Eibesfeldt 1975: 505).

In recent linguistics we can often find informal allusions to territory in areas such as the study of politeness (Leech 1983: 140; Brown and Levinson 1978/1987: 61). Briefly, the respect for and the maintenance of territory have been claimed to be a fundamental component of the pragmatic structure of politeness. Also, in a study in conversational analysis, the notion of territory is used to capture an aspect of interactions between two speakers (Lacoste 1981). As far as we know, however, there has been no serious attempt to develop the notion of territory into a key notion in any systematic theory with substantial empirical coverage and explanatory power.



In Japanese linguistics, at least four serious applications of the notion of territory have been made. Kanae Sakuma (1936/1951) proposed the notion in his revealing study of Japanese demonstratives. Also, in a contrastive analysis of Japanese and English demonstratives (Hattori 1968), Shiro Hattori tried to characterize their uses in terms of the speaker's territory with insightful results. Recently, Sadao Ando has attempted to characterize the use of English and Japanese demonstratives as well as of *come* and *go* and some other verbs in the two languages in terms of Sakuma's notion of territory (Ando 1986). As far as I am aware, however, no attempts had been made to extend the notion of territory (whatever its precise character is) to the realm of information expressed in a sentential utterance or discourse until my own 1979 paper (Kamio 1979), in which I attempted not only to do that, but also to find a connection with Hattori's notion of territory, claiming the fundamental unity of my notion and his.

The notion of territory of information proposed in Kamio (1979) and to be developed in this book will be discussed in detail in the following chapters. Here information falling into the speaker's or hearer's territory of information may be quite informally characterized as information that the speaker/hearer considers proximal, or 'close', to him/herself. For example, information conveying the speaker's own birthdate, e.g. the information expressed by the utterance *I was born on September 29, 1942*, falls into the speaker's territory of information, since it expresses information which can be considered very close to the speaker. A linguistic manifestation of this character is that the utterance would be natural if the speaker uses it, but not generally so if the hearer uses it replacing *I* by *you*. That is, the utterance *You were born on September 29, 1942* can only be natural in very restricted situations. For instance, a doctor can use it in telling an amnesiac patient about the latter's birthdate, or a mother can use it in talking to her young child who wants to know his/her birthdate. Under normal situations, however, the form closest to the utterance in question that can be used naturally would be *You were born on September 29, 1942, weren't you?* or *I hear you were born on ...* and so on. Thus, even this simple example suggests that information falling into the speaker's territory affects the form of utterances that can be naturally used.

The present book first attempts to reformulate the framework I tried to establish in Kamio (1979), trying to lay more solid and systematic foundations for the notion of territory of information.<sup>1</sup> Secondly, it will discuss a variety of utterances, sentence forms, and constructions in which the notion of territory of information plays a major role. It will also discuss subsentential elements such as lexical items and phrases to which the notion is relevant. Thirdly, the book tries to apply the framework itself and results obtained from it on a number of proposals and theories that have been advanced in such related fields as discourse analysis, functional syntax, speech act theories, and some others. Thus, by taking the notion of territory of information quite seriously, the present work will undertake to show the linguistic validity of the notion and its far reaching consequences in a wide variety of fields in the study of language. Therefore, this book is an attempt to develop a new notion, the speaker's/

hearer's territory of information, and explore its consequences, thereby trying to contribute to the study of informational structure of language.

The brief discussion of the examples of a birthdate given above suggests the relevance of the notion of territory of information to the study of evidentials. In fact, the theory to be developed in this book may itself be considered to be a theory of evidentials. Since recent discussions show an appropriate general framework is still lacking in this area of study (Givón 1982; Palmer 1986; Charé and Nichols 1986; Willett 1988), the attempt made here may also serve to fill the gap, and thus be a contribution to, the study of evidentiality.

The research reported in the following, however, may be most appropriately considered to fall into the area of pragmatics. Thus, we will observe and discuss the use of sentence forms, phrases and lexical items in relation to actual situations, trying to discover the underlying principles and regularities. Our paradigm of research has the forms of utterances and other linguistic elements on the one hand and the information that they express on the other. It is the notion of the territory of information that mediates the relationship between them and plays the fundamental role in characterizing it.

This paradigm has certain affinities with some of the recent linguistic trends which pay serious attention to the so-called informational structure. Thus, a series of work by Halliday (1967/1968; 1978; 1985), work in functional syntax or functional sentence perspective, initiated by linguists in Prague such as Firbas (1964; 1966; 1975) and Daneš (1974) and later much developed by Kuno (1973; 1977; 1980; 1987); syntactic research oriented toward pragmatics, represented by such works as Prince (1978; 1981; 1992), Givón (1979), Cole (1978; 1981), Kuno and Takami (1993), Gundel, Hedberg, and Zacharski (1993), Ward (1988), Birner (1994), Lambrecht (1994) and Ward and Birner (1995), are quite relevant in spirit to the analyses to be proposed in this book. Much of this line of work is concerned with aspects of the character of information expressed by various syntactic forms and has established the study of the nature of information expressed in natural language as a legitimate and important tradition in linguistics. The present book is an attempt to join this tradition from the area of pragmatics and offer another significant perspective from which the character of information expressed in natural language can be analyzed fruitfully.

## CHAPTER 2

### The Theory of Territory of Information

This chapter first presents an informal analysis of some English examples relevant to the theory of territory of information. We introduce with these most of the basic notions of the theory also informally: direct and indirect forms, closeness, and the territory of information itself. Then, we will turn to Japanese where evidence for the notion of territory of information is also available. On the basis of these discussions, the theory of territory of information will be formulated and some further examples showing the scope of that theory will be provided.<sup>1</sup>

#### 2.1. Some Preliminary Observations

Consider first the following example:

(1) ??That lady is your mother.<sup>2</sup>

Suppose that the speaker, John, and the hearer, Susan, are chatting in a lobby of a hotel and that John has found a lady who he believes is Susan's mother behind her. Suppose further that since Susan does not seem to notice the presence of that lady, he wants to let her know about it. For this purpose, (1) would sound very strange and impolite. It is obvious, however, that if Susan herself has noticed the presence of her mother and gives John (almost) the same information,<sup>3</sup> the corresponding utterance with a minimum of difference from (1) would be perfectly natural:

(2) That lady is my mother.

Why is (1) so strange while (2) is quite all right? Notice that what (2) expresses is a piece of information that is 'close' to the speaker Susan (= the hearer in the situation where (1) was uttered) while it is not so close to the hearer of (2), John, since the utterance reports the presence of Susan's mother. Likewise, what (1) expresses is close to the hearer Susan but not so close to its speaker John since (1) also reports Susan's mother's presence. To make (1) sound natural, John would have to use one of the sentence forms such as those exemplified in (3):

- (3) a. Isn't that lady your mother?  
 b. I think that lady is your mother.  
 c. I believe that lady is your mother.

Thus, the form (1) must take is the form of a rhetorical question as in (3a) or includes elements like *I think* and *I believe* in (3b) and (3c). Notice that all three forms in (3) are much less direct and assertive than (1), which is a direct expression of the information which John intended to convey.

## 2.2. Initial Evidence from English

Let us, then, try to make a first approximation of the generalization governing phenomena like the one observed in (1) to (3). Forms like (1) in which utterances do not contain any 'hedging' elements but make a direct assertion or statement will be called the 'direct form'. In contrast, forms like those in (3) in which hedging elements or rhetorical questions function to attenuate the directness of the direct form will be called the 'non-direct form'. The non-direct form includes 'indirect forms' such as those observed in (3b) and (3c). A more satisfactory definition of these forms will be given later.

Let us assume a conceptual category, 'the speaker's territory of information', and that information which is 'close' to the speaker falls into his/her territory of information. We also assume that 'the hearer's territory of information' contains information which is close to him/her. Then, the first generalization mentioned above would be stated as: when a given piece of information falls into the speaker's territory but not the hearer's, the speaker uses the direct form; when a given piece of information falls into the hearer's territory but not the speaker's, the speaker uses the non-direct form.

The notion of 'territory' being discussed here might seem very similar to the common sense notion of territory. For the time being, this understanding suffices. What is more important in this context is that something like the notion of territory of information is indeed necessary. Notice that in examples (1), (2) and (3) above, both John and Susan know what Susan's mother looks like. Moreover, what either of them has noticed in the cases of (2) and (3) is identical in content, that is, that the lady close by is Susan's mother. Thus, the difference between (2) and (3), or that between the acceptability of (2) and the unacceptability of (1), must be due to the difference between the respective speakers' relationships to the information these utterances convey. It is exactly this kind of difference that the notion of territory of information is intended to capture.

Consider next the following situation. Suppose that Paul is the president of a company, Pat an outside business associate of his, and Monica the secretary for Paul. Now suppose further that while Paul and Pat are talking in the president's office, Monica comes in to tell Paul that he has a meeting at 3:00, as in (4):

- (4) Monica: You have a meeting at 3:00.

Notice that the direct form of (4) does not cause any problem here. Notice also that in this situation, Paul and Pat have obtained the same information from the same source in approximately the same way. Nonetheless, if an occasion arises later in which either Paul or Pat wants to refer to the meeting, then only Paul can naturally use the direct form as in (5):

- (5) Paul: I have a meeting at 3:00.

In contrast, Pat must resort to a non-direct form such as those exemplified in (6):

- (6) Pat: a. You have a meeting at 3:00, don't you?  
 b. I believe you have a meeting at 3:00.  
 c. I guess you have a meeting at 3:00.

If he used the direct form, as the secretary in fact did in (4), that would sound quite unnatural, as in (7).

- (7) Pat: ??You have a meeting at 3:00.

These observations pose three questions: first, why can Monica use the direct form? Second, why can Paul use the direct form? Third, why can Pat not use the direct form but only the non-direct form?

With an appropriate understanding of the notion of territory of information, these questions can straightforwardly be answered. First, since the handling of her boss' schedule is an essential part of her job, Monica is professionally close to the information (4) expresses. Hence the information falls within her territory of information. On the other hand, the hearer of her utterance, (4), is Paul, who has not even known the information. Thus, the information (4) conveys falls within the speaker's territory but not the hearer's. This enables Monica to use the direct form without sounding unnatural or impolite at all. Second, since the meeting is one which Paul is expected to attend, or since the meeting is his meeting, he can use the direct form (5) naturally. This is clearly because the information about the meeting falls within his territory, being very close to him. It does not, however, fall within his hearer's, i.e. Pat's, territory. The reason for this is that since the meeting is an event internal to Paul's company and thus Pat has nothing to do with it, the information about the meeting is not close to him. Third, because the information about the meeting does not fall within Pat's territory, he is not allowed to use the direct form. The hearer Paul, however, definitely has the information in his territory, as we have just seen. Thus, Pat must use non-direct forms like those in (6).<sup>4</sup>

It is crucial here to recall that Paul and Pat got the same information from the same source (= Monica) in approximately the same way. Thus, it is impossible to attribute the difference in the forms of utterances they are allowed to make, i.e. the direct form for Paul versus the non-direct form for Pat, to any differences in the contents or the times and manners of the reception of the information. Therefore, the only factor that explains the difference in question

here lies in the difference between Paul's and Pat's relationships to the information. That is, Paul has the information within his territory whereas Pat does not. Thus, here again the notion of territory of information plays a crucial role in accounting for the observed pattern in the uses of utterance.

The foregoing account suggests that the notion of closeness, which underlies the notion of territory of information, is concerned with a very abstract, hence general, notion. Reviewing our previous examples, we note that they involve closeness in terms of (i) a person's relationship to another person (cases of personal information, e.g. (2)); (ii) the profession or professional expertise of a person (cases of professional relationship, e.g. (4), (6)); and (iii) a person's plans, actions or behavior (e.g. (5)).

The following examples show that closeness subsumes still other kinds of relationship. For instance, observe (8):

(8) I am nauseated.

Under almost any circumstances, the information (8) conveys can be expressed in the direct form. This is simply because information expressing the speaker's direct experience is always close to the experiencer, i.e. the speaker, and not close to others. Thus, closeness also holds in: (iv) cases of direct experience. Yet another class of cases can be illustrated. For example, even a geographical relation between the speaker or the hearer and the information represented by a sentence can be shown to involve a territory ((v) cases of geographical relation). Observe the following example:

(9) ??The population of this town is about 3,000.

If the speaker of (9) has never lived in or around the town and thus has no specific geographical relation to there, while the hearer is a resident, then (9) would sound strange. This is obviously because the information expressed in (9) is close to the hearer but not to the speaker, thus falling within the former's territory. Therefore, the speaker must use indirect forms like (10):

(10) I hear the population of this town is about 3,000.

There are, however, contexts which would make (9) quite natural. For example, if the speaker is a specialist in demography in the United States, then by professional relation ((ii)) the information contained in (9) is closer to him than to the hearer. In this case, he can use (9) without causing strangeness or intrusiveness.

### 2.3. Evidence from Japanese

We now turn to Japanese and attempt to provide evidence for the necessity of the notion of territory of information in that language. Consider first the following examples:

- (11) a. *Taroo wa taiin simasita.*<sup>5</sup>  
           TM released-from-hospital did-F  
           'Taroo has been released from the hospital.'  
       b. *Kanai wa 46 desu.*<sup>6</sup>  
           my-wife TM is-F  
           'My wife is 46 years old.'  
       c. *Kono uti, 3000-man en sita no.*  
           this house ten-thousand yen cost CP  
           'This house cost thirty million yen.'

All these utterances are in the direct form. In Japanese, utterances that end with the main predicate or a minimum stylistic auxiliary such as *-masu* (a formality-level indicator) and that do not have hedging elements will be considered to have the direct form. In contrast, utterances that contain a hedging sentence-final form will be considered to have the indirect form. As in English, the direct form is used to make a definite and most assertive statement while the indirect form is used to make a less definite and weaker assertion. The indirect form versions of (11) are exemplified in (12):

- (12) a. i. *Taroo wa taiin sita-rasii desu.*<sup>7</sup>  
           TM released-from-hospital did seem is-F  
           'Taroo seems to have been released from the hospital.'  
       ii. *Taroo wa taiin sita-yoo desu.*  
           TM released-from-hospital did appear is-F  
           'Taroo appears to have been released from the hospital.'  
       iii. *Taroo wa taiin sita-mitai desu.*  
           TM released-from-hospital did look is-F  
           'It looks like Taroo has been released from the hospital.'  
       b. i. ??*Kanai wa 46 desu-ite.*  
           my-wife TM is-F HM  
           Lit. 'I hear my wife is 46.'  
       ii. ??*Kanai wa 46-no yoo desu.*  
           my-wife TM of appear is-F  
           Lit. 'My wife appears to be 46.'  
       iii. ??*Kanai wa 46-rasii.*  
           my-wife TM seem  
           Lit. 'My wife seems to be 46.'

- (12) c. i. *Kono uti, 3000-man en sita-tte.*  
 this house ten-thousand yen cost HM  
 'I hear this house cost thirty million yen.'  
 ii. *Kono uti, 3000-man en sita-soo yo.*<sup>8</sup>  
 this house ten-thousand yen cost hear SF  
 'I hear this house cost thirty million yen.'

The approximate generalization that we obtained in English in the previous section also holds in Japanese. Thus, all examples in (11) represent cases of personal information if Taroo is a son of the speaker and if the referent of *kono uti* (this house) is the speaker's house, for example. Therefore, the information examples (11) express is considered close to the speakers. On the other hand, if the hearers are assumed to be just acquaintances or friends of the speakers', the information is not close to them. Thus, it falls within the speakers' territories but not the hearers'. Accordingly, by the generalization just referred to, the direct forms in (11) are all natural.

Consider now examples (12), indirect form versions of those in (11). Forms such as those in (12a) are acceptable if the speaker is a friend of Taroo's, for example, and has not seen Taroo being released from the hospital. That is, when the speaker of (12a) is inferring or imagining that Taroo has been released from hospital on some indirect basis. Similarly, forms such as those in (12c) are acceptable if the speaker is talking about someone else's house based on some hearsay information. Examples in (12b), however, are strange since they explicitly mention the speaker's wife; the speaker's wife's age constitutes a piece of personal information and thus the information (12b) express should be close to the speaker, falling within his territory of information. Since the information is obviously much less close to the hearer if the latter is just a friend of the speaker's, for example, it should not fall within the hearer's territory of information. Therefore, the direct form must be used. Examples (12b), however, are in the indirect form. This is the reason why they all sound very odd.

A strong case can be made for establishing the necessity of the territory of information, using these examples. Let us take (11a) and (12a), reproduced here as (13a) and (13b), respectively, for this purpose:

- (13) a. *Taroo wa taiin simasita.* (= (11a))  
 TM released-from-hospital did-F  
 'Taroo has been released from the hospital.'  
 b. i. *Taroo wa taiin sita-rasii desu.*  
 TM released-from-hospital did seem is-F  
 (= (12ai))  
 'Taroo seems to have been released from the hospital.'  
 ii. *Taroo wa taiin sita-yoo desu.*  
 TM released-from-hospital did appear is-F  
 (= (12aii))  
 'Taroo appears to have been released from the hospital.'

- (13) b. iii. *Taroo wa taiin sita-mitai desu.*  
 TM released-from-hospital did look is-F  
 (= (12aiii))  
 'It looks like Taroo has been released from the hospital.'

As was mentioned above, (13a) is natural when the speaker is Taroo's father and the hearer is his acquaintance. In such a case, however, it is usually assumed that Taroo's father has actually seen his son being released from the hospital. That is, under normal circumstances, (13a) is based on the speaker's direct experience. Thus, it usually represents not only a case of personal information but also a case of direct experience discussed in the previous section.

(13a), however, is appropriate even in situations like the following. Suppose that Taroo's father lives separately from his family and that one day Taroo's mother makes a long distance telephone call to tell him that Taroo, who they know was hospitalized because of a serious illness, has become much better and been released. Suppose further that on the next day, one of Taroo's father's colleagues or superiors happens to ask him about his son's condition, caring about his illness. Then, (13a) sounds perfectly fine. Notice that in this case, Taroo's father completely lacks direct observation of his own son. In fact, he got the information represented in (13a) through communication with his wife, that is, by a kind of hearsay. Moreover, if Taroo's father used any one of (13b) in this situation, then the utterance would be more or less strange. It would sound as if Taroo's father were very indifferent to his son or as if he considered his son's condition totally irrelevant to himself.

It should be mentioned here that the assumption about the next day is very important. Taroo's father may use an indirect form in one of the following two types of situations: either when he does not know the information about his son's release well, or immediately after he has received it. Thus, for example, suppose that he has invited one of his close friends to his apartment and has been talking with the latter. A telephone rings then and he receives the information from his wife, but either if the conversation was heavily garbled making it impossible for him to receive a full message, or if his friend asks him what happened just after the call, then he would respond with an indirect form like those in (13b).

It cannot be defined clearly until when he would be able to use an indirect form or how much knowledge he must have before he becomes able to use a direct form. The condition operative in the former case here, however, seems to be characterizable by the term 'information processing'. That is, a speaker can use an indirect form to express what he/she has newly learned and is certain of until a sufficient amount of information processing has taken place. Once such information has been processed well and 'digested and absorbed' into his/her body of knowledge, indirect forms will no longer be useable. This is the reason why the assumption about "the next day" is important here. Further discussion of this matter is given in chapter 6, particularly, in section 6.2.

Regarding the acceptability of (13a) in the assumed situation, one might point out that since the source of information for Taroo's father is his wife, who is a

very reliable source, he got information that was as reliable as what could be directly perceived. Therefore, this argument goes, he must use the direct form as in (13a) much as cases of direct experience. This claim can be refuted as in the following scenario.

Suppose that one day a wife has received an official notice informing her that the city tax will be raised soon. She lets her husband know about this by a long distance telephone call. The next day, if the husband happens to have a suitable occasion in conversation with his colleagues, he would be able to communicate this information with an indirect form, as in (14):

- (14) *Uti no hou zya, kondo zyuuminzei ga agaru-rasii yo.*  
 homeof direction in this-time city-tax NM rise seem SF  
 'In my district, city taxes seem to be going up soon.'

Thus, even if the husband's source of information is the same, that is, his wife, he can naturally use an indirect form when the information is not personal but of a public nature. Thus, what is crucial about (13a) is that the information it expresses is very personal to the speaker, i.e. to Taroo's father. In other words, the information falls into Taroo's father's territory but not the hearer's, that is, his colleague's territory, thus conforming to the generalization given above.

One might, however, further argue against this conclusion by pointing out that in the case of (14), the original source of information is not the wife's direct perception but an official notice; the original information was conveyed to her via a letter, which is a special kind of hearsay-based information; this may make a difference in the form of the utterance which her husband can then use in communicating this information to others.

This counter-argument does not hold, however. Suppose that measles is prevalent in the neighborhood of Taroo's home and that Taroo's mother has actually seen a child lying in bed who contracted the disease. Suppose further that she tells her husband about that over the telephone. Then, if an appropriate occasion for this topic arises on the next day, he would say (15) to his friend:

- (15) *Kinzyo no ko ga hasika ni kakatta-soo da.*  
 neighborhood of child NM measles by caught hear is  
 'I hear a child in the neighborhood of my home caught the measles.'

(15) is clearly in the indirect form in contrast to (13a). The original source of this information is no doubt what the speaker's wife directly perceived. Therefore, what makes a difference in the form of utterance in (13a) and (15) is that information about someone else's child is not personal to Taroo's father, that is, it is not as close to him as the information about his own son. Therefore, the information expressed in (13a) falls into Taroo's father's territory of information but the information expressed in (15) does not. It is exactly for this reason that the former can be conveyed in the direct form while the latter can be conveyed only in the indirect form.

There are various kinds of other, more vague counter-arguments to this conclusion. For example, since Taroo is the speaker's son, information about Taroo must be familiar to the speaker, or the speaker must have detailed knowledge about Taroo. Because of this, such an argument runs, Taroo's father must have unusually strong confidence in information about Taroo, so that when Taroo's father talks about his son, he can or must use the direct form, which is the most definite means of expressing information about his son.

Arguments like this can be refuted quite easily. Recall that (13a) conveys the information that Taroo has been released from a hospital. It is quite possible that Taroo has never been seriously ill before. In this case too, Taroo's father can naturally use (13a) although information about his son's hospitalization is not at all familiar to him nor, in the situation assumed for (13a), may he have detailed knowledge about Taroo's current condition. If, on the other hand, the above counter-argument claims that Taroo's father must be strongly confident in any and all information about Taroo, then Taroo's father cannot use any indirect form when talking about his son. This is, however, surely contrary to the fact. For example, if Taroo goes to an Australian college and writes to his family for the first time saying that he is doing well, then on reading the postcard, Taroo's father would say (16), an indirect form, to his wife:

- (16) *Taroo wa genki de yatte iru-yoo da na.*  
 TM well being doing is appear is SF  
 'Taroo seems to be doing well.'

Thus, arguments like those above collapse. Note that (16) represents one of the two cases discussed above where the speaker may use a non-direct form when expressing personal information. That is, it is a case in which the speaker, Taroo's father, does not have enough information: reading just one postcard does not provide much information about its writer's well-being.<sup>9</sup> This is the reason why the speaker of (16) can use an indirect form.

Our arguments for the notion of the speaker's/hearer's territory of information can be applied to cases of information based on a geographical relation and of information based on the speaker's/hearer's professional relation in essentially the same form. This can be seen from the fact that these two kinds of cases are also concerned with information close to the speaker/hearer. The fact that they are not concerned with information directly involving the speaker/hearer him/herself as in cases of the speaker's/hearer's direct experience or plans and behavior does not make a difference.

For example, in cases where geographical information is expressed, the speaker, who lives in Tokyo and is not a demographer, would use an indirect form with *ne* in talking to me, since I live in the same region as the city mentioned in his/her utterance:

- (17) *Hitati-tte kekkou ookina mati-rasii ne.*  
 QM fairly big city seem SF  
 'Hitati seems to be a fairly big city, isn't it?'



The reason why the speaker uses this particular form, i.e. an indirect form immediately followed by a sentence-final particle *ne*, in talking to me cannot be explained unless it is assumed that the notion of the hearer's (= my) territory is at work here. Notice first that the speaker would use this kind of indirect form even when he/she knows that the hearer has never been in the city. Thus, the speaker's assumption of my experience with the city is irrelevant. Note that this also excludes explanations based on familiarity and confidence of the sort discussed above. Secondly, if the speaker thought that Hitati was located in a region which has no geographical relation to where I live (except that both places are within Japan), then the speaker would use an indirect form like (18):

- (18) *Hitati-tte kekkou ookina mati-rasii (yo).*  
 QM fairly big city seem SF  
 'Hitati seems to be a fairly big city.'

which lacks the final particle *ne*. Thus, the factor which control forms like (17) must be the hearer's territory of information functioning on the basis of our earlier observation that information close to the hearer by virtue of a geographical relation falls into the hearer's territory of information.

The foregoing discussions have made it clear that the distinction between the direct and the indirect or non-direct forms, or between the indirect forms with and without *ne*, is controlled by the speaker's/hearer's territory of information. As an example in which the two territories of information interact, let us consider the examples cited below, which are counterparts to our earlier English examples (4) to (7) in section 2.2. These are discussed here also for the purpose of showing that the principles of territory of information work quite similarly in English and Japanese.

Suppose that the same situation obtains as the one where our English examples (4) to (7) were discussed. That is, the president of a company is talking with an outside business associate in the former's office. Then, the president's secretary comes into there and tells the president that he/she is going to have a meeting at three o'clock:

- (19) Secretary: *Syatyoo wa 3-zi kara kaigi ga gozaimasu.*  
 president TM o'clock from meeting NM have-F-P  
 '(You) President has a meeting at three.'

Note that (19) is a direct form although it has a formal and polite form of the main predicate. Note also that the president and his business associate heard (19) at the same time. Later, the president wants to remind his associate that he must attend a meeting and would say (20) to his business associate:

- (20) President: *Watasi wa 3-zi kara kaigi ga arimasu*  
 I TM o'clock from meeting NM have-F  
 ((node)<sup>10,11</sup>).  
 since  
 '(Since) I have a meeting at three.'

On the other hand, if the business associate notices that it is now close to three and wants to bring the meeting to a close so that the president may attend the meeting, then he would have to say (21) and cannot say (22):

- (21) Associate: a. *Syatyoo wa 3-zi kara kaigi ga aru-*  
 president TM o'clock from meeting NM have-  
*yoo desu kara.*  
 appear is-F since  
 'Since it appears that the president has a meeting from three.'  
 b. *Syatyoo wa 3-zi kara kaigi ga aru-*  
 president TM o'clock from meeting NM have-  
*soo desu kara.*  
 hear is-F since  
 'Since I hear that the president has a meeting from three.'

- (22) Associate: ??*Syatyoo wa 3-zi kara kaigi ga arimasu*  
 president TM o'clock from meeting NM have  
*kara.*  
 since  
 Lit. 'Since the president has a meeting from three.'

Thus, indirect forms are appropriate, and the direct form inappropriate, in this situation, just as in English.

The reasons for the uses of the three speakers' utterances are also exactly the same as in the case of English. First, the reason why the president can use the direct form is obvious: since his attending the meeting constitutes his schedule, the information about that is close to him; hence it falls into his territory of information. Second, the associate cannot use the direct form but rather must use the indirect form for the following reason: since the meeting is an event internal to the president's company, the information is not close to the outside associate, falling into the president's territory. Therefore, the president can use the direct form naturally in talking to the associate, whereas the latter cannot use the direct form but must resort to the indirect form in talking to the former. The reason why the secretary can use the direct form should now be obvious: since the information she conveyed to the president is professionally close to her, it falls within her territory of information.<sup>12</sup>

Notice here, as before, that in these examples, the president and the business associate received the same information from the same source at the same time.

Therefore, there can be no difference in the content or amount of information they obtained, nor is there any significant difference in the manner and timing of the acceptance of the information. This shows that the difference in the forms of their utterances is entirely due to the difference in the relationships of the information to the president and to the partner. It is thus exactly the notion of the speaker's/hearer's territory of information that captures this difference.

We have thus established the necessity of the notion of the speaker's/hearer's territory of information in explaining the observed differences in the forms of utterances. Moreover, the last set of Japanese examples and our argument with them are completely parallel to the set of English examples cited in the previous section and the argument with them provided there. Therefore, our discussions in this section have also shown that the notion of the speaker's/hearer's territory of information functions quite similarly in the two languages.

## 2.4. A Formalization of the Theory

So far our discussions have been based on informal understanding of notions such as being 'close' and the speaker's/hearer's 'territory of information'. In this section, we will try to formalize these concepts within the main body of the theory of territory of information. Before going into the formalization, however, we should perhaps refer to a conceptual distinction.

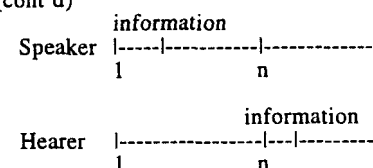
Within the framework of our theory, having or knowing information and having it in one's territory must be distinguished for the moment. The former simply means having information in one's general storage of information. In contrast, the latter means that within one's general storage of information there is a conceptual category called the territory of information whose existence and functioning this book has been attempting to demonstrate. Thus, the set of information which falls into one's territory of information is a subset of information known to him/her. Therefore, there is a redundancy relation between the two notions: having information in one's territory implies just having information. The reverse, however, obviously does not hold: having information may or may not mean having information in one's territory. After presenting a formalization of our theory, we will return to this distinction and the conceptual significance of the notion of territory of information.

### 2.4.1. Basic Assumptions

Let us now return to the major purpose here and first introduce the basic postulate of the theory:

- (23) There are two linear psychological scales, one for the speaker and the other for the hearer, which measure the distance between the speaker/hearer and a given piece of information.<sup>13</sup>

(23) (cont'd)



A given piece of information is located on these scales and can take any value between (and including) 1 and 0.

In the case illustrated above, the information is closer to the speaker than to the hearer.

Based on (23), we define the speaker's/hearer's territory of information as in (24):

- (24) There are two conceptual categories called the speaker's and the hearer's territory of information. A given piece of information that is closer to the speaker than  $n$  belongs to the speaker's territory of information, and that which is closer to the hearer than  $n$  belongs to the hearer's territory of information, where  $n$  is a specified value between 1 and 0 and designates the outer boundary of both territories.

Thus, if a given piece of information takes the value  $m = 1$  on the speaker's scale and the value  $m' = 0$  on the hearer's scale, then the information completely falls within the speaker's territory and not the hearer's in the least. Also, if the reverse case obtains, then the information completely falls within the hearer's territory and not the speaker's at all. Most of the examples we have considered in the previous sections fall into either of these two extreme cases. Consequently, we have discussed the notion of territory as if it were an absolute category that has an all or none character. In general, however, the notion has a relative and gradable character so that cases like the following occur. If a given piece of information takes the value ( $n < m$ ) on the speaker's scale while it takes the value  $m' (< n)$  on the hearer's scale (as in the above diagram), then that information falls within the speaker's territory to some degree and not the hearer's since  $n$  is the threshold value for information to fall into the speaker's/hearer's territory. On the other hand, if  $n < m < m'$  holds in this situation, then that information falls within both territories but more within the hearer's territory than within the speaker's territory.

### 2.4.2. The System of the Theory of Territory of Information

What determines the location of information on the two scales? There are general conditions that determine the location of information on the speaker's or

the hearer's scale, which are given in (25). As seen below, (25) is essentially a summary of what we already saw in the previous sections:

- (25) a. information obtained through the speaker's/hearer's internal direct experience  
 b. information embodying detailed knowledge which falls into the range of the speaker's/hearer's professional or other expertise  
 c. information obtained through the speaker's/hearer's external direct experience including information verbally conveyed to the speaker/hearer by others which he/she considers reliable  
 d. information about persons, objects, events and facts close to the speaker/hearer including such information about the speaker/hearer him/herself

Information which satisfies one or more (see below) of these conditions is considered close to the speaker/hearer. In (25a), "internal direct experience" means so-called internal feelings such as pain, emotion, memory, and belief which are directly felt within an experiencer's mind. In contrast, "external direct experience" in (25c) means experience which is obtained from outside an experiencer through the five senses. (25d) concerns what may be called personal data in a broad sense. It includes what we have so far referred to as the speaker's/hearer's plans and behavior, and his/her geographical relations.

Conditions (25) are intended to apply to English, and not to Japanese. As we suggested above, conditions for Japanese are basically similar to (25) but differ in one respect. Although, as we shall see later, that difference will result in a major difference in the explanation of some phenomena, we will discuss condition (25) here as conditions common to English and Japanese, leaving the difference untouched for the moment.

(25a) has the following characteristic: in general utterances expressing information which meets this condition cannot be made in forms other than the direct form. Thus, observe (26) and (27), which are all in indirect forms:

- (26) a. ??I seem to be nauseated. (cf. (8))  
 b. ??I seem to feel lonely.
- (27) a. ??*Watasi, haki ke ga suru-rasii.*  
           I       nausea NM do seem  
           Lit. 'I seem to be nauseated.'  
 b. ??*Atama ga itai -yoo da.*  
       head NM ache look is  
       Lit. 'It looks like (I) have a headache.'

As seen here, they are all strange. There are, however, systematic exceptions to this characteristic of (25a), which will be discussed later in this section.

On the other hand, information which meets (25b), (25c) or (25d) can be made in a non-direct form. For example, utterance (28a) and (29a) (due to Takahiro Iwahata) which express information meeting (25c):

- (28) a. This pot has a few flaws.  
       b. It looks like this pot has a few flaws.
- (29) a. *Kono tubo wa sukosi kizu ga arimasu ne.*  
           this pot TMA-little flaw NM exist-F SF  
           'This pot has a few flaws, doesn't it?'  
       b. *Kono tubo wa sukosi kizu ga aru -yoo desu ne.*  
           this pot TMA-little flaw NM exist look is-F SF  
           'It looks like this pot has a few flaws, doesn't it?'

can be expressed in an indirect form like (28b) and (29b). When a customer in an antique shop takes a pot in his/her hands and notices that there are some flaws on it, he/she can say (28a) or (29a) based on his/her observation, i.e. through external direct experience. The indirect form in (28b) and (29b), however, is preferred if he/she wants to be polite, or to speak out of consideration of the owner.

Information which meets conditions (25b), (25c) or (25d) has another characteristic which information meeting (25a) does not have. The latter kind of information does not have cases where the basis for asserting a given piece of information is insufficient. For example, if the speaker feels nauseated, then it will automatically be a sufficient basis for saying that he/she feels nauseated as in (8) above. In contrast, take an example meeting condition (25c) about external direct experience. If the speaker has directly observed a child's being hit by a car, then he/she can say (30a) or (31a) in the direct form:

- (30) a. A child has been hit by a car!  
       b. It looks like a child has been hit by a car.
- (31) a. *Kodomo ga kuruma ni hanerareta.*  
           child NM car by hit-PAS-was  
           'A child has been hit by a car.'  
       b. *Kodomo ga kuruma ni hanerareta-yoo da.*  
           child NM car by hit-PAS-was look is  
           'It looks like a child was hit by a car.'

If, however, the speaker is in a taxi rapidly passing the site of an accident which has already occurred and thus he/she has only an insufficient observation, then he/she will use an indirect form like (30b) or (31b) to convey what he/she has seen to others.

Likewise, (25b) about expertise and (25d) about personal data may have cases in which the basis for asserting a given piece of information is insufficient. The former have such cases when a given piece of information conveys a highly